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> Writer's Email: nmaguire@fcoplaw.com

May 11, 2018

Via Email

Chair Das Williams and Members of the Santa Barbara County Board of Supervisors 105 E. Anapamu Street, Suite 407 Santa Barbara, CA 93101 Email: sbcob@co.santa-barbara.ca.us

> Re: MacElhenny Appeal of Lighthouse Trust Demo/Rebuild Project (Case Nos. 16BAR-00000-00219 and 17LUP-00000-00035) Hearing Agenda May 15, 2018

Dear Chair Williams and Members of the Board:

On behalf of appellant Michael MacElhenny¹, we submit the following comments regarding the Lighthouse Trust Demo/Rebuild Project (the "Project").

As discussed in our concurrently-submitted comment letter regarding the Project's potential environmental impacts, the Project cannot be approved without additional review of environmental impacts associated with the January 9, 2018, mud slides and debris flows. Therefore, we ask that your Board either grant Mr. MacElhenny's appeals or direct Planning and Development staff to undertake a thorough environmental review of the Project.

In the event that the Board does address the particulars of the proposed Project in its hearing, we offer these comments to ensure that the Project applicant abides by its assurances, stated repeatedly to the Montecito Board of Architectural Review (MBAR), that its proposed landscaping will not impede the views of its neighbors.

Mr. MacElhenny is the managing member of the legal entity, Buena Vista 796, LLC, that owns the property located at 796 Buena Vista Avenue.

The Lighthouse Trust, of New York, New York², owns the adjacent properties located at 1948 and 1952 Tollis Avenue in Montecito (collectively, the "Property"). The Property currently is developed with two single-family homes. The Lighthouse Trust proposes to demolish these homes and construct a new home along with several accessory structures. The applicant proposes to build the new home as close as possible to the northerly boundary of the Property, which boundary is shared with the adjacent MacElhenny property. The Project also includes a new landscaping plan, discussed further below, that proposes to install olive trees in the area between the residence and the north boundary for screening purposes.

In 2016 and last year, the MBAR conducted conceptual and preliminary reviews of the Lighthouse Trust Project. During this process, the MBAR commented that iterations of the proposed new home were inconsistent with Montecito's architectural and development guidelines³ because the proposed home was "too long," "too close to [the] rear property line" and "too big to respect views from adjacent properties." The MBAR recommended that the home's second floor be "reduced in scale" and suggested that the overall massing of the home be restudied. Additionally, the MBAR directed the applicant to consider alternatives to olive trees "to keep height managed." (See Attachments I-V.)

According to a December 15, 2017, letter from representatives of the Lighthouse Trust, "a number of material Project changes were made by the Owner's design professionals" during the MBAR process to address concerns regarding the proposed home, including lowering of the ridgeline of the proposed home. With regard to the MBAR-expressed concerns regarding landscaping height, the Project's landscape architect testified to the MBAR on June 22, 2017, that:

The comment that we received previously was about the importance of landscape along the rear property line and so we are showing that in these sections and in the plan view. And from what we understand, <u>maintaining views is very important</u> so what we've done is we have selected olive trees as our primary screen tree along the rear property line and sited it actually on one of the lower

 $^{^2}$ We understand that Ms. Gwyneth Paltrow controls or benefits from the Lighthouse Trust, the owner of 1948 and 1952 Tollis Avenue.

³ The Montecito Community Plan, Montecito Land Development Code, and Montecito Architectural Guidelines and Development Standards (both the pre- and post-March 30, 2018, versions) may be located at:

http://longrange.sbcountyplanning.org/planareas/montecito/montecito.php. The Santa Barbara County Comprehensive Plan may be located at:

http://longrange.sbcountyplanning.org/programs/genplanreformat/PDFdocs/GP main.pdf.

> terraces to not impact the uphill neighbors' views. At the same time, we are trying to balance screening and privacy so we have layers of screening here. We have some additional evergreen shrubs along the property line, <u>but again that won't get into the</u> view corridor.

(Emphasis added.)

However, the Lighthouse Trust's concessions have turned out to be illusory, along with its promise to not impede the "uphill neighbors' views" with landscaping. This is evident in the March 12, 2018, Site Section included as Attachment VI to this letter. This plan, provided to us by the Lighthouse Trust after the Planning Commission hearing on this matter, has never been provided to County staff and was not provided to the MBAR, the Planning Commission, or even, until now, this Board. Instead, the Lighthouse Trust submitted a Site Section that does not show landscaping at all. That incomplete version is included in your Board packet in Attachment 9.

As the March 2018 Site Section confirms, the Lighthouse Trust's landscaping will, at maturity, materially exceed the height of the proposed home's ridgeline.⁴ The view of the uphill neighbor is therefore impeded by the landscaping <u>over and above the view obstruction created by the home itself</u>. The Site Section illustrates this with a line of sight labeled "Clear View of Ocean," when in fact the line of sight from the MacElhenny property will end at the canopies of the proposed olive trees if they are allowed to grow taller than the ridgeline of the new residence. So while the Lighthouse Trust repeatedly has taken credit for reducing the height of the proposed home during the MBAR process, it has simply substituted landscaping to screen the Property, and with it the ocean view, from its uphill neighbor.

In order to ensure that the Lighthouse Trusts abides by the promises it made to the MBAR and Planning Commission, we request that the Board modify the conditions of approval to add a condition that provides as follows:

Bio-03 Landscaping Height Limitation: The Owner/Applicant shall ensure that no landscaping within 100 feet of the northerly boundary of the Property shall exceed the height of the roof ridgeline of the new single-family residence approved by BAR Case No. 16BAR-00000-00219.

PLAN REQUIREMENTS: All Landscape Plans and related plans shall expressly acknowledge and reflect the height limitation imposed by this condition.

TIMING: The Owner/Applicant shall submit Landscape Plans conforming to this condition prior to the issuance of Land Use Permit.

⁴ Mature olive trees may grow to 50 feet in height. (Attachment VII.)

MONITORING: P&D processing planner shall ensure that the required acknowledgments are reflected on the Landscape Plans and related plans. P&D compliance monitoring staff shall respond to reasonable complaints regarding landscaping height.

We appreciate your consideration of this request and look forward to our hearing.

Sincerely,

Neal P. Maguire

NPM/tm

Attachments

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Via Email

Mr. Das Williams, Chair and Members of the Santa Barbara County Board of Supervisors 105 E. Anapamu Street, Suite 407 Santa Barbara, CA 93101 Email: <u>sbcob@co.santa-barbara.ca.us</u>

> Re: MacElhenny Appeal of Lighthouse Trust Demo/Rebuild Project (Case Nos. 16BAR-00000-00219 and 17LUP-00000-00035) Hearing Agenda May 15, 2018

Dear Chair Williams and Members of the Board:

On January 9, 2018, the County of Santa Barbara experienced deadly and widespread debris flows and mudslides that, physically and otherwise, transformed the landscape of its communities, particularly Montecito. Even as Montecito residents attempt to rebuild damaged and destroyed homes and properties, the County of Santa Barbara has recognized that there are substantial <u>ongoing</u> risks associated with such development. The County therefore has determined that it requires additional technical information before it can have confidence that individual projects may proceed without adversely impacting project applicants and their neighbors. Notably, County staff has requested that individual property owners refrain from pursuing plans for rebuilding homes until that information becomes available.

In the midst of the County's efforts to balance public safety concerns with the needs of residents who lost their homes and other structures, the Lighthouse Trust continues to seek approval from the County to voluntarily demolish two homes and rebuild one new residence on its property on Tollis Avenue in Montecito. This property was physically impacted by the January mud slides and has been identified by the County as being in an Extreme Risk Area for future debris flows and flooding. Despite these critical issues, the Lighthouse Trust has not provided any information required to properly evaluate the potential environmental impacts

associated with the project. This is true even though the County's local environmental standards dictate that environmental "impacts are considered significant <u>when people or structures would</u> <u>be exposed to major geologic hazards upon implementation of the project.</u>" (Emphasis added.)

Instead of properly addressing the potential impacts of its project in order to assure the safety of the applicant and its neighbors, the Lighthouse Trust continues to seek special treatment to pursue its project as though the January slides did not occur. All County decision-makers who have considered the Lighthouse Trust project did so prior to January 9, 2018, without the benefit of the considerable new information regarding debris flows and flood risk that is now known to the County and the Montecito community.

In light of the Lighthouse Trust project's failure to consider potential environmental impacts arising from and associated with the January 9th slides, we request that the Board of Supervisors direct County staff to prepare the requisite technical studies and analyses – under the California Environmental Quality Act and otherwise – so that the County and the Montecito community are assured that the project can be developed without adversely impacting the applicant and its neighbors.

While the project applicant will most assuredly object to any delay arising from the to-becompleted technical studies and analyses, recall again that the Lighthouse Trust seeks to demolish its existing residences voluntarily; it is not trying to rebuild a home lost in the catastrophe of January 9th. Consequently, any considerations that support a streamlined rebuilding process are entirely inapplicable here. The Lighthouse Trust project's tension with substantial public safety concerns cannot and should not be overridden by arguments regarding project delays.

Accordingly, on behalf of Michael MacElhenny¹, we submit the following comments regarding the above-referenced item and request that this letter be included in the administrative record for the matter.

The Project: The Lighthouse Trust, of New York, New York², owns the adjacent properties located at 1948 and 1952 Tollis Avenue in Montecito (collectively, the "Property"). The Property currently contains, among other items, two single-family homes. The Lighthouse Trust proposes to demolish these homes and construct a new 9,185 sq. ft. home along with an

¹ Mr. MacElhenny is the managing member of the legal entity, Buena Vista 796, LLC, that owns the property located at 796 Buena Vista Avenue, immediately north of the Lighthouse Property.

² We understand that Ms. Gwyneth Paltrow controls or benefits from the Lighthouse Trust, the owner of 1948 and 1952 Tollis Avenue.

attached garage, guesthouse, guesthouse garage, swimming pool, pool cabana, and two new water tanks (the "Project"). The Project also proposes to "cut," or excavate, approximately 4,800 cubic yards of soil to accommodate the proposed home's 4,947 sq. ft. basement. While a substantial portion of the excavated soil will be utilized as fill on the site, the excavation involves the equivalent of approximately 343 to 480 truck trips worth of soil. The Project also includes a new landscaping plan.

The Lighthouse Trust submitted applications to the County for preliminary design review approval from the Montecito Board of Architectural Review (MBAR) as well a land use permit from the Planning and Development Director. Michael MacElhenny appealed the MBAR and Director approvals to the Montecito Planning Commission and, in turn, that Commission's approval of the Project to the Board of Supervisors. Notably, all of the County decision-makers that have previously considered the project did so before January 9, 2018 – without the benefit of current knowledge regarding the debris flow and flood risks in Montecito and on the Property.

The January 9, 2018 Slides: The Planning Commission considered the Project on January 3, 2018. Less than a week later, the Montecito area was subjected to devastating and tragic mudslides that claimed almost two dozen lives and damaged or destroyed over 200 homes and over 100 other structures (e.g., guest homes, bridges, and commercial buildings) in Montecito. (See Attachments A, B.)

Notably, the slides affected the Property and damaged adjacent and nearby residences. Buena Vista Creek, which is north of the Property, could not contain debris flow that ultimately traveled to the Property itself as well as to the south and east. That flow traversed a local channel that crosses Buena Vista Avenue. (See April 30, 2018, photographs included as Attachment C.) A map compiled by the *Santa Barbara Independent* illustrates the debris flow path into, through, and beyond that local channel.³ (See Attachment D.) This same map confirms that debris flow ended up on the Lighthouse Property itself and, indeed, in areas of the Property where the Project's larger new home will be constructed.

Furthermore, a separate map compiled by the County Office of Emergency Management demonstrates that several structures near the Property were damaged or destroyed by the debris flow, including the home to the south, a guest home two properties north, and several homes just

³ The map may be located at:

https://www.google.com/maps/d/viewer?mid=1tSzYm6DZpootH4aS3STEfYIHYPgak2jO&ll=3 4.442185994130995%2C-119.61104374367369&z=17, last visited May 10, 2018.

east of the Lighthouse Property.⁴ (See Attachment E.) Lastly, the Office of Emergency Management prepared a map indicating, in part, which areas of Montecito comprise <u>existing</u> debris flow risk areas.⁵ (See Attachment F.) That map, last updated March 10, 2018, identifies the Lighthouse Property as being within the Extreme Risk Area, the highest level of concern. That designation recognizes that a property is "at risk of debris flows from water overtopping the banks, creating high velocity flow (debris, rocks, mud and water) that causes destruction."

In a March 13, 2018, memorandum (Attachment G), the County reaffirmed that the Montecito area:

is subject to <u>ongoing</u> threats of debris flows during significant rain events (a half inch of rain or more in an hour) for the next two to five years. In order to prevent potential damage <u>to rebuilt</u> <u>structures and other structures in the community</u>, any <u>improvements</u> that occur <u>during this timeframe</u> should be done with proper attention to changes in topography and new creek profiles.

(Emphasis added.) The County further explained that "the current situation poses unique challenges" even beyond what would be associated with "rebuilding after a fire," as the Montecito "landforms have changed significantly, including property elevations and at some locations, the width and depth of creeks."

The Ongoing Impacts of the January Slides: In fact, the County's March 13, 2018 memorandum indicates that the entire floodplain management program is currently inadequate. As noted, the County relies heavily on FEMA's Flood Insurance Rate Maps (FIRM) in implementing its own floodplain ordinance. As the memorandum notes, though,

the current FIRM maps are no longer representative of on-theground conditions due to the land-changing debris flow. The base flood elevations on the current FIRM maps do not reflect current topography and are of little use in the rebuilding process where

⁴ The map may be located at: <u>https://sbc-</u>

gis.maps.arcgis.com/apps/webappviewer/index.html?id=ee848a57d8b2416eb2802da300df5b6e, last visited May 8, 2018.

⁵ The map may be located at: https://sbc-

gis.maps.arcgis.com/apps/webappviewer/index.html?id=469ab8e3057a4f56aee5e3f080dc7fb1, last visited May 10, 2018.

topography has changed. FEMA will be developing new FIRM maps but this is expected to take four to five years.

To provide interim assistance to property owners while the FIRM maps are permanently updated, County staff, in conjunction with FEMA, is preparing a "Flood Hazard/Mapping Analysis" to be completed in several months. County staff has advised property owners to delay design plans and permit applications in Montecito so that the County's land use permit process and decisions may be informed by the Flood Hazard/Mapping Analysis.

For those property owners that decline the County's request to wait until the interim Flood Hazard/Mapping Analysis has been completed, the March 13th memorandum states that the County will require "submittals" to "facilitate the review process," which submittals may include: a current topographic study; a hydrologic analysis; and plans prepared with the geotechnical civil and hydraulic engineering, soil erosion, hydrology, and engineering geology expertise.

In addition to the caution expressed by County staff, the Montecito community supports the County's efforts to ensure that new development within Montecito is approved after being informed at least by the Flood Hazard/Mapping Analysis. In April, the Montecito Planning Commission reaffirmed the County's March 13th memorandum, discussed above, and voted unanimously to:

> recommend[] that the Board of Supervisors <u>wait to take action</u> on the proposed Ordinance Amendment to the Montecito Land Use and Development Code (MLUDC) and recommend[] that the County Planning Commission recommend that the Board of Supervisors <u>wait to take action</u> on the proposed Ordinance Amendment to Article II, the Coastal Zoning Ordinance, <u>until the Flood Hazard/Recovery Mapping comes out in June 2018</u>, <u>members of the public have had sufficient time to review the</u> <u>Ordinance Amendments in context with the new advisory base</u> <u>flood elevations</u>, and resiliency and adaptive management <u>strategies have been considered</u>. Upon receipt of this information, the Montecito Planning Commission requests that the Ordinance Amendments be referred back to the Montecito Planning Commission for further review and recommendations.

(Attachment H; emphasis added.) The Montecito Planning Commission Chair, Joe Cole, stated that the County's proposed ordinance amendments regarding streamlined rebuilding should be delayed because the "County needs an overall strategy that would include a threat analysis, early

warning monitoring, slope protections and neighborhood zoning based on actual hazard maps." Chair Cole continued, "We need to use FEMA mapping to figure out where the real risks are." (Attachment I.)

The California Environmental Quality Act: While the County has, so far, indicated that new development within Montecito should be informed by technical analyses of the development site's ongoing flood and hazard risks, it is also important to remember that the County's interim response to the January slides is not the only arbiter of what analyses may be required in connection with the land use permit process. The California Environmental Quality Act (CEQA) is designed, in part, to "[i]nform governmental decision makers and the public about the potential, significant environmental effects of proposed activities" and to "[i]dentify the ways that environmental damage can be avoided or significantly reduced." (CEQA Guidelines, § 15002.)

In order to determine when a development project may have a potentially significant impact on the environment, CEQA encourages local agencies such as the County to:

develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, noncompliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant.

(CEQA Guidelines, §15064.7, subd. (a).) The County has accepted this invitation. First, the County has established a detailed framework – its *Guidelines for the Implementation of the California Environmental Quality Act of 1970 As Amended* – governing the procedural components of CEQA. (Attachment J.) The County also adopted its *Environmental Thresholds and Guidelines Manual*, which guide the "Planning and Development Department's determination on whether or not a project may have a significant effect on the environment." (Attachment K.)

On the procedural side, the County's *Guidelines* provide that a project applicant must include, at the outset of the permitting process, sufficient information to properly evaluate the project. For example, the *Guidelines* direct that a permit application should contain "[d]etailed information on site conditions, particularly any unique characteristics such as environmentally sensitive habitats or geologic hazards is required." Additionally, for "projects which may ... pose

a threat to public health or safety, information regarding the engineering basis and design of the project facilities and the effects of project operations is required."

Such information is critical because, as the County's *Environmental Thresholds and Guidelines Manual* instructs, a project is deemed to have a potentially significant environmental impact "if the proposed development activity, including all proposed mitigation measures, could result in substantially increased erosion, landslides, soil creep, mudslides and unstable slopes.... In addition, <u>impacts are considered significant when people or structures would be exposed to</u> <u>major geologic hazards upon implementation of the project.</u>" (Emphasis added.)

The Lighthouse Project's Potentially Significant Impacts: With regard to the Lighthouse Trust Project, the County prepared – <u>before the January slides</u> – a project description and Notice of Exemption indicating that the Project was exempt from the provisions of CEQA. The same project description and Notice of Exemption, which have not been revised to address the substantial environmental issues arising from the January slides, appear in the Board's packet for the appeal. Notably, then, the County has not addressed, through the CEQA process or otherwise, the potential impacts associated with demolishing and rebuilding a home in what the County itself has identified as an Extreme Risk Area for ongoing debris flows and flooding.

Instead, the County continues to rely on CEQA exemptions that are typically applicable to single-family homes and similarly inconsequential projects. However, the CEQA exemptions relied on by the County are, in CEQA terminology, <u>categorical</u> exemptions, which renders them subject to CEQA Guidelines section 15300.2 – the "exception to the exemptions" provision. That CEQA Guidelines provision specifies, in part, that categorical exemptions "shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances."

It is clear that both elements of the "exception to the exemption" – unusual circumstances and the reasonable possibility of a significant impact – are present with regard to the Lighthouse Project. As discussed above, Santa Barbara County experienced a life- and community-altering event in January. The Lighthouse Property was itself impacted by the debris flow resulting from the January slides. The same debris flow damaged or destroyed structures on adjacent and nearby properties. The risk is also ongoing. The County itself identified the Property as being in an Extreme Risk Area. The County acknowledged that its prior flood management program is, currently, severely lacking. The January slides radically altered not only the physical conditions of Montecito, but also what was known about the likely risks associated with living in Montecito.

Additionally, there is beyond a "reasonable possibility" that the Project will have a significant adverse environmental impact. As noted above, the County's own CEQA thresholds

state that "impacts are considered significant when people or structures would be exposed to major geologic hazards upon implementation of the project." Again, the County identified the Property as being in an Extreme Risk Area. Moreover, the flood and debris risk associated with the Property is not just hypothetical. The Property was, as discussed above, actually impacted by the debris flow from the Buena Vista Creek. Despite this, the County has not conducted an analysis, under CEQA or otherwise, regarding these potential impacts.

It is also worth noting that the Lighthouse Project includes elements that threaten to increase the Property's geologic hazards. For example, in order to accommodate the Project, including its basement, approximately 340 to 480 truck trips worth of soil will be excavated at the Property, including, in the words of County staff, to "step down the hillside in a manicured landscape." The County has not analyzed the potential impact of such grading, including potential impacts on adjacent properties as a result of such significant earthwork.

For the foregoing reasons, we request that the Board grant the appeals outright, or, alternatively, direct the Planning and Development Department to prepare an Initial Study under CEQA that will inform the County as to what type of environmental review will be required under CEQA for the Project if it proceeds.⁶

Sincerely,

Neal P. Maguire

NPM/tm

Attachments '

⁶ Pursuant to the County's *Guidelines for the Implementation of the California Environmental Quality Act of 1970 As Amended*, "A determination that a project is not exempt may not be appealed; a determination that a project is exempt may be reviewed by the decisionmaker at the time of consideration of the project, and <u>if the decisionmaker disagrees with the determination of exemption</u>, the decisionmaker shall instruct the Planning and Development Department to prepare an Initial Study." (Emphasis added.)



MONTECITO BOARD OF ARCHITECTURAL REVIEW APPROVED MINUTES Meeting of December 19, 2016

Santa Barbara County Planning Commission Hearing Room Engineering Building, Room 17 123 East Anapamu Street Santa Barbara, CA 93101 (805) 568-2000

Thiep Cung	Dave Mendro	- Chair
Don Sharpe	Claire Gottsdanker	- Vice Chair
John Watson	Alex Tuttle	- Supervising Planner
Dorinne Lee Johnson	Sharon Foster	- MBAR Secretary
Bob Kupiec		-

The regular meeting of the Santa Barbara County Montecito Board of Architectural Review Committee was called to order by the Vice Chair, Claire Gottsdanker, at 2:00 P.M., in the Santa Barbara County Engineering Building, Room 17,123 East Anapamu Street, Santa Barbara, California.

COMMITTEE MEMBERS PRESENT:

Claire Gottsdanker - Vice Chair Don Sharpe John Watson Dorinne Lee Johnson Robert Kupiec Thiep Cung

Sharon Foster - Hearing Support Supervisor Alex Tuttle - Supervising Planner

COMMITTEE MEMBERS ABSENT: Dave Mendro - Chair

NUMBER OF INTERESTED PERSONS: 20

ADMINISTRATIVE AGENDA:

I. PUBLIC COMMENTS: None

II. AGENDA STATUS REPORT:

C-2. 16BAR-00000-00179, Morton-Smith Renovation and Additions-797 Park Lane West was dropped from the agenda at the request of Planning & Development.

Action: Watson moved, seconded by Johnson, and carried by a vote of 4-0-1 (Mendro and Kupiec absent, Cung abtained) to approve the changes to the December 12, 2016 MBAR agenda.

III. MINUTES: The MBAR Minutes of December 5, 2016 will be reviewed.

Action: Watson moved, seconded by Johnson, and carried by a vote of 4-0-1 (Mendro and Kupiec absent, Cung abtained) to approve the MBAR Minutes of December 5, 2016 as amended.

IV. MBAR MEMBERS INFORMATIONAL BRIEFINGS:

Thiep Cung reported that he would be abstaining from items 4, 5 and 13.

Claire Gottsdanker reported that she attended the Planning & Development Joint Chairs meeting on December 12, 2016. She also stated that would be not be in attendance for the January 12, 2017 MBAR meeting.

V. STAFF UPDATE: None

CONSENT AGENDA:

C-1.	16BAR-00000-00159	Howe New Garage	1482 East Mountain Drive
	16LUP-00000-00475	(Mark Friedlander, Planner 568-2	2046) Ridgeline: N/A

Request of Brian Miller, agent for the owner, Michael Howe, to consider Case No. 16BAR-00000-00159 for **final approval on consent of a new detached garage of approximately 791 square feet with a 975 square foot motor court.** The following structures currently exist on the parcel: a single family dwelling of approximately 5,344 square feet and a pool cabana of approximately 400 square feet. The proposed project will require approximately 113 cubic yards of cut and approximately 21 cubic yards of fill. The property is a 2.80 acre parcel zoned 3-E-1 and shown as Assessor's Parcel Number 011-060-025, located at **1482 East Mountain Drive** in the Montecito area, First Supervisorial District.(Continued from 9/12/16, 11/7/16, 12/5/16)(Appearance by Tom Smith)

Action: Watson moved, seconded by Johnson, and carried by a vote of 5-0 (Mendro and Cung absent) to grant final approval on consent of 16BAR-00000-00159. (The approval of this project was trailed to later in the meeting)

C-2.	16BAR-00000-00179	Morton-Smith Renovation and Additions	797 Park Lane West
	16LUP-00000-00467	(Tammy Webber, Planner 568-3017)	Ridgeline: N/A

Request of Jeremy Roberts, architect for the owner, Emma Morton-Smith, to consider Case No. 16BAR-00000-00179 for final approval on consent of an addition to the first floor of approximately **616** square feet and an addition to the second floor of approximately **1,303** square feet and an addition to the basement of approximately 230 square feet, an addition to the existing attached garage of approximately **30** square feet and an patio deck of approximately **846** square feet. The following structures currently exist on the parcel: a two story single family dwelling, with the first floor being approximately 2,344 square feet, the second floor being approximately 764 square feet, the base being approximately 500 square feet and an attached garage of approximately 170 cubic yards of fill. The property is a 1.16 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-050-024, located at **797 Park Lane West** in the Montecito area, First Supervisorial District.(Continued from **10/10/16, 11/7/16**)

Action: Watson moved, seconded by Johnson, and carried by a vote of 5-0 (Mendro & Kupiec absent) to drop the project 16BAR-00000-00179 as requested by Planning & Development. *Please see Agenda Status Update.*

STANDARD AGENDA

1.

Floor Area Calculator & Project Statistics Worksheet

(Jessica Steele, Planner 884-8082)

Request of the Long Range Planning Division to present the Floor Area Calculator and Project Statistics Worksheet. The worksheet calculates "Recommended Maximum House Net Floor Area" based on the new floor area calculations reflected in the Montecito Architectural Guidelines Limited Update (May 2016). The worksheet will replace the Statistics Table for Montecito Projects on the current MBAR application. No formal action is required by MBAR. (Continued from 12/5/16)

MBAR Comments:

1. The Floor Area Calculator and Project Statistics Worksheet appears to include all of the relevant information and work as intended. Nice job.

No action taken. The project received comments only. (Mendro absent)

CONCEPTUAL REVIEW

	Wavenly Trust New Two Story		
2.	15BAR-00000-00101	Single Family Dwelling & Cabana	1040 Coyote Road
	15LUP-00000-00356	(Sean Stewart, Planner 568-2517)	Ridgeline: H-Mon

Request of Michael Stroh, architect for the owner, Wavenly Trust, to consider Case No. 15BAR-00000-00101 for further conceptual review of new two story single family dwelling, with the first floor being approximately 1,151 square feet, the second story being approximately 2,805 square feet, and an attached garage of approximately 551 square feet and a cabana of approximately 120 square feet. No structures currently exist on the parcel. The proposed project will require approximately 1,190 cubic yards of cut and approximately 750 cubic yards of fill. The property is a 3.0 acre parcel zoned 3-E-1 and shown as Assessor's Parcel Number 013-050-059, located at 1040 Coyote Road in the Montecito area, First Supervisorial District. (Continued from 7/27/15, 11/30/15)(Michael Stroh, Henry Lenny, Lisa Loiacono, Pat Brody)

Public Comments:

1. Kellam de Forest

MBAR Comments:

- 1. Mirador seems out of scale to house and extends too far out restudy.
- 2. Primary window on lower level should be further recessed.
- 3. Landscape plan needs further development, add more plant material by front gate so it blends more into landscape.

No action taken. The project received comments only. (Mendro absent) The project may return for preliminary/final approval with the planner's approval.

Light House Trust

3. 16BAR-00000-00219 Demo/New Two Story Single Family Dwelling 1948 & 1952 Tollis Avenue (No Planner Assigned) Ridgeline: N/A

Request of Don Nulty architect for the owners, Lighthouse Trust, to consider Case No. 16BAR-00000-00219 for conceptual review of a new two story single family dwelling, with the first floor being approximately 4,913 square feet, the second floor being approximately 2,370 square feet, a basement of approximately 5,984 square feet, an attached garage of approximately 609 square feet, a detached garage of approximately 570 square feet a detached guesthouse of approximately 784 square feet and accessory structure of approximately 800 square feet. The following structures currently exist on the parcel: Two existing residences of approximately 7,426 square feet total (to be

demolished). The proposed project will require approximately 3,800 cubic yards of cut and approximately 2,200 cubic yards of fill. The property is a 2.26 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-110-001 &007-110-002, located at **1948 & 1952 Tollis Avenue** in the Montecito area, First Supervisorial District. (Appearance by Don Nulty, Brian Zant, Steven Williams, Robin Stanford)

Public Comment:

- 1. Marsha Kotlyar for Marsha Hall
- Kellam de Forest

MBAR Comments:

- 1. Story poles and site visit required.
- Address aggregate side setbacks.
- Address aggregate side setbacks.
 Neighborhood compatibility survey required to demonstrate appropriateness of FAR.

No action taken. The project received comments only. (Mendro absent) The project may return for further conceptual review. MBAR requested a site visit and story poles.

4.	16BAR-00000-00230	Daniels Addition, Pool Cabana and Alterations	640 Randal Road
		(No Planner Assigned)	Ridgeline: N/A

Request of Chris Richards, agent for the owners, Ron Daniels & Joanne Rosen, to consider Case No. 16BAR-00000-00230 for conceptual review of a new a pool cabana of approximately 591 square feet, a new pool and a roof extension and enclosure of approximately 15 square feet. The following structures currently exist on the parcel: a single family dwelling of approximately 3,132 square feet and an attached garage of approximately 514 square feet. The proposed project will require approximately < 49 cubic yards of cut and approximately < 49 cubic yards of fill. The property is .96 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-120-035, located at 640 Randal Road in the Montecito area, First Supervisorial District.(Appearance by Chris Richards)

MBAR Comments:

- 1. Location of cabana does not relate well to pool.
- Site visit required with staked footprint of cabana and pool.

Site visit required with staked
 Confirm setbacks from ESH.

No action taken. The project received comments only. (Mendro absent, Cung recused) The project may return for further conceptual review. MBAR requested a site visit and stakes.

5.	16BAR-00000-00235	Halbreich Addition and Remodel	1988 East Valley Road	
		(No Planner Assigned)	Ridgeline: N/A	

Request of Warner Group Architects, Inc., architect for the owners, Jeremy & Nancy Halbreich, to consider Case No.16BAR-00000-00235 for conceptual review of an artist studio of approximately 35 square feet and the enclosure of an existing balcony of approximately 76 square feet. The following structures currently exist on the parcel: a single family dwelling of approximately 3,230 square feet, a basement of approximately 1,041 square feet, an attached garage of approximately 611 square feet and an artist studio of approximately 800 square feet. The proposed project will require approximately < 50cubic yards of cut and no fill. The property is a 1.3 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-130-023, located at 1988 East Valley Road in the Montecito area, First Supervisorial District. (Appearance by John Eisenbiez)

Public Comments:

1. Kellam de Forest

MBAR Comments:

- 1. Should use opportunity of project to improve on existing sub-par architecture of the house.
- 2. Landscape and entry are nice improvements. Please study architecture to be of consistent quality as the landscape plan.
 3. Restudy column base.

No action taken. The project received comments only. (Mendro absent, Cung recused) The project may return for preliminary approval.

6.	16BAR-00000-00173	Franz Remodel, Addition and New Garage	1157 High Road
	16CDP-00000-00070	(Sean Stewart, Planner 568-2017)	Ridgeline: N/A

Request of Elizabeth Sorgman, architect for the owner, Barbara Franz, to consider Case No. 16BAR-00000-00173 for further conceptual review of a 690 square foot (net) addition to an existing single family dwelling and a new two car garage of approximately 480 square feet (net). The following structures currently exist on the parcel: a single family dwelling of approximately 948 square feet. The proposed project will require approximately 150 cubic yards of cut and approximately 150 cubic yards of fill. The property is a .21 acre parcel zoned 20-R-1 and shown as Assessor's Parcel Number 009-163-008, located at 1157 High Road in the Montecito area, First Supervisorial District. (Continued from 9/26/16, 10/10/16)(Appearance by Elizabeth Sorgman, Barbara Franz, Brian Franz)

Public Comments:

- 1. J'Amy Brown Letter
- 2. Roger & Dorothy Daniels Letter
- 3. Ian & Denise Burrows Letter 4. Jill Taylor & Ray Link Letter

MBAR Comments:

- 1. Would like garage wider and rotated, or shrink driveway entrance to add more landscaping.
- Pedestrian walkway needs to be further developed.
 If facing the street, the garage door would need to be nicely designed.

No action taken. The project received comments only. (Mendro absent) The project may return for further conceptual review/ preliminary approval.

7.	16BAR-00000-00203	Hatton New Accessory Structure	1641 East Valley Road
	16LUP-00000-00486	(Kimberley McCarthy Planner 568-2	2005) Ridgeline: N/A

Request of Sophie Calvin, agent for the owners, Mr. & Mrs. Timothy Hatton, to consider Case No. 16BAR-00000-00203 for further conceptual review/preliminary/final approval of a new accessory structure of approximately 498 square feet. The following structures currently exist on the parcel: a single family dwelling of approximately 2,340 square feet, an attached garage of approximately 539 square feet. The proposed project will not require grading. The property is a 1.0 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-170-019, located at 1641 East Valley Road in the Montecito area, First Supervisorial District.(Continued from 11/7/16)(Appearance by Sophie Calvin, Tim Hatton, Jock Sewal)

Public Comment:

1. Kellam de Forest

MBAR Comments:

- One member concerned with loss of oak tree.
 Location of new oak trees seems inappropriate due to lack of space from existing trees and proposed building.

- 3. Some members concerned with visibility of modular structure from East Valley Road.
- Other members are okay with it. 4.
- 5. Need complete landscape plan in addition to tree planting.

Action: Watson moved, seconded by Kupiec, and failed by a vote of 3-3 (Mendro absent) to grant preliminary/final approval.

Action: Watson moved, seconded by Sharpe, and carried by a vote of 5-1 (Kupiec no, Mendro absent) to continue 16BAR-00000-00203 for further conceptual review/preliminary/final approval with the applicant to restudy location of the workshop and provide a developed landscape plan and materials board.

Berg New Single Family Dwelling			
8.	16BAR-00000-00040	and Detached Studio	321 Ennis Brook
	16LUP-00000-00445	(Gabe Diaz Planner (805) 568-3359)	Ridgeline: N/A

Request of Ron Heston, agent for the owners Ronald & Marci Berg, to consider Case No. 16BAR-00000-00040 for conceptual review/preliminary approval of a new single family dwelling of approximately 3,980 square feet, an attached garage of approximately 800 square feet and a detached studio of approximately 800 square feet, a 5 foot high retaining wall, a bocce ball court and an outdoor shower. There are no other structures on the property. The proposed project will require approximately 600 cubic yards of cut and approximately 600 cubic yards of fill. The property is a .71 acre parcel zoned 1-E-1 and shown as Assessor's Parcel Number 007-530-033 located at 321 Ennis Brook in the Montecito area, First Supervisorial District. (Continued from 10/10/16, 10/2416)(Appearance Ron Heston, Ronald Berg Sam Maphis)

MBAR Comments:

- One member concerned with downlighting from trees, should be full cut-off.
 Trees along street should not be lit.
- Trees along street should not be
 Appreciates lowering of height.

Action: Watson moved, seconded by Sharpe, and carried by a vote of 5-0 (Mendro absent, Cung recused) to grant 16BAR-00000-00040 preliminary approval with the applicant to remove 10 of the down lights from trees, ensure fixtures are full-snoot, and add planter along garage wall, as identified on plans. The project may return for final approval with the planner's approval.

9.	16BAR-00000-00132	Melton Trust Additions	520 McLean Lane
	16LUP-00000-00329	(Kimberley McCarthy, Planner 568-2005)	Ridgeline: N/A

Request of Wade Davis Design, architect for the owner, Melton Trust, to consider Case No. 16BAR-00000-00132 for further conceptual review/preliminary approval of an addition of approximately 137 square feet to the existing single family dwelling and an addition of approximately 377 square feet to the existing attached garage. The following structures currently exist on the parcel: a single family dwelling of approximately 4,614 square feet, and attached garage of approximately 732 square feet and a pool house of approximately 800 square feet. The proposed project will not require grading. The property is a 1.14 acre foot parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-520-009, located at **520 McLean Lane** in the Montecito area, First Supervisorial District. (Continued from 7/25/16) (Appearance by Jim Davis)

Action: Watson moved, seconded by Gottsdanker, and carried by a vote of 5-0 (Mendro & Kupiec absent) to grant 16BAR-00000-00132 preliminary approval as submitted. The project may return for final approval on consent with the planner's approval.

PRELIMINARY APPROVAL

		Saffir Demo/New Single Family Dwelling	
10.	16BAR-00000-00146	Balcony & Attached Garage	1512 East Mountain Drive
	16LUP-00000-00095	(Kathryn Lehr Planner 568-3560)	Ridgeline: N/A

Request of Danny Longwill, architect for the owners, Ken & Andrea Saffir, to consider Case No. 16BAR-00000-00146 for preliminary/final approval of a new single family dwelling of approximately 3,744 square feet and an attached garage of approximately 530 square feet. The following structures currently exist on the parcel: single family dwelling of approximately 2,141 square feet and an attached garage of approximately 464 square feet, all to be demolished. The proposed project will require approximately 390 cubic yards of cut and approximately 40 cubic yards of fill. The property is a 3.25 acre parcel zoned 3-E-1and shown as Assessor's Parcel Number 011-070-024 located at 1512 East Mountain Drive in the Montecito area, First Supervisorial District.(Continued from 9/12/16)(Appearance by Danny Longwill, Brian Banks)

MBAR Comments:

1. The project is exempt from the 16-foot height limit in the interest of good design without negatively affecting neighborhood compatibility or the surrounding view shed.

Action: Cung moved, seconded by Kupiec, and carried by a vote of 6-0 (Mendro absent) to grant 16BAR-00000-00146 preliminary/final approval as submitted.

FINAL APPROVAL

11.	16BAR-00000-00039	Corson Two Story Single Family Dwelling	302 Ennisbrook Drive
	16LUP-00000-00132	(Sean Stewart, 568-2017)	Ridgeline: N/A

Request of Robert Senn, architect for the owner, Brad Corson, to consider Case No. 16BAR-00000-00039 for final approval of a new two story residence with the first floor being approximately 3,706 square feet, the second floor being approximately 1,408 square feet, a basement of approximately 1,940 square feet an attached garage of approximately 787 square feet and an accessory structure of approximately 799 square feet. There are currently no structures on the property. The proposed project will require approximately 710 square feet cubic yards of cut and approximately 710 cubic yards of fill. The property is a 1.48 acre parcel zoned PRD and shown as Assessor's Parcel Number 007-530-011, located at **302 Ennisbrook Drive** in the Montecito area, First Supervisorial District.(Continued from 3/21/16, 4/18/16,6/20/16,7/25/16, 8/22/16)(Appearance by Robert Senn, Sam Maphis)

MBAR Comments:

1. No tree lighting on property line.

Action: Watson moved, seconded by Johnson, and carried by a vote of 6-0 (Mendro absent) to continue 16BAR-00000-00039 for final approval on consent.

12.	15BAR-00000-00250	Smith Additions and Accessory Structures	800 Buena Vista Drive
	16LUP-00000-00028	(Sean Stewart, Planner 568-2517)	Ridgeline: N/A

Request of Tom Ochsner, architect for the owner, Pat Smith, to consider Case No. 15BAR-00000-00250 for final approval of additions to the existing one story single family dwelling with an approximate 218 square foot (net) first floor laundry room addition, a 50 square foot (net) first floor foyer addition, a 119 square foot (net) first floor living room addition, a 51 square foot (net) first floor closet addition, a 1,036 square foot (net) second story master bedroom suite addition, along with a second story deck (proposed square footage unknown), a 422 square foot (net) cabana, a 657 square foot (net) detached garage and bike barn, a retaining wall to connect two existing retaining walls with colors and materials to match existing, and demolition of an existing 347 square foot (net) carport. The following structures currently exist on the parcel: a one story single family dwelling of approximately 3,917 square feet (net), an art studio of approximately 276 square feet (net), an attached garage of approximately 584 square feet (net), and a carport of approximately 347 square feet. The proposed project will require approximately 250 cubic yards of fill. The property is a 1.67 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-060-047, located at 800 Buena Vista Drive in the Montecito area, First Supervisorial District. (Continued from 1/25/16, 3/7/16, 7/11/16, 8/8/16)(Appearance by Tom Ochsner)

MBAR Comments:

- 1. Large window on south elevation seems out of proportion.
- 2. Concerned about placement of bocce court as part of Final approval since it is a change from what was granted preliminary approval.
- 3. Need lighting plan.

Action: Watson moved, seconded by Johnson, and carried by a vote of 6-0 (Mendro absent) to continue 15BAR-00000-00250 with the applicant to reconsider the bocce court, restudy the large iron window/door, and provide a lighting plan. The project may return for final approval on consent.

Olsten Montecito Trust

13.	14BAR-00000-00082	Demo, New Single Family Dwelling and Garage	1154 Channel Drive
	14LUP-00000-00014	(J. Ritterbeck, Planner 568-3509)	Ridgeline: N/A

Request of Kelly Teich, architect for the owner, Olsten Montecito Trust, to consider Case No. 14BAR-00000-00082 for preliminary/final approval of a new 3,187 square foot, two story single-family dwelling with the first floor being approximately 1,935 square feet, the second floor being approximately 1,252 square feet, an 881 square foot basement, a new detached garage of approximately 680 square feet, and a new detached pool cabaña of approximately 570 square feet. The following structures currently exist on the parcel: a two story single family dwelling of approximately 3,802 square feet total (to be demolished) and an attached garage of approximately 520 square feet (to be demolished). The proposed project will require 500 cubic yards of cut and 100 cubic yards of fill and 400 cubic yards of export. The property is a 0.44-acre parcel zoned 1-E-1 and shown as Assessor's Parcel Number 009-352-019, located at 1154 Channel Drive in the Montecito area, First Supervisorial District. (Continued from 5/5/14, 8/25/14, 10/6/14 11/3/14, 12/1/14, 12/15/14, 9/28/15, 10/12/15, 11/21/16)(Appearance by Kelly Teich, Derrik Weston, Mike Tessio)

Public Comments:

Susan Petrovich
 Sophie Calvin

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MBAR Comments:

- 1. 2. 3. 4.

- AR Comments: Need detail for corten planter box, including plant palette for boxes. Appreciates louvering of skylight should be painted steel to match window detail. Look at heat island effect from the roof. Landscaping is compatible with surrounding development. Windows on second story facing green roof and to the east should have raised sills to function more like windows than doors. Entry gate should have wood detailing matching elevator tower. Lighting should be on timers. 5.
- 6.
- Lighting should be on timers. 7.
- Need details on roofing material for garage and cabana and need precise details for house.
 Need to document and verify that landscaping will not impair private views.
 Find alternative downlight fixture for tree lighting.

- **11.** Rear balcony is acceptable.

Action: Watson moved, seconded by Johnson, and carried by a vote of 4-0-1 (Mendro absent, Sharpe abstained, Cung recused) to grant 14BAR-00000-00082 preliminary approval with the planner's approval and with the following direction:

- The window sill height on the second story shall be revised to behave like windows and not doors.
- Lighting shall be on timers.
- Downlight fixtures shall be revised to not be adjustable.

- Downlight fixtures shall be revised to not be adjustance. The entry gate to be wood, not corten. Need full roof details for all structures. Applicant to provide 3rd party review of the landscaping by a County-qualified arborist to confirm the height of the landscaping/trees.
- Applicant to study the heat island effect of the roofing.
- Skylight louvers to be dark, non-reflective material. All required MBAR findings can be made.

There being no further business to come before the Montecito Board of Architectural Review Committee, Committee Member Watson moved, seconded by Johnson, and carried by a vote of 5 to 0 (Mendro and Cung absent) that the meeting be adjourned until 2:00 P.M. on Monday, January 12, 2017 in the Santa Barbara County Engineering Building, Room 17, 123 East Anapamu Street, Santa Barbara, California 93101.

Meeting adjourned at 7:44 P.M.

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MONTECITO BOARD OF ARCHITECTURAL REVIEW APPROVED MINUTES Meeting of April 6 2017

Santa Barbara County Planning Commission Hearing Room Engineering Building, Room 17 123 East Anapamu Street Santa Barbara, CA 93101 (805) 568-2000

-	Bob Kupiec Dave Mendro Don Sharpe	Claire Gottsdanker John Watson	- Chair - Vice Chair - Supervising Planner
-	Sam Maphis Thiep Cung	Sharon Foster	- MBAR Secretary

The regular meeting of the Santa Barbara County Montecito Board of Architectural Review Committee was called to order by the Chair, Claire Gottsdanker, at 1:00 P.M., in the Santa Barbara County Engineering Building, Room 17,123 East Anapamu Street, Santa Barbara, California.

COMMITTEE MEMBERS PRESENT:

Claire Gottsdanker - Chair John Watson - Vice Chair Donald Sharpe Thiep Cung Robert Kupiec Sam Maphis Dave Mendro

Sharon Foster - Hearing Support Supervisor Alex Tuttle - Supervising Planner

COMMITTEE MEMBERS ABSENT: None

NUMBER OF INTERESTED PERSONS: 35

ADMINISTRATIVE AGENDA:

I. PUBLIC COMMENTS: None

II. AGENDA STATUS REPORT:

Item 8. -707 Park Lane, LLC New Single Family Dwelling 16BAR-00000-00255, Accessory Structure and Attached Garage 707 Park Lane was continued to the MBAR meeting of April 27, 2017 at the request of the applicant.

Action: Watson moved, seconded by Maphis (Kupiec absent) and carried by a vote of 6-0 to approve the changes to the April 6, 2017 agenda.

III. MINUTES: The Minutes of March 9, 2017 and March 23, 2017 will be considered.

Action: Watson moved, seconded by Kupiec (Maphis & Sharpe absent) and carried by a vote of 5-0 to approve the MBAR minutes of March 9, 2017 as amended.

Action: Watson moved, seconded by Kupiec (Kupiec & Mendro absent) and carried by a vote of 5-0 to approve the MBAR minutes of March 23, 2017 as amended.

IV. MBAR MEMBERS INFORMATIONAL BRIEFINGS: Claire Gottsdanker and John Watson attended the Montecito Association Land Use Committee meeting on April 4, 2017.

Claire Gottsdanker attended the Planning & Development Joint Chairs meeting of April 3, 2017.

V. STAFF UPDATE: None

STANDARD AGENDA:

The Representatives of the following items should be in attendance at this MBAR Meeting by 1:00 P.M.

CONCEPTUAL REVIEW

1.

Next Chapter LLC,

Exterior Alterations to the Caretakers Cottage 17BAR-00000-00041 260 Santa Rosa Lane (No Planner Assigned) Ridgeline: N/A

Request of Wade Davis Design, architect for the owner, Next Chapter, LLC, to consider Case No. 17BAR-00000-00041 for conceptual review of exterior to the existing onsite 2-story caretakers residence/garage. The following structures currently exist on the parcel: a caretaker's cottage of approximately 535 square feet above an existing garage/equipment storage area below. The proposed project will not require grading. The property is a 2.0 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-280-054, located at **260 Santa Rosa Lane** in the Montecito area, First Supervisorial District. (Appearance by Jim Davis)

Public Comments:

- Dylan Johnson
 Bonnie Rand Letter

MBAR Comments:

1. Nice project.

The project received comments only. The project may return for preliminary/final approval with the planner's approval.

Next Chapter LLC, New Gate House, a Garage/Storage Structure 2. 17BAR-00000-00042 and Exterior Alterations

380 Santa Rosa Lane (No Planner Assigned) Ridgeline: N/A

Request of Wade Davis Design, architect for the owner, Next Chapter, LLC, to consider Case No. 17BAR-00000-00042 for conceptual review of a new gate house of approximately 254 square feet, a detached storage structure of approximately 1,700 square feet and exterior alterations to the existing residence. The following structures currently exist on the parcel: a single family residence of approximately 491 square feet. The proposed project will require approximately 20 cubic yards of cut and approximately 20cubic yards of fill. The property is a 21.26 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-280-047, located at 380 Santa Rosa Lane in the Montecito area. First Supervisorial District.(Appearance by Jim Davis)

Public Comments:

- 1. Monica Fried
- 2. Dylan Johnson
- 3. Bonnie Rand Letter

MBAR Comments:

- 1. Study shifting driveway away from southern property line in order to create drainage swale to capture and control runoff.
- 2. Southerly gate post should be shifted north.
- 3. Nice architecture.
- 4. Need landscape plan.
- 5. Need full plans for structures and need to verify allowed square footage for storage structure with planner.
- 6. Need grading plan for new internal roads.

The project received comments only. The project may return for further conceptual review/ preliminary approval with the planner's approval.

Crown Castle New Wooden Pole,

3. 17BAR-00000-00052 Mounted Antenna, Shroud and Electrical Meter 735 Oak Grove Drive 13CUP-00000-00009 (Jovce Gerber, Planner 568-3518) Ridgeline: N/A

Request of Tricia Knight, agent for the owners, Crown Castle NG West, Inc., to consider Case No. 17BAR-00000-00052 for conceptual review of a new telecommunications facility consisting of a new 25 ft 6 inch wooden pole, one omni directional 24" x 16" antenna mounted on the top of the pole, one pole-mounted equipment shroud, and one pole-mounted 100 AMP electrical meter. No structures currently exist in the project location. The proposed project will require less than 50 cubic yards of cut and fill. The pole would be placed within the road right-of-way adjacent to Assessor's Parcel Number 007-110-082, located in the road right of way adjacent to **735 Oak Grove Drive** in the Montecito area, First Supervisorial District. (Appearance by Tricia Knight)

Public Comments:

- 1. Matthew Stotts- Letter
- 2. Marilyn & Steven Bachman- Letter
- Barbara & Jeffrey Brownman
 Harry Fowler Letter

MBAR Comments:

1. Study and show alternative placement options.

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- 2. New pole creates visual intrusion into the existing setting.
- 3. Study opportunities to integrate with landscaping to blend in with surroundings.
- 4. Site visit requested to view the site and alternatives.

The project received comments only. The project may return for further conceptual review with a site visit.

Marks Trust Patio Enclosure, Window and Door Changes,

4.17BAR-00000-00048Pool Extension and a New Geo Thermal Pool809 Romero Canyon17LUP-00000-00090(Mark Friedlander, Planner 568-2026)Ridgeline: N/A

Request of Danny Longwill, architect for the owners, Mike and Phyllis Marks, to consider Case No. 17BAR-00000-00048 for conceptual review of the enclosure a patio of approximately 293 square feet to create a dining room with window and door changes, an extension of the already approved pool and a new geo-thermo pond. The following structures currently exist on the parcel: a 5,088 square foot single family dwelling, a residential second unit of approximately 1,185 square feet, an artist studio of approximately 410 square feet and a storage barn of approximately 1,156 square feet (previously permitted and currently under construction). The proposed project will require approximately 280 cubic yards of cut and no fill. The property is a 5.76 acre parcel zoned 5-E-1 and shown as Assessor's Parcel Number 007-080-034, located at **809 Romero Canyon** in the Montecito area, First Supervisorial District. (Appearance by Danny Longwill, Mike & Phyllis Marks)

MBAR Comments:

- 1. Project is consistent with prior approval.
- 2. Nice project.
- 3. Some concern with water waste of pond from evaporation architect to provide more information.

The project received comments only. The project may return for preliminary/final approval with the planner's approval.

	Rudd/Gerlach New Two Story Single Family Dwelling, Attached Garage		
5.	17BAR-00000-00036	New Pool & Three Subterranean Basements	445 Nicholas Lane
	16LUP-00000-00344	(Sean Stewart Planner 568-2517)	Ridgeline: N/A

Request of Brian Banks, agent for the owners, Charles Rudd & Inken Gerlach, to consider Case No. 17BAR-00000-00036 for conceptual review of a new two story single family dwelling, with the first floor being approximately 2,932 square feet, the second floor being approximately 1,695 square feet, an attached garage of approximately 732 square feet and 3 fully subterranean basements totaling approximately 2,135 square feet. The following structures currently exist on the parcel: a single family dwelling with an attached garage of approximately 2,384 square feet total, to be demolished. The proposed project will require approximately 1,650 cubic yards of cut and approximately 1,080 cubic yards of fill. The property is a .95 acre parcel zoned 2-E-1and shown as Assessor's Parcel Number 013-210-058, located at 445 Nicholas Lane in the Montecito area, First Supervisorial District. (Appearance by Brian Banks, Kas Seefeld, Charles Rudd)

Public Comments:

1. Ed Moore

MBAR Comments:

Look to enhance entry.
 Large overhangs are nice.

- 3. Style preferred over prior design.
- 4. South elevation appears monolithic, needs to be softened and varied to break horizontal and vertical planes.
- 5. Pool facing material should match house.
- 6.
- Garage elevation needs further study to tie in with house better. Amount of cut could be decreased. Try to reduce export by using on-site or reducing **Ž**. basement area.

The project received comments only. The project may return for further conceptual review. Possible story poles and site visit for the future.

Light House Trust

16BAR-00000-00219 Demo/New Two Story Single Family Dwelling 1948 &1952 Tollis Avenue 6. 17LUP-00000-00035 (Mark Friedlander, Planner 568-2046) Ridgeline: N/A

Request of Don Nulty architect for the owners, Lighthouse Trust, to consider Case No. 16BAR-00000-00219 for further conceptual review of a new two story single family dwelling, with the first floor being approximately 5.022 square feet, the second floor being approximately 1.972 square feet, a basement of approximately 5,021 square feet, an attached garage of approximately 577 square feet, a detached garage of approximately 570 square feet, a detached guesthouse of approximately 754 square feet and pool cabana structure of approximately 782 square feet. The following structures currently exist on the parcel: Two existing residences of approximately 7,426 square feet total (to be demolished). The proposed project will require approximately 3,800 cubic yards of cut and approximately 2,200 cubic yards of fill. The property is a 2.26 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-110-001 &007-110-002, located at 1948 & 1952 Tollis Avenue in the Montecito area, First Supervisorial District. (Continued from 12/19/17)(Appearance by Brian Banks, Don Nulty, Robert Foley, Stephen Alesch, Robin Standefer, Brian Cabaniss)

Public Comments:

- Michael MacElhenny
- 2. Patrick Smith
- 3. Lilli and Bill Tragos- Letter

MBAR Comments:

- House seems too close to rear property line. 1.
- 2. Second floor could be more efficient and reduced in scale – restudy massing.
- 3. Master bedroom could have reduced plate height.
- 4. Massing is too big to respect views from adjacent properties.
- Consider eliminating second story and reconfiguring site plan. 5.
- House is too long and could be more compact. 6.
- 7. Landscaping could help to add some green space behind house.
- 8. Architectural style is nice.
- Study grading to reduce required export and balance on-site. 9.
- 10. Generally supportive of extent of grading.

The project received comments only. (Mendro recused) The project may return for further conceptual review.

PRELIMINARY APPROVAL

7.	17BAR-00000-00038	Kurland/David Loggia Remodel	1330 Arroyico Lane
	17LUP-00000-00053	(Tammy Weber, Planner 568-3017)	Ridgeline: N/A

Request of John D. Kelley, architect for the owners, Norman Kurland and Deborah David, to consider Case No. 17BAR-00000-00038 for **preliminary/final approval of a loggia remodel of approximately 178 square feet.** The following structures currently exist on the parcel: a single family residence of approximately 3,188 square feet with an attached garage of approximately 504 square feet. The proposed project will not require grading. The property is a .35 acre parcel zoned E-1 and shown as Assessor's Parcel Number 009-051-005, located at **1330 Arroyico Lane** in the Montecito area, First Supervisorial District. (Continued from 3/23/17)(Appearance by John D. Kelly)

MBAR Comments:

1. Appreciates response to prior comments.

Action: Kupiec moved, seconded by Sharpe and carried by a vote of 6-1 (Watson no) to grant preliminary and final approval of 17BAR-00000-00038.

		707 Park Lane, LLC New Single Family Dwelling	
8.	16BAR-00000-00255	Accessory Structure and Attached Garage	707 Park Lane
	16LUP-00000-00606	(Sean Stewart, Planner 568-2517)	Ridgeline: N/A

Request of Darrell Becker, agent for the owner, 707 Park Lane, LLC, to consider Case No. 16BAR-00000-00225 for preliminary/final approval of a new single family dwelling of approximately 3,454 square feet, an attached garage of approximately 528 square feet, and a detached cabana of approximately 798 square feet. No structures currently exist on the parcel. The proposed project will require approximately 117 cubic yards of cut and approximately 117 cubic yards of fill. The property is a 1 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-090-023, located at 707 Park Lane in the Montecito area, First Supervisorial District. (Continued from 2/2/17)

Action: Watson moved, seconded by Maphis, and carried by a vote of 6-0 (Kupiec absent) to continue 16BAR-00000-00225 to the April 27, 2017 MBAR meeting. *Please see Agenda Status Update*.

Fuss New Garage, Garage Conversion,			
9.	17BAR-00000-00007	New Cabana and Attached Covered Patio	175 Olive Mill Lane
	17CDP-00000-00013	(Sean Stewart, Planner 568-2517)	Ridgeline: N/A

Request of Sophie Calvin, agent for the owners, Mr. & Mrs. Stuart Fuss, to consider Case No. 17BAR-00000-00007 for preliminary/final approval of a new garage of approximately 768 square feet, a garage conversion of approximately 534 square feet, a new cabana of approximately 206 square feet with an attached semi-enclosed BBQ area of 623 square feet and a covered porch of approximately 130 square feet. The following structures currently exist on the parcel: a single family dwelling of approximately 5,022 square feet and an attached garage of approximately 534 square feet. The proposed project will not require grading. The property is a 1.37 acre parcel zoned 2-E-1 and shown as

Assessor's Parcel Number 009-170-080, located at 175 Olive Mill Lane in the Montecito area, First Supervisorial District. (Continued from 2/23/17)(Appearance by Sophie Calvin & Mrs. Fuss)

MBAR Comments:

10.

- An Comments: One member concerned that attic should be included in FAR since it appears to accommodate living space. Attic should be non-habitable. Cabana seems overly large given attached pavilion. Landscape along south side of property needs to be maintained on subject property. Appreciates lowering of chimneys. Window in attic dormer is too large. 1.
- 2. 3.
- 4.
- 5.

Action: Kupiec moved, seconded by Sharpe, and carried by a vote of 5-2 (Watson and Cung no) to grant preliminary/final approval of 17BAR-00000-00007 with the dormer window to be reduced from 4 to 3 bays, the attic to be non-habitable, and landscape screening on the south side of the property to be maintained.

Atkinson New Cabana, Two Story Detached Garage,

17BAR-00000-00017	Exercise Room and Covered Pavilion	800 Riven Rock Lane
17LUP-00000-00103	(Tammy Weber, 568-3017)	Ridgeline: N/A

Request of Tom Ochsner, architect for the owners, David & Cathy Atkinson, to consider Case No. 17BAR-00000-00017 for preliminary/final approval of a cabana of approximately 347 square feet with an attached covered pavilion of approximately 443 square feet, a two story detached accessory structure, with the first floor being a garage of approximately 763 square feet and the second floor being the exercise room of approximately 384 square feet. The following structures currently exist on the parcel: a single family residence of approximately 3,600 square feet, a stable of approximately 672 square feet. The proposed project will require approximately 350 cubic yards of cut and approximately 350 cubic yards of fill or will not require grading. The property is a 3.3 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 011-090-001, located at 800 Riven Rock Lane in the Montecito area, First Supervisorial District. (Continued from 2/23/17)(Appearance by Tom Ochsner, David & Cathy Atkinson)

MBAR Comments:

1. Consider adding stone on the left side of the chimney.

Action: Cung moved, seconded by Maphis and carried by a vote of 7-0 to grant preliminary/final approval of 16BAR-00000-00017.

FINAL APPROVAL

11.	16BAR-00000-00173	Franz Remodel, Addition and New Garage	1157 High Road	
	16CDP-00000-00070	(Sean Stewart, Planner 568-2517)	Ridgeline: N/A	

Request of Elizabeth Sorgman, architect for the owner, Barbara Franz, to consider Case No. 16BAR-00000-00173 for final approval of a 690 square foot (net) addition to an existing single family dwelling and a new detached two car garage of approximately 480 square feet (net). The following structures currently exist on the parcel: a single family dwelling of approximately 948 square feet. The proposed project will require approximately 150 cubic yards of cut and approximately 150 cubic yards of fill. The property is a .21 acre parcel zoned 20-R-1 and shown as Assessor's Parcel Number 009-163-008, located at **1157 High Road** in the Montecito area, First Supervisorial District. (Continued from 9/26/16, 10/10/16, 12/19/16, 1/12/17)(Appearance by Elizabeth Sorgman, Barbara Franz)

Public Comments:

J'Amy Brown 1.

MBAR Comments:

- 1. 2.
- Appreciates improvements in response to prior comments. Wistringia shrub should be pulled back further from pedestrian path and help create thicker hedge, or reduce size of plant. Bell light on the street tree should be eliminated. Hedge should be maintained at 8 feet and thickened.
- 3.
- 4. 5.
- Tree in front should be shifted away from driveway.

Action: Watson moved, seconded by Sharpe and carried by a vote of 7-0 to grant final approval of 16BAR-00000-00173, with the tree lights to be removed in the road right-of-way, hedge to be maintained at 8 feet, wistringia to be moved against hedge and tree moved 10 feet east, the two stone pilasters to be on applicant's property, and garage door as depicted on stapled plan.

Berg New Single Family Dwelling			
12.	16BAR-00000-00040	and Detached Studio	321 Ennis Brook
	16LUP-00000-00445	(Gabe Diaz, Planner (805) 568-3359)	Ridgeline: N/A

Request of Ron Heston, agent for the owners Ronald & Marci Berg, to consider Case No. 16BAR-00000-00040 for final approval of a new single family dwelling of approximately 3,980 square feet, an attached garage of approximately 800 square feet and a detached studio of approximately 800 square feet, a 5 foot high retaining wall, a bocce ball court and an outdoor shower. There are no other structures on the property. The proposed project will require approximately 600 cubic yards of cut and approximately 600 cubic yards of fill. The property is a .71 acre parcel zoned 1-E-1 and shown as Assessor's Parcel Number 007-530-033 located at 321 Ennis Brook in the Montecito area, First Supervisorial District. (Continued from 10/10/16, 10/2416, 12/19/17)(Appearance by Ron Heston & Ronald Berg)

MBAR Comments:

Need finished architectural details. 1.

Action: Watson moved, seconded by Kupiec and carried by a vote of 6-0 (Cung absent) to continue the project. The project may return for final approval on consent.

There being no further business to come before the Montecito Board of Architectural Review Committee, Committee Member Watson moved, seconded by Maphis, and carried by a vote of 6 to 0 (Cung absent) that the meeting be adjourned until 1:00 P.M. on Thursday, April 27, 2017 in the Santa Barbara County Engineering Building, Room 17, 123 East Anapamu Street, Santa Barbara, California 93101.

Meeting adjourned at 5:45 P.M.

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MONTECITO BOARD OF ARCHITECTURAL REVIEW APPROVED MINUTES Meeting of May 11, 2017

Santa Barbara County Planning Commission Hearing Room Engineering Building, Room 17 123 East Anapamu Street Santa Barbara, CA 93101 (805) 568-2000

-	Bob Kupiec	Claire Gottsdanker	- Chair
-	Dave Mendro	John Watson	- Vice Chair
-	Don Sharpe	Alex Tuttle	- Supervising Planner
-	Sam Maphis	Sharon Foster	- MBAR Secretary
-	Thiep Cung		-

The regular meeting of the Santa Barbara County Montecito Board of Architectural Review Committee was called to order by the Chair, Claire Gottsdanker, at 1:00 P.M., in the Santa Barbara County Engineering Building, Room 17,123 East Anapamu Street, Santa Barbara, California.

COMMITTEE MEMBERS PRESENT:

Claire Gottsdanker Don Sharpe	-	Chair
John Watson	-	Vice Chair
Thiep Cung		
Dave Mendro		
Sam Maphis		
Sharon Foster	-	Hearing Support Supervisor
Alex Tuttle	-	Supervising Planner

COMMITTEE MEMBERS ABSENT:

Robert Kupiec

NUMBER OF INTERESTED PERSONS:

ADMINISTRATIVE AGENDA:

I. PUBLIC COMMENTS: None

II. AGENDA STATUS REPORT:

- C-2. 16BAR-00000-00208- Symington Addition & Elevator 246 Miramar Avenues- Dropped at the request of Planning & Development.
 - 17BAR-00000-00065 Dillon Trust New Two Story Single Family Dwelling Dwelling to an Attached Residential Second Unit Conversion of Existing Single Family, 751 Via Manana continued to the May 25, 2017 MBAR meeting due to a noticing error.

Action: Watson moved, seconded by Sharpe (Kupiec absent) and carried by a vote of 6-0 to approve the changes to the May 11, 2017 agenda.

III. The Minutes of April 27, 2017 will be considered.

Action: Mendro moved, seconded by Maphis (Kupiec absent, Sharpe & Watson abstained) and carried by a vote of 4-0-2 to approve the MBAR minutes of April 27, 2017.

IV. MBAR MEMBERS INFORMATIONAL BRIEFINGS:

John Watson attended the May 10, 2017 Montecito Planning Commission Hearing.

V. STAFF UPDATE: None.

CONSENT AGENDA:

	Berg New Single Family Dwelling				
C-1.	16BAR-00000-00040	and Detached Studio	321 Ennis Brook		
	16LUP-00000-00445	(Gabe Diaz, Planner (805) 568-3359)	Ridgeline: N/A		

Request of Ron Heston, agent for the owners Ronald & Marci Berg, to consider Case No. 16BAR-00000-00040 for final approval on consent of a new single family dwelling of approximately 3,980 square feet, an attached garage of approximately 800 square feet and a detached studio of approximately 800 square feet, a 5 foot high retaining wall, a bocce ball court and an outdoor shower. There are no other structures on the property. The proposed project will require approximately 600 cubic yards of cut and approximately 600 cubic yards of fill. The property is a .71 acre parcel zoned 1-E-1 and shown as Assessor's Parcel Number 007-530-033 located at 321 Ennis Brook in the Montecito area, First Supervisorial District. (Continued from 10/10/16, 10/2416, 12/19/17, 4/6/17)(Appearance by Ron Heston & Ronald Berg) (Gottsdanker, Sharpe and Watson, present for the consent items)

Action: Watson moved, seconded by Sharpe, and carried by a vote of 5-0 (Kupiec and Maphis absent) to grant final approval on consent of 16BAR-00000-00040 as submitted. (Gottsdanker Sharpe & Watson present for the consent items)

C-2.	16BAR-00000-00208	Symington Addition & Elevator	246 Miramar Avenues
	16LUP-00000-00472	(Tammy Weber, Planner 568-3017)	Ridgeline: N/A

Request of Troy Worgull, agent for the owner, Ann Symington, to consider Case No. 16BAR-00000-00208 for final approval on consent of an addition to the first floor of the single family dwelling of approximately 126 square feet. **The following structures currently exist on the parcel: a two story single family dwelling of approximately 4,267 square feet and accessory structure of approximately 89 square feet. The proposed project will not require grading. The property is a .62 acre parcel zoned 20- R-1 and shown as Assessor's Parcel Number 007-290-29 located at** 246 Miramar Avenue **in the Montecito area, First Supervisorial District.** (Continued from 11/21/16, 1/12/17) (Gottsdanker, Sharpe and Watson, present for the consent items)

Action: Watson moved, seconded by Sharpe, and carried by a vote of 5-0 (Kupiec & Maphis absent) to continue 16BAR-00000-00208 to the May 25, 2017 MBAR meeting at the request of Planning & Development. (Gottsdanker Sharpe & Watson present for the consent items)

C-3.17BAR-00000-00034Miramar Acquisition Co. LLC
New Sanitary Lift Station Structures1555 South Jameson Lane17SCD -00000-00063(Nicole Lieu Planner 886-8068)Ridgeline: N/A

Request of Miramar Acquisition Co, LLC, owners, to consider Case No. 17BAR-00000-00034 for final approval on consent of a new sanitary lift station structure of approximately 634 square feet. The following structures currently exist on the parcel: Construction in progress. The proposed project will not require grading. The property is an 8.06 acre parcel zoned CV and shown as Assessor's Parcel Number 009-371-004, located at 1555 South Jameson Lane in the Montecito area, First Supervisorial District. (Continued from 3/09/17)(Appearance by Ken Mineau & Bryce Ross.)(Gottsdanker, Sharpe and Watson, present for the consent items)

Action: Watson moved, seconded by Sharpe, and carried by a vote of 5-0 (Kupiec & Maphis absent) to grant final approval on consent of 16BAR-00000-00132 with the applicant to add additional support on the gate to ensure it does not sag. (Gottsdanker Sharpe & Watson present for the consent items)

C-4.	16BAR-00000-00230	Daniels Addition	640 Randal Road
	16LUP-00000-00598	(Mark Friedlander 568-2046)	Ridgeline: N/A

Request of Chris Richards, agent for the owners, Ron Daniels & Joanne Rosen, to consider Case No. 16BAR-00000-00230 for **final approval on consent of a new addition of approximately 683 square feet and expansion of outdoor patio area.** The following structures currently exist on the parcel: a single family dwelling of approximately 3,132 square feet and an attached garage of approximately 514 square feet. The proposed project will require approximately < 49 cubic yards of cut and approximately < 49 cubic yards of fill. The property is .96 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-120-035, located at in the Montecito area. (Continued from 12/19/16, 02/02/17, 3/3/17)(Appearance by Chris Richards)(Gottsdanker, Sharpe and Watson, present for the consent items)

Action: Watson moved, seconded by Sharpe, and carried by a vote of 5-0 (Kupiec & Maphis absent) to grant final approval on consent of 16BAR-00000-00230 as submitted. (Gottsdanker Sharpe & Watson present for the consent items)

STANDARD AGENDA:

Dillion Trust New Two Story Single Family Dwelling Conversion of Existing Single Family 1. 17BAR-00000-00065 Dwelling to an Attached Residential Second Unit (No Planner Assigned) 751 Via Manana Ridgeline: N/A

Request of Vanguard Planning, Inc, agent for the owners, Kathleen Dillion Trust, to consider Case No. 17BAR-00000-00065 for **conceptual review of a new two story single family dwelling of approximately 2,421 square foot (total) and the conversion of the existing single family dwelling of approximately 828 square feet into a new accessory dwelling unit.** The following structures currently exist on the parcel: single family dwelling of approximately 828 square feet into a new accessory dwelling unit. The following structures currently exist on the parcel: single family dwelling of approximately 828 square feet that exists on top of the three car garage. The proposed project will require approximately74 cubic yards of cut and approximately 233 cubic yards of fill. The property is a 1 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-090-031, located at **751 Via Manana** in the Montecito area, First Supervisorial District.

Action: Watson moved, seconded by Sharpe (Kupiec absent) and carried by a vote of 6-0 to continue the project to the May 25, 2017 MBAR meeting. *Please see Agenda Status Report*.

Hornburg Garage Conversion to Habitable Space Addition

2.	17BAR-00000-00068	Two Trellises and Exterior Renovations	233 Middle Road	
	17LUP-00000-00151	(Tammy Weber, Planner 568-3017)	Ridgeline: N/A	

Request of Patrick Marr, architect for the owner, Lisa Hornburg, to consider Case No. 17BAR-00000-00068 for conceptual review, preliminary/final approval of a garage conversion into habitable space of approximately 150 square feet, an addition to the existing single family dwelling of approximately 173 square feet, two trellises totaling 349 square feet total and exterior renovations. The following structures currently exist on the parcel: a single family dwelling of approximately 2,017 square feet and an attached garage of approximately 519 square feet. The proposed project will not require grading. The property is a .24 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 009-121-016, located at 233 Middle Road in the Montecito area, First Supervisorial District. (Appearance by Patrick Marr & Lisa Hornburg)

MBAR Comments:

- 1. Check location of the gate with the Fire District.
- 2. Verify minimum garage dimensions and review with Fire District to ensure compliance.

Action: Watson moved, seconded by Mendro, and carried by a vote of 6-0 (Kupiec absent) to grant preliminary approval of 17BAR-00000-00068. The project may return for final approval on consent.

Light House Trust

3. **16BAR-00000-00219** (Demo/New Two Story Single Family Dwelling) **1948 & 1952** Tollis Avenue 17LUP-00000-00035 (Mark Friedlander, Planner 568-2046) Ridgeline: N/A

Request of Don Nulty architect for the owners, Lighthouse Trust, to consider Case No. 16BAR-00000-00219 for further conceptual review of a new two story single family dwelling, with the first floor being approximately 5,951 square feet, the second floor being approximately 1,435 square feet, a basement of approximately 6,435 square feet, an attached garage of approximately 577 square feet, a detached garage of approximately 570 square feet, a detached guesthouse of approximately 754 square feet and pool cabana structure of approximately 782 square feet. The following structures currently exist on the parcel: Two existing residences of approximately 7,426 square feet total (to be demolished). The proposed project will require approximately 6,144 cubic yards of cut and approximately 6,144 cubic yards of fill. The property is a 2.26 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-110-001 &007-110-002, located at 1948 & 1952 Tollis Avenue in the Montecito area, First Supervisorial District (Continued from 12/19/17, 4/6/17)(Appearance by Brian Banks, Stephen Alesch, Robin Standefer, Brian Cabaniss)

Public Comments:

- Michael MacElhenny
 Pat Smith

MBAR Comments:

- Appreciates lowering of house. Garage seems to clash with the rest of the house. 1. 2. 3.
- Provide North-South site section. South elevation windows should drop down from 10 to 9 feet. 4.
- 5. Building proportions should be restudied in terms of plate heights and roof pitches/interior volumes.
- 6. 7. Architecture is nice.
- Landscaping in rear will be critical.

The project received comments only. (Kupiec absent, Mendro recused) The project may return for further conceptual review.

Future Value Construction Inc. New Single Family 17BAR-00000-00012 Dwelling and Attached Garage 266 East Mountain Drive 4.

		Dwennig und Medered Gurage	200 Last mountain Drive	
	17LUP-00000-00157	(Sean Stewart, Planner 568-2517)	Ridgeline: N/A	

Request of Brian Banks, agent for the owner, Future Value Construction Inc., to consider Case No. 17BAR-00000-00012 for further conceptual review of a new single family dwelling of approximately 2,628 square feet, an attached garage of approximately 844 square feet and a partly underground basement of approximately 1,720 square feet. No structures currently exist on the parcel. The proposed project will require approximately 1.950 cubic yards of cut and approximately 190 cubic yards of fill. The property is a 1.08 acre foot parcel zoned 3-E-1 and shown as Assessor's Parcel Number 013-030-025, located at 266 East Mountain Drive in the Montecito area, First Supervisorial District. (Continued from 2/23/17)(Appearance by Brian Banks, Marc Whitman, Chuck Thomason)

MBAR Comments:

- Appreciates vertical and horizontal modulation of house volumes. Nice project. 1. 2.
- 3. Retaining wall at road needs to recede into the hillside, with landscaping where possible. Need more details and show it on visual renderings.
- 4. Height at northeast corner of house is acceptable.
- Look to add some larger shrubs and oak trees at south and west ends of house.
 Need to resolve septic requirements.
- 7. Sandstone walls are critical to design instead of plaster to help mitigate building mass and scale.

The project received comments only. (Kupiec absent) The project may return for further conceptual review/preliminary approval with planner approval.

5.	17BAR-00000-00040	Allison Addition	712 Chelham Way
	17LUP-00000-00142	(Joe Dargel, Planner 568-3573)	Ridgeline: N/A

Request of Johnny Hirsch, agent for the owners, Kasper and Davin Allison, to consider Case No. 17BAR-00000-00040 for further conceptual review of an addition to the existing single family dwelling of approximately 189 square feet (gross). The following structures currently exist on the parcel: a single family dwelling of approximately 2,230 square feet and an attached garage of approximately 378 square feet. The proposed project will require approximately 35 cubic yards of cut and no fill. One elm tree is proposed for removal. The property is a 0.16 acre parcel zoned 7-R-1 and shown as Assessor's Parcel Number 013-111-024, located at 712 Chelham Way in the Montecito area, First Supervisorial District. (Continued from 3/23/17)(Appearance by Johnny Hirsh, Davin Allison, Keeley Thompson)

Public Comments:

1. John Watson

MBAR Comments:

- 1. Landscape screening should blend with what is already there; reconsider bamboo with a Landscape screening should blend with what is an different plant species.
 Architecture is acceptable.
 Need more complete landscape and hardscape plan.
 Restudy rear window to eliminate vertical break ups.

- 5. Restudy transition from siding to plaster.
- 6. Resolve issue with trellis connecting accessory structure.

The project received comments only. (Kupiec absent, Watson recused) The project may return for further conceptual/preliminary approval with the planner's approval.

FINAL APPROVAL

		Glazer New Single Family Dwelling	
6.	16BAR-00000-00094	Attached Garage, Detached Cabana & Pool	137 Butterfly Lane
	16CDP-00000-00051	(Mark Friedlander Planner 568-2046)	Ridgeline: N/A

Request of Brett Ettinger, architect for the owners, Jay & Marsha Glazer, to consider Case No. 16BAR-00000-0094 for final approval of new single family of approximately 2,652 square feet, an attached garage of approximately 644 square feet, and a detached cabana of approximately 600 square feet and a pool. The following structures currently exist on the parcel: a single family dwelling of approximately 636 square feet and a garage of approximately 400 square feet, all to be demolished. The proposed project will require approximately 900 cubic yards of cut and approximately 1,200 cubic yards of fill. The property is a .32 acre parcel zoned 20-R-1 and shown as Assessor's Parcel Number 009-221-002, located at 137 Butterfly Lane in the Montecito area, First Supervisorial District. (Continued from 6/20/16, 7/25/16, 8/8/16, 9/12/16)(Appearance by Brett Ettinger, Rob Maday)

Public Comments:

John Handlozer Sybil Rosen 1. 2.

Action: Cung moved, seconded by Sharpe, and carried by a vote of 6-0 (Kupiec absent) to grant final approval of 16BAR-00000-00094, including the relocation of the spa.

There being no further business to come before the Montecito Board of Architectural Review Committee, Committee Member Watson moved, seconded by Sharpe, and carried by a vote of 6-0 (Kupiec absent) that the meeting be adjourned until 1:00 P.M. on Thursday, May 25, 2017 in the Santa Barbara County Engineering Building, Room 17, 123 East Anapamu Street, Santa Barbara, California 93101.

Meeting adjourned at 3:56 P.M.

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MONTECITO BOARD OF ARCHITECTURAL REVIEW APPROVED MINUTES Meeting of June 22, 2017

Santa Barbara County Planning Commission Hearing Room Engineering Building, Room 17 123 East Anapamu Street Santa Barbara, CA 93101 (805) 568-2000

-	Bob Kupiec	Claire Gottsdanker	- Chair
-	Dave Mendro	John Watson	- Vice Chair
-	Don Sharpe	Alex Tuttle	- Supervising Planner
-	Sam Maphis	Sharon Foster	- MBAR Secretary
-	Thiep Cung		-

The regular meeting of the Santa Barbara County Montecito Board of Architectural Review Committee was called to order by the Chair Claire Gottsdanker, at 1:00 P.M., in the Santa Barbara County Engineering Building, Room 17,123 East Anapamu Street, Santa Barbara, California.

COMMITTEE MEMBERS PRESENT:

Claire Gottsdanker	- (Chair
John Watson	- 1	Vice Chair
Thiep Cung		
Don Sharpe		
Sam Maphis		
Sharon Foster	- F	learing Support Supervisor

COMMITTEE MEMBERS ABSENT:

- Supervising Planner

Robert Kupiec Dave Mendro

Alex Tuttle

NUMBER OF INTERESTED PERSONS:

ADMINISTRATIVE AGENDA:

I. PUBLIC COMMENTS: None

II. AGENDA STATUS REPORT:

Item 4 - 17BAR-00000-00095 Burrows Trust Addition 1140 High Road was continued to the July 6, 2017 MBAR meeting at the request of the applicant.

Action: Watson moved, seconded by Maphis (Cung, Kupiec & Mendro absent,) and carried by a vote of 4-0 to approve the change to the June 22, 2017 MBAR agenda.

III. MINUTES: The Minutes of June 6, 2017 will be considered.

Action: Watson moved, seconded by Sharp (Cung, Kupiec and Mendro absent,) and carried by a vote of 4-0 to continue the MBAR minutes of June 2017 due to a lack of a quorum.
IV. MBAR MEMBERS INFORMATIONAL BRIEFINGS: None

V. STAFF UPDATE: None

STANDARD AGENDA:

CONCEPTUAL REVIEW

1.	17BAR-00000-00091	Galkin Addition	3155 Eucalyptus Hill Road
	17LUP-00000-00206	(Tammy Weber, Planner 568-3017)	Ridgeline: N/A

Request of Michelle McToldridge, architect for the owners, Derek & Jenna Galkin, to consider Case No. 17BAR-00000-00091 for **conceptual review/preliminary approval of an addition of approximately 643 square feet.** The following structures currently exist on the parcel: a single family dwelling of approximately 1,080 square feet with an attached garage of approximately 461 square feet and an accessory structure of approximately 330 square feet. The proposed project will require approximately 10 cubic yards of cut and approximately 10 cubic yards of fill. The property is a 1.0 acre foot parcel zoned 2-E-1and shown as Assessor's Parcel Number 013-180-008, located at **3155 Eucalyptus Hill Road** in the Montecito area, First Supervisorial District. (Appearance by Michelle McToldridge)

MBAR Comments:

1. Project is acceptable.

The project received comments only. (Kupiec and Mendro absent, Sharpe abstained) The project is to return for preliminary/ final approval.

Branning Second Story Addition 2. 17BAR-00000-00092 Living Area Addition and Demo/New Garage 125 Santa Isabel Lane (No Planner Assigned) Ridgeline: N/A

Request of Philip DeBolske, architect for the owners, Dianna & Rich Branning, to consider Case No. 17BAR-00000-00072 for conceptual review of a second story addition to the existing single family dwelling of approximately 562 square feet, an addition to the dining area of approximately 486 square feet and a new attached garage of approximately 440 square feet, existing garage to be demolished. The following structures currently exist on the parcel: a single family dwelling of approximately 1,800 square feet and an attached garage of approximately 324 square feet (to be demolished). The proposed project will not require grading. The property is a .37 acre parcel zoned 20-R-I and shown as Assessor's Parcel Number 009-242-005, located at 125 Santa Isabel Lane in the Montecito area, First Supervisorial District.(Appearance by Philip DeBolske & Dianna Branning)

MBAR Comments:

1. Site visit with story poles requested.

The project received comments only. (Kupiec, Mendro absent) The project is to return for further conceptual review. MBAR requested a site visit.

3.	17BAR-00000-00094	McCoy Second Story Addition	1491 Bonneymeade
		(No Planner Assigned)	Ridgeline: N/A

Request of Jock Sewall, architect for the owners, James & Judy McCoy, to consider Case No. 17BAR-00000-00094 for conceptual review a second story addition to the existing garage of approximately 350 square feet. The following structures currently exist on the parcel: a two story single family dwelling of approximately 2,872 square feet and an attached garage of approximately 530 square feet. The proposed project will require not require grading. The property is a condominium lot zoned PRD and shown as Assessor's Parcel Numbers 009-360-031, located at 1491 Bonneymeade in the Montecito area, First Supervisorial District.

MBAR Comments:

- Arborist report needed for oak trees.
 Nice addition to existing residence.

The project received comments only. (Kupiec and Mendro absent) The project is to return for preliminary/ final approval with planner approval.

4.	17BAR-00000-00095	Burrows Trust Addition	1140 High Road
	17CDP-00000-00042	(Kimberley McCarthy, Planner 568-2005)	Ridgeline:
	N/A		_

Request of Jason Grant, agent for the owners, Ian Burrows, to consider Case No. 17BAR-00000-00095 for conceptual review of an addition to the first floor of the existing single family dwelling of **approximately** 379 square feet. The following structures currently exist on the parcel: a two story single family dwelling with the first floor being approximately 3,581 square feet, the second story being approximately 347 square feet and a detached garage of approximately 739 square feet. The proposed project will not require grading. The property is a.95 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 009-162-037, located at 1140 High Road in the Montecito area, First Supervisorial District.

Action: Watson moved, seconded by Maphis and carried by a vote of 5-0 (Kupiec and Mendro absent) to continue the project to the July 6, 2917 agenda as requested by the applicant. Please see the Agenda Status Update.

5.	17BAR-00000-00096	Tauber Additions	1250 Pepper Lane
	17LUP-00000-00212	(Tammy Weber, Planner 568-3017	Ridgeline: N/A

Request of Tom Ochsner, architect for the owner, Jack Tauber, to consider Case No. 17BAR-00000-00096 for conceptual review/preliminary approval of an addition to the existing home office of approximately 220 square feet and an addition to the existing garage of **approximately 200 square feet.** The following structures currently exist on the parcel: a single family residence of approximately 3,173 square feet, an attached garage of approximately 450 square feet, a detached exercise room of approximately 537 square feet and an attached home office of approximately 233 square feet. The proposed project will require approximately 35 cubic yards of cut and approximately 35 cubic yards of fill. The property is a 1 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 009-040-015, located at **1250 Pepper Lane** in the Montecito area, First Supervisorial District.(Appearance by Joseph Flynn)

MBAR Comments:

- 1. Study reducing the amount of paving at entry and approach, including the area of the proposed fire turnaround, to soften entry appearance.
- Consider additional trees in landscape plan. 2.

3. Review FAR calculations.

The project received comments only. (Kupiec and Mendro absent) The project is to return for preliminary/ final approval.

6.	17BAR-00000-00079	Damery Carport and Garage Conversion	72 La Vuelta
	17CDH-00000-00018	(Sean Stewart, Planner 568-2517)	Ridgeline:
	N/A		e

Request of Everett Woody, architect for the owner, Josiah Damery, to consider Case No. 17BAR-00000-00079 for further conceptual review of the conversion of the single family dwelling's existing attached garage of 363 square feet to habitable space. The project also includes a new covered porch on the north and east side of the existing dwelling, a new covered trellis on the west side of the dwelling, converting the existing Juliet balcony on the north side of the dwelling to a dormer, new dormers on the north and east side of the dwelling, and converting the Juliet balcony on the south side of the dwelling to a closet. A new carport is proposed to be attached to the west side of the existing pool cabana and an uncovered trellis to be attached to the east side of the pool cabana. The existing dwelling and cabana will receive new siding and windows. The following structures currently exist on the parcel: an existing single family dwelling of approximately 2,770 net square feet, and a pool cabana of approximately 446 net square feet. The proposed project will not require grading. The property is a .44 acre parcel zoned 1-E-1and shown as Assessor's Parcel Number 007-340-030, located at 72 La Vuelta in the Montecito area, First Supervisorial District. (Continued from 6/8/17) (Appearance by Everett Woody & Gil Garcia)

MBAR Comments:

- Site plan has improved with hardscape reduction.
 Hand drawn elevation is preferable design and proportions.
 Document landscaping along south property line, may need to be augmented.
 Be clear with materials and colors in drawings.

The project received comments only. (Kupiec and Mendro absent) The project is to return for preliminary approval.

7.	17BAR-00000-00080	Norwood/Battistone New Wine Storage Shed	875 Rockbridge Road
	17LUP-00000-00173	(Sean Stewart, Planner 568-2517)	Ridgeline: N/A

Request of Everett Woody, architect for the owners, Philip W. Norwood & Marianne Battistone, to consider Case No.17BAR-00000-00080 for further conceptual review of a new wine storage accessory structure of approximately 193 net square feet. The following structures currently exist on the parcel: a single family dwelling of approximately 3,644 square feet, an attached garage of approximately 590 square feet and a detached pool cabana of approximately 800 square feet. The proposed project will not require grading. The property is a 1.07 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 011-040-026, located at 875 Rockbridge in the Montecito area, First Supervisorial District. Continued from 6/8/17) (Appearance by Everett Woody & Gil Garcia)

MBAR Comments:

1. Appreciates pulling structure further away from rear property line.

The project received comments only. (Kupiec and Mendro absent) The project is to return for preliminary/final approval.

OK Wave LLC, New Single Family Dwelling 8. 16BAR-00000-00197 **351 Woodley Road** (Mark Friedlander Planner, 568-2046 17LUP-00000-166 Ridgeline: N/A

Request of Shubin & Donaldson, architects for the owners, OK Wave, LLC, to consider Case No. 16BAR-00000-00197 for further conceptual review of a new single family residence of approximately 10,691 square feet, a basement of approximately 5,237 square feet, an attached garage of approximately 1,962 square feet and a detached accessory structure of approximately 710 square feet. No structures currently exist on the parcel. The proposed project will require approximately 6,000 cubic yards of cut and fill. The property is a 3.99 acre foot parcel zoned 2-E-1 and shown as Assessor's Parcel Number 009-021-001, located at 351 Woodley Road in the Montecito area, First Supervisorial District. (Continued from 11/7/16)(Apperance by Robin Donaldson, Greg Griffin, Amy Blakemore, Linda Weinman, Bruce Heavin)

MBAR Comments:

- Architectural concept is supported.
 Two members would like to see height lowered.
 Add larger plantings to top areas of building.
 Blending in landscaping with surroundings will be critical. Landscape plan should be simplified to mimic and integrate with existing site.
- Need layering of trees. 5.
- 6. Need to work with Building and Safety to review railings and building edges to ensure they meet code.
- 7. Need fully developed landscape plan.

The project received comments only. (Kupiec and Mendro absent) The project is to return for further conceptual review.

Light House Trust

9. 16BAR-00000-00219 Demo/New Two Story Single Family Dwelling 1948 &1952 Tollis Avenue 17LUP-00000-00035 (Mark Friedlander, Planner 568-2046) Ridgeline: N/A

Request of Brian Banks, agent for the owner, Lighthouse Trust, to consider Case No. 16BAR-00000-00219 for further conceptual review of a new two story single family dwelling, with the first floor being approximately 5,916 square feet, the second floor being approximately 1,231 square feet, a basement of approximately 4,947 square feet, an attached garage of approximately 577 square feet, a detached garage of approximately 570 square feet, a detached guesthouse of approximately 754 square feet and pool cabana structure of approximately 782 square feet. The following structures currently exist on the parcel: Two existing residences of approximately 7,426 square feet total (to be demolished). The proposed project will require approximately 4,700 cubic yards of cut and approximately 4,000 cubic yards of fill. The property is a 2.26 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-110-001 &007-110-002, located at 1948 & 1952 Tollis Avenue in the Montecito area, First Supervisorial District. (Continued from 12/19/17, 4/6/17, 5/11/17) (Tony Spann, Anthony Grumbine, Brian Banks, Stephen Alesch, Robin Standefer, Brian Cabaniss)

Public Comments:

- 1. Chris Price
- 2. Patrick Smith
- 3. Chris Jacobs

MBAR Comments:

- 1. Two members would like roof line broken up by lowering master bedroom on east end.
- Trellis could be lowered as well.

- 3. Windows appear too tight to the roof line. Refine window proportions and space between top of windows and roof eaves.
- Appreciates changes made in response to prior comments.
 Consider species other than olives at west end to keep height managed.

The project received comments only. (Kupiec and Mendro absent) The project is to return for preliminary approval with the planner's approval.

10.	17BAR-00000-00040	Allison Addition	712 Chelham Way
	17LUP-00000-00142	(Joe Dargel, Planner 568-3573)	Ridgeline: N/A

Request of Johnny Hirsch, agent for the owners, Kasper and Davin Allison, to consider Case No. 17BAR-00000-00040 for further conceptual/preliminary review of an addition to the existing single family dwelling of approximately 189 square feet (gross). The following structures currently exist on the parcel: a single family dwelling of approximately 2,230 square feet and an attached garage of approximately 378 square feet. The proposed project will require approximately 35 cubic vards of cut and no fill. One elm tree is proposed for removal. The property is a 0.16 acre parcel zoned 7-R-1 and shown as Assessor's Parcel Number 013-111-024, located at 712 Chelham Way in the Montecito area, First Supervisorial District. (Continued from 3/23/17, 5/11/17)(Appearance by Johnny Hirsh & Rob Maday)

MBAR Comments:

1. Inside corner of new addition to have same board and batt material.

Action: Cung moved, seconded by Sharpe and carried by a vote of 4-0 (Kupiec and Mendro absent, Watson abstained) to grant preliminary approval of 17BAR-00000-00040. The project may return for final approval with the planner's approval.

Mohtashemi Demo,

11. 17BAR-00000-00028 New Single Family Dwelling and Attached Garage 1356 East Valley Road (Joe Dargel, Planner 568-357 17LUP-00000-000088 Ridgeline: N/A

Request of Philip DeBolske, architect for the owners, Kevin & Lana Mohtashemi, to consider Case No. 17BAR-00000-00028 for further conceptual review of a new two story single family dwelling, with the first floor being approximately 2,995 square feet, the second story being approximately 395 square feet, and an attached garage of approximately 400 square feet. The following structures currently exist on the parcel: an existing two story single family dwelling to be demolished. The proposed project will not require grading. The property is a 0.67 acre parcel zoned R-3 and shown as Assessor's Parcel Number 011-190-003, located at 1356 East Valley Road in the Montecito area, First Supervisorial District. (Continued from 3/9/17, 3/27/17, 4/27/17) (Philip DeBolske, Lana Mohtashemi & Pat Brody)

MBAR Comments:

- Appreciates changes made to site plan and reduction of hardscape.
 Restudy proportion of molding of west and south garage elevation.
- 3. Consider trees other than California pepper.

The project received comments only. (Kupiec and Mendro absent) The project is to return for preliminary/final approval.

PRELIMINARY APPROVAL

12.	16BAR-00000-00175	All Saints By the Sea Alterations	84 Eucalyptus Lane
	16CDP-00000-00049	(Mark Friedlander, Planner 568-2046	Ridgeline: N/A

Request of Bob Easton, architect for the owner, All Saints by the Sea Episcopal Church, to consider Case No. Request of Bob Easton, architect for the owner, All Saints by the Sea Episcopal Church, to consider Case No. 16BAR-00000-00175 for preliminary approval of ground floor additions totaling approximately 1,025 square feet (gross) on the east (rear) and north elevations, and an addition to the basement of approximately 856 square feet (gross). Like-for-like reconstruction of portions of the southern and western exterior walls are proposed for structural and seismic remediation. The following structures currently exist on the parcel: the church building of approximately 6,835 square feet, a parish hall of approximately 4,623 square feet, classrooms of approximately 4,388 square feet, a parish house of approximately 2,903 square feet and a detached accessory of approximately 666 square feet. The proposed project will require less than 50 cubic yards of grading. The property is a 1.64 acre parcel zoned 15-R-I and shown as Assessor's Parcel Number 009-333-011, located at 84 Eucalyptus Lane in the Montecito area, First Supervisorial District. (Continued from 11/21/16, 4/27/17)(Appearance by Bob Easton)

MBAR Comments:

1. Nice project.

Action: Cung moved, seconded by Sharpe and carried by a vote of 5-0 (Kupiec and Mendro absent) to grant preliminary approval of 16BAR-00000-00175. The project may return for final approval on consent with the planner's approval

		Wavenly Trust New Two Story	
13.	15BAR-00000-00101	Single Family Dwelling & Cabana	1040 Coyote Road
	15LUP-00000-00356	(Joe Dargel Planner 568-3573)	Ridgeline: H-Mon

Request of Michael Stroh, architect for the owner, Wavenly Trust, to consider Case No. 15BAR-00000-00101 for preliminary approval of new two story single family dwelling, with the first floor being approximately 1,000 square feet, the second story being approximately 2,474 square feet, and an attached garage of approximately 572 square feet. No structures currently exist on the parcel. The proposed project will require approximately 1,190 cubic yards of cut and approximately 750 cubic yards of fill. The property is a 3.0 acre parcel zoned 3-E-1 and shown as Assessor's Parcel Number 013-050-059, located at **1040** Covote Road in the Montecito area, First Supervisorial District. (Continued from 7/27/15, 11/30/15, 12/19/16)(Appearance by Micheal Stroh, Henry Lenny & Derrik Eichelberger)

MBAR Comments:

- 1. 2. 3. Slopes seem overly mechanical, look to soften slopes by introducing walls.
- Architecture is acceptable.
- Entry gate design to be restudied.
- **4**. Restudy 2:1 engineered slopes and landscaping around driveway.

Action: Watson moved, seconded by Sharpe and carried by a vote of 5-0 (Kupiec and Mendro absent) to grant preliminary approval of 15BAR-00000-00101. The project may return for final approval with the planner's approval.

There being no further business to come before the Montecito Board of Architectural Review Committee, Committee Member moved, seconded by, and carried by a vote of 5 to 0 (Kupiec & Mendro absent) that the meeting be adjourned until 1:00 P.M. on Thursday, July 6, 2017 in the Santa Barbara County Engineering Building, Room 17, 123 East Anapamu Street, Santa Barbara, California 93101.

Meeting adjourned at 5:46 P.M.

MONTECITO BOARD OF ARCHITECTURAL REVIEW COMMITTEE APPROVED MINUTES Meeting of June 22, 2017 Page 8



MONTECITO BOARD OF ARCHITECTURAL REVIEW APPROVED MINUTES Meeting of August 24, 2017

Santa Barbara County Planning Commission Hearing Room Engineering Building, Room 17 123 East Anapamu Street Santa Barbara, CA 93101 (805) 568-2000

-	Bob Kupiec	Claire Gottsdanker	- Chair
-	Dave Mendro	John Watson	- Vice Chair
-	Don Sharpe	Alex Tuttle	- Supervising Planner
-	Sam Maphis	Sharon Foster	- MBAR Secretary
-	Thiep Cung		·

The regular meeting of the Santa Barbara County Montecito Board of Architectural Review Committee was called to order by the Chair Claire Gottsdanker, at 1:00 P.M., in the Santa Barbara County Engineering Building, Room 17,123 East Anapamu Street, Santa Barbara, California.

COMMITTEE MEMBERS PRESENT:

Claire Gottsdanker	-	Chair
John Watson	-	Vice Chair
Thiep Cung		
Don Sharpe		
Dave Mendro		
Sam Maphis		
Sharon Foster	-	Hearing Support Supervisor
Alex I uttle	-	Supervising Planner

COMMITTEE MEMBERS ABSENT: Robert Kupiec

NUMBER OF INTERESTED PERSONS: 30

ADMINISTRATIVE AGENDA:

I. PUBLIC COMMENTS: None

II. AGENDA STATUS REPORT:

- #1 17BAR-00000-00129- Cantin Additon and Detached Accessory Structure 355 Hot Springs Road- was continued to the September 7, 2017 MBAR meeting at the request of the applicant.
- #6- 17BAR-00000-0011- Keagy Sports Court, 284 Santa Rosa Lane- was continued to the September 7, 2017 MBAR meeting as the request of the applicant.
- #13.- 17BAR-00000-00040 -Allison Addition, 712Chelham Way- was dropped from the agenda at the request of the applicant.

Action: Watson moved, seconded by Sharpe (Kupiec absent) and carried by a vote of 6-0 to approve the changes to the August 24, 2017 agenda

III. MINUTES: The Minutes of August 10, 2017 were continued to the MBAR meeting of September 7, 2017

Action: Watson moved, seconded by Sharpe (Kupiec absent) and carried by a vote of 6-0 to continue the MBAR minutes of August 10, 2017.

IV. MBAR MEMBERS INFORMATIONAL BRIEFINGS: None

V. STAFF UPDATE: None

CONSENT AGENDA:

C

-1.	17BAR-00000-00127	Miramar Hotel Revisions	1555 South Jameson Lane
	17LUP-00000-00286	(Nicole Lieu, Planner 884-8068)	Ridgeline: N/A
	17SCD-00000-00041		-

Request of Bryce Ross, agent for the owner, Miramar Acquisition Co. LLLC, to consider Case No. 17BAR-00000-00127 final approval on consent of the removal, from the previously permitted plans, of a theater building of approximately of approximately 2,807 square feet to be replaced with a guest services retail building of approximately 1,867 square feet. The following structures currently exist on the parcel: previously permitted Miramar Hotel currently under construction. The proposed project will not require grading. The property is an 8.06 acre parcel zoned C-V and shown as Assessor's Parcel Number 009-371-007 (formerly Parcel Numbers 009-371-004 & 009-371-003), located at 1555 South Jameson Lane in the Montecito area, First Supervisorial District.(Continued from 8/10/17)

Action: Watson moved, seconded by Sharpe and carried by a vote of 6-0 (Kupiec absent) to grant final approval on consent of 17BAR-00000-00127.

STANDARD AGENDA:

CONCEPTUAL REVIEW

1. 17BAR-00000-00129 Cantin Additon and Detached Accessory Structure 335 Hot Springs Road (No Planner Assigned) Ridgeline: N/A

Request of Rick Starnes, agent for the owners, Mr. & Mrs. David Cantin, to consider Case No. 17BAR-00000-00129 conceptual review of an addition to the existing single family dwelling approximately 474 square feet and a new attached garage of approximately 770 square feet. The following structures currently exist on the parcel: a single family dwelling of approximately 2,870 square feet, a detached garage of approximately 462 square feet (to be demolished). The proposed project will require approximately 50 cubic yards of cut and no fill. The property is a 1.0 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 009-070-043, located at 335 Hot Springs Road in the Montecito area, First Supervisorial District.

Action: Watson moved, seconded by Sharpe (Kupiec absent) and carried by a vote of 6-0 to continue the project to the September 28, 2017 Meeting at the request of the applicant. *Please see the agenda status report.*

2.	17BAR-00000-00132	Anthony New Workshop	660 Randall Road
		(No Planner Assigned)	Ridgeline: N/A

Request of Designarc, architects for the owners, Andrew and Asia Anthony, to consider Case No. 17BAR-00000-00132 conceptual review of a new detached workshop of approximately 548 square feet. The following structures currently exist on the parcel: a single family dwelling of approximately 3,354 square feet and an attached garage of approximately 580 square feet. The proposed project will not require grading. The property is a 1.0 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-120-034, located at 660 Randall Road in the Montecito area, First Supervisorial District. (Appearance by Mark Kirkhart, Jim Van Order)

MBAR Comments:

1. Nice project.

The project received comments only. (Kupiec absent) The project may return for preliminary/final approval once a planner is assigned.

Edgewater Trust 3. 17BAR-00000-00133 Exterior Door & Window Change & Demo/ New Deck1631 Posilipo Lane (No Planner Assigned) Ridgeline: N/A

Request of Steve Welton, agent for the owners, Edgewater Trust, to consider Case No. 17BAR-00000-00133 conceptual review of exterior door and window changes and demo/rebuild of existing deck first floor deck, with no change to the original footprint, of approximately 661 square feet. The following structures currently exist on the parcel: a single family residence of approximately 2,836 square feet, a detached garage of approximately 473 square feet. The proposed project will not require grading. The property is a.051 acre parcel zoned 1-E-1 and shown as Assessor's Parcel Number 007-372-008, located at **1631 Posilipo Lane** in the Montecito area, First Supervisorial District. (Appearance by Barry Winick)

MBAR Comments:

- Project lacks architectural identity; try to unify style. 1.
- 2. Provide more information on setback encroachment and its impact on neighbors.

The project received comments only. (Kupiec absent) The project is to return for further conceptual review.

Dugan Trust Second Story Addition

4.	17BAR-00000-00134	a New Garage, New Cabana and Pool Relocation	759 Picacho Lane
		(No Planner Assigned)	Ridgeline: N/A

Request of Jock Sewall, architect for the owner, Dugan Trust, to consider Case No. 17BAR-00000-00134 conceptual review of a second story edition to the existing single family dwelling of approximately 2000 square feet, a new detached garage of approximately 500 square feet and a new cabana of approximately 600 square feet and the relocation of the existing pool and the demolition of the existing guest house of approximately 400 square feet. The following structures currently exist on the parcel: a single family dwelling of approximately 3,550 square feet with attached garage of approximately 495 square feet. The proposed project will require approximately 1,400 cubic yards of cut and approximately 1,400 cubic yards of fill. The property is a 1.7 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 011-090-042, located at 759 Picacho Lane in the Montecito area, First Supervisorial District.(Appearance by Jock Sewall), Stacey Faucett)

MBAR Comments:

- Site visit with story poles. Consider eliminating one of the driveways. 1. 2. 3. 4.
- Nice architectural style.
- Need drainage plan for all the site work.
- 5.
- Need site sections. Confirm FAR calculations. 6.

The project received comments only. (Kupiec absent) The project is to return for further conceptual review.

		Negard As- Built and Attached	
5.	16BAR-00000-00117	Garage and Deck and Covered Porch	2830 Gibraltar Road
	13DVP-00000-00007	Jovce Gerber, Planner	RMZ-40

Request of Syndi Souter, agent for the owners, Olaf & Nicole Negard, to consider Case No. 12BAR-00000-00205 for conceptual review a new single family dwelling of 2,315 square feet, with a covered porch, deck, and garage of approximately 1,400 square feet below the deck and porch. The following structures currently exist on the parcel: an as built single family dwelling of approximately 450 square feet (to be demolished). The proposed project will require approximately 2,200 cubic yards of cut and approximately 1,500 cubic yards of fill. The property is a 13.4 acre parcel zoned RMZ and shown as Assessor's Parcel Number 153-280-025, located at 2830 Gibraltar Road in the Montecito area, First Supervisorial District. (Continued from 10/24/16) Appearance by Tom Ochsnerm, Syndi Souter & Olaf Negard)

MBAR Comments:

- 1. Nice project.
- <u>2</u>. <u>3</u>.
- Need FAR calculations. Size, bulk, and scale seem appropriate. Get fire turnaround sorted out before story poles. 4.
- 5. Need site visit with story poles.

The project received comments only. (Kupiec & Sharpe absent) The project is to return for further conceptual review.

6.	17BAR-00000-00110	Keagy Sports Court	284 Santa Rosa Lane
	17LUP-00000-00101	(Tess Harris Planner 568-3319)	Ridgeline: N/A

Request of Kas Seefield, architect for the owners, John & Jill Keagy, to consider Case No. 17BAR-00000-00110 for conceptual review of a previously approved sports court of approximately 6,384 square feet, a fence of approximately 3'5" to surround the court and a retaining wall of approximately 3'2.5" square feet is proposed to surround the fenced sports court. The following structures currently exist on the parcel: a single family dwelling of approximately 4, 413 square feet, an attached garage of approximately 516 square feet, a cabana of approximately 940 square feet, a covered patio of approximately 594 square feet and a sauna of approximately 24 square feet. The proposed project will require approximately 450 cubic yards of cut and approximately 40 cubic yards of fill. The property is a 1.0 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-280-053, located at **284** Santa Rosa Lane in the Montecito area, First Supervisorial District. (Continued from 7/27/17)

Action: Watson moved, seconded by Sharpe (Kupiec absent) and carried by a vote of 6-0 to continue the project to the September 7, 2017 MBAR meeting at the request of the applicant. *Please see the Agenda Status Report.*

PRELIMINARY APPROVAL

7. 17BAR-00000-00003 **Barkley Conversion & Accessory Structure** 1741 Glen Oaks Drive 17LUP-00000-00007 (Sean Stewart, Planner 568-2517) Ridgeline: N/A

Request of Britt Jewett, architect for the owner, Alben Barkley, to consider Case No. 17BAR-00000-00003 for preliminary approval of a new covered porch of approximately 254 square feet, a new pergola of approximately 1,010 square feet, and conversion of 2,090 square feet of no habitable first floor equestrian stables to habitable space and conversion of 975 square feet of no habitable second floor equestrian hayloft to habitable space. The project also includes an interior remodel. The following structures currently exist on the parcel: a two story single family dwelling of approximately 4,559 square feet, a guest house of approximately 960 square feet and an attached garage of approximately 2,525 square feet. The proposed project will not require grading. The property is a 1.64 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-200-011, located at 1741 Glen Oaks Drive in the Montecito area, First Supervisorial District (Continued from 2/2/17)(Appearance by Britt Jewett, Justine Manual)

MBAR Comments:

1. Project is acceptable.

Action: Cung moved, seconded by Sharpe and carried by a vote of 5-0-1 (Kupiec absent, Watson abstained) to grant preliminary of 17BAR-00000-00003. The project can return for final on consent with the planner's approval.

8.	17BAR-00000-00095	Burrows Trust Addition	1140 High Road
	17CDP-00000-00042	(Kimberley McCarthy, Planner 568-2005)	Ridgeline: N/A

Request of Jason Grant, agent for the owners, Ian Burrows, to consider Case No. 17BAR-00000-00095 for preliminary/final approval of an addition to the first floor of the existing single family dwelling of approximately 379 square feet. The following structures currently exist on the parcel: a two story single family dwelling with the first floor being approximately 3,581 square feet, the second story being approximately 347 square feet and a detached garage of approximately 739 square feet. The proposed project will not require grading. The property is a.95 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 009-162-037, located at 1140 High Road in the Montecito area, First Supervisorial District. (Continued from 6/22/17, 7/6/17)(Appearance by Jason Grant)

Public Comments:

1. J' Amy Brown

MBAR Comments:

- Nice project.
 Two lines of hedging should remain and be maintained and irrigated.
- 3. Chimney is acceptable.
- 4. Chain link fence to be removed before final occupancy is granted.

Action: Maphis moved, seconded by Watson and carried by a vote of 6-0 (Kupiec absent) to grant Preliminary/Final approval of 17BAR-00000-00095.

9.	17BAR-00000-00103	Goldberg New Pool Cabana	2710 Sycamore Canyon
	17LUP-00000-00265	(Tammy Weber, Planner 568-3017)	Ridgeline: N/A

Request of Adele Goggia/ Harrison Design, agent for the owner, Gary Goldberg, to consider Case No. 17BAR-00000-00103 for preliminary/final approval of a new pool cabana of approximately 798 square feet. The following structures currently exist on the parcel: a single family dwelling of approximately 2,644 square feet, an attached garage of approximately 727 square feet, a storage shed of approximately 246 square feet and an accessory dwelling unit of approximately 918 square feet. The proposed project will not require grading. The property is a 0 .93 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 011-160-011, located at **2710 Sycamore Canyon** in the Montecito area, First Supervisorial District.(Continued from 7/6/17)(Appearance by Adele Goggia)

MBAR Comments:

- 1. Need to correct call out for the hedge to confirm species and sizing (15-gallon at 3-4 feet on center with pittosporum undulatum).
- 2. Some members not okay with extent of setback encroachment.

Action: Watson moved, seconded by Maphis of 2-4, failed by a vote to grant preliminary approval with the cabana to shift 5 feet north. (Sharpe, Mendro, Cung, and Gottsdanker no, Kupiec absent).

Action: Watson moved, seconded by Sharpe and carried by a vote of 4-2 (Kupiec absent, Mendro & Maphis no) to continue the project with the applicant to explore alternatives that would eliminate the setback encroachment.

10.	17BAR-00000-00074	Gilson Additions	1160 Summit Road
	17CDP-00000-00037	(Sean Stewart Planner 568-2517)	Ridgeline: N/A

Request of Steve Willson, agent for the owners, Robert Gilson, to consider Case No. 17BAR-00000-00074 for **preliminary approval of an addition of approximately 984 square feet to the first floor of the existing single family dwelling and an addition of approximately 185 square feet to the second story.** The following structures currently exist on the parcel: a two story single family dwelling, with the first floor being approximately 1,692 square feet. The proposed project will require approximately 30 cubic yards of cut and approximately 30 cubic yards of fill. The property is a 0 .85acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 009-170-037, located at **1160 Summit Road** in the Montecito area, First Supervisorial District.(Continued from 5/25/17)

Action: Gottsdanker moved, seconded by Watson and carried by a vote of 6-0 (Kupiec absent) to drop the project from the agenda due to the absence of the applicant.

		Burtness/Roberts New Single Family Dwelling	
11.	16BAR-00000-00124	Detached Garage, Garage Conversion	1415 Wyant Road
	16LUP-00000-00444	(Mark Friedlander Planner 568-2046)	Ridgeline: N/A

Request of Sophie Calvin, agent for the owners, Peter Burtness & Annie Roberts, to consider Case No. 16BAR-00000-00124 for preliminary approval of a new two story single family dwelling with the first floor being approximately 2,064 square feet, the second floor being approximately 2,289 square feet, a basement of 2,780 square feet a detached garage of approximately 744 square feet and a new 1,023 square foot Accessory Dwelling Unit (ADU) being converted from an existing single family dwelling, and a new pool. The following structures currently exist on the parcel: The

existing single family dwelling to be relocated and converted into an ADU and a 252 square foot storage structure. The proposed project will require approximately 615 cubic yards of cut and approximately 200 cubic yards of fill with additional excavation required for the pool, basement and proposed cistern. The property is a .91 acre parcel zoned 1-E-1 and shown as Assessor's Parcel Number 009-140-038, located at 1415 Wyant Road in the Montecito area, First Supervisorial District (Continued from 7/11/16, 10/10/16, 10/24/16, 12/5/16, 6/8/17)(Appearance by Peter Burtness, Sophie Calvin, Steve Fort, Amy Blakemore)

MBAR Comments:

Restudy perimeter landscaping or document adequacy of existing landscaping in photographs to ensure that the project is generously screened from all neighbors except the 1. neighbor to the west.

Action: Watson moved, seconded by Sharpe and carried by a vote of 6-0 (Kupiec absent) to grant preliminary of 16BAR-00000-00124. The project can return for final on consent with the planner's approval.

Light House Trust Demo/New

<mark>12.</mark>	16BAR-00000-00219	Two Story Single Family Dwelling 1948 & 1952	Tollis Avenue
	17LUP-00000-00035	(Mark Friedlander, Planner 568-2046)	Ridgeline: N/A

Request of Brian Banks, agent for the owner, Lighthouse Trust, to consider Case No. 16BAR-00000-00219 for preliminary approval of a new two story single family dwelling, with the first floor being approximately 5,856 square feet, the second floor being approximately 1.181 square feet, a basement of approximately 4,947 square feet, an attached garage of approximately 577 square feet, a detached garage of approximately 570 square feet, a detached guesthouse of approximately 754 square feet and pool cabana structure of approximately 782 square feet. The following structures currently exist on the parcel: Two existing residences of approximately 7,426 square feet total (to be demolished). The proposed project will require approximately 4,700 cubic yards of cut and approximately 4,000 cubic yards of fill. The property is a 2.26 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 007-110-001 &007-110-002, located at 1948 & 1952 Tollis Avenue in the Montecito area, First Supervisorial District. (Continued from 12/19/17, 4/6/17, 5/11/17, 6/22/17) (Appearance by Tony Spann, Anthony Grumbine, Brian Banks, Brian Cabaniss, Karen McConaughey, Chris Jacobs)

Public Comments:

- 1. 2. 3. Michael MacElhenny
- Patrick Smith
- Chris Jacobs
- 4. Susan Basham

MBAR Comments:

- Height of house is in keeping with houses in front and back of the property given the slope.
- 1. 2. 3. MBAR appreciates lowering of the finished grade.
- Restudy stone pines and consider other species that are lower growing or moving them to another area of the site.
- Northwest corner plantings and olives in the lower end are appropriate in terms of height. Consider a 6:12 roof pitch instead of 8:12. 4.
- 5.
- 6. 7.
- Siting is appropriate. Study spacing between eaves and doors.

Action: Cung moved, seconded by Maphis and carried by a vote of 4-0 (Kupiec absent, Sharpe, and Mendro abstained) to grant preliminary approval of 16BAR-00000-00219 based on the ability to make the required findings, including:

- 1. That the overall structure shapes, as well as parts of any structure are in proportion to and in scale with other existing or permitted structures on site and in the area surrounding the
- property, including to the immediate west. That electrical and mechanical equipment will be well integrated into the total design 2. concept.
- 3. 4. That there will be harmony of color, composition, and material on all sides of the structure. That there will be a limited number of materials on the exterior face of the structure.
- That there will be a harmonious relationship with existing and proposed adjoining developments, avoiding excessive variety and monotonous repetition, but allowing similarity 5. of style, if warranted.
- That the site layout, orientation and location of structures will be in an appropriate and well 6.
- That the site layout, orientation and location of structures will be in an appropriate and well designed relationship to one another, and to the environmental qualities, open spaces, and topography of the site with consideration for the semi-rural character of the community and will have no impact on public views of the hillsides or ocean. That adequate landscaping will be provided in proportion to the project and the site with due regard to preservation of specimen and landmark trees, existing vegetation, selection of plantings that are appropriate to the project and that adequate provisions have been made for the maintenance of all landscaping. That grading and development is designed to avoid visible scarring and will be in an appropriate and well designed relationship to the natural topography with regard to maintaining the natural appearance of the ridgelines and hillsides. That no signs are proposed. 7.
- 8.
- That no signs are proposed. That rooflines have been broken up to reduce massing and avoid the appearance of a single long building, and the house is below the finished floor of the adjacent lot to the rear, consistent with Montecito Architectural Guidelines. 10.

FINAL APPROVAL

13.	17BAR-00000-00040	Allison Addition	712 Chelham Way
	17LUP-00000-00142	(Joe Dargel, Planner 568-3573)	Ridgeline: N/A

Request of Johnny Hirsch, agent for the owners, Kasper and Davin Allison, to consider Case No. 17BAR-00000-00040 for final review of an addition to the existing single family dwelling of approximately 182 square feet (gross). The following structures currently exist on the parcel: a single family dwelling of approximately 2,230 square feet and an attached garage of approximately 378 square feet. The proposed project will require approximately 35 cubic yards of cut and no fill. One elm tree is proposed for removal. The property is a 0.16 acre parcel zoned 7-R-1 and shown as Assessor's Parcel Number 013-111-024, located at 712 Chelham Way in the Montecito area, First Supervisorial District. (Continued from 3/9/17, 3/27/17, 4/27/17, 6/22/17)

Action: Watson moved, seconded by Sharpe (Kupiec absent) and carried by a vote of 6-0 to drop the 17BAR-00000-00040 at the request of the applicant. Please see the Agenda Status Report.

14.	17BAR-00000-00096	Tauber Additions	1250 Pepper Lane
	17LUP-00000-00212	(Tammy Weber, Planner 568-3017)	Ridgeline: N/A

Request of Tom Ochsner, architect for the owner, Jack Tauber, to consider Case No. 17BAR-00000-00096 for final approval of an addition to the existing home office of approximately 220 square feet and an addition to the existing garage of approximately 200 square **feet.** The following structures currently exist on the parcel: a single family residence of approximately 3,173 square feet, an attached garage of approximately 450 square feet, a detached exercise room of approximately 537 square feet and an attached home office of approximately 233 square feet. The proposed project will require approximately 35 cubic yards of cut and approximately 35 cubic yards of fill. The property is a 1 acre parcel zoned 2-E-1 and shown as Assessor's Parcel Number 009-040-015, located at 1250 Pepper Lane in the Montecito area, First Supervisorial District. (Continued from 6/22/17)

(Appearance by Tom Ochsner)

Public Comments:

1. Danny Longwill

MBAR Comments:

- Parking area is over-paved look to reduce extent of paved areas.
 Restudy fire turnaround to avoid impacts to neighbor and oak trees.

Action: Cung moved, seconded by Watson and carried by a vote of 4-0 (Kupiec, Sharpe, and Mendro absent) to continue 17BAR-00000-00040.

There being no further business to come before the Montecito Board of Architectural Review Committee, Committee Member Watson moved, seconded by Sharpe, and carried by a vote of 4 to 0 (Kupiec, Mendro & Sharpe absent) that the meeting be adjourned until 1:00 P.M. on Thursday, September 7, 2017 in the Santa Barbara County Engineering Building, Room 17, 123 East Anapamu Street, Santa Barbara, California 93101.

Meeting adjourned at 5:54 P.M.

G:\GROUP\PC_STAFF\WP\MONTECITO\MBAR\MINUTES\2017\8-24-17 UNAPPROVED MINUTES.DOCX



OLIVE

Olea europaea L.

Oleaceae

Common Name: Olive.

Related Species: Wild Olive (*Olea africana*), Oleaster (*O. europaea* var. *oleaster*).

Distant Affinity: American Olive (*Osmanthus americana*), Fragrant Olive (*O. fragrans*).



Origin: The olive is native to the Mediterranean region, tropical and central Asia and various parts of Africa. The olive has a history almost as long as that of Western civilization, its development being one of civilized man's first accomplishments. At a site in Spain, carbon-dating has shown olive seed found there to be eight thousand years old. *O. europaea* may have been cultivated independently in two places, Crete and Syria. Archeological evidence suggest that olives were being grown in Crete as long ago as 2,500 B.C. From Crete and Syria olives spread to Greece, Rome and other parts of the Mediterranean area. Olives are also grown commercially in California, Australia and South Africa. There is some disagreement over when the trees first appeared in California. Some say they were introduced in 1769 when seeds brought from Mexico were planted. Others site the date 1785 when trees were brought in to make olive oil.

Adaptation: The olive requires a long, hot growing season to properly ripen the fruit, no late spring frosts to kill the blossoms and sufficient winter chill to insure fruit set. Home grown olives generally fruit satisfactorily in the warmer coastal valleys of California. Virtually all U.S. commercial olive production is concentrated in California's Central Valley, with a small pocket of olive acreage outside Phoenix. The tree may be grown as an ornamental where winter temperatures do not drop below 12° F. Green fruit is damaged at about 28°, but ripe fruit will withstand somewhat lower temperatures. Hot, dry winds may be harmful during the period when the flowers are open and the young fruits are setting. The trees survive and fruit well even with considerable neglect. Olives can also be grown in a large container, and has even appeared in shows as a bonsai.

DESCRIPTION

Growth Habits: The olive is an evergreen tree growing to 50 ft. in height with a spread of about 30 ft. The tree can be kept to about 20 ft. with regular pruning. The graceful, billowing appearance of the olive tree can be rather attractive. In an all-green garden its grayish foliage serves as an interesting accent. The attractive, gnarled branching pattern is also quite distinctive. Olives are long-lived with a life expectancy of 500 years. The trees are also tenacious, easily sprouting back even when chopped to the ground.

Foliage: The olive's feather-shaped leaves grow opposite one another. Their skin is rich in tannin, giving

the mature leaf its gray-green appearance. The leaves are replaced every two or three years, leaf-fall usually occurring at the same time new growth appears in the spring.

Flowers: The small, fragrant, cream-colored olive flowers are largely hidden by the evergreen leaves and grow on a long stem arising from the leaf axils. The olive produces two kinds of flowers: a perfect flower containing both male and female parts, and a staminate flower with stamens only. The flowers are largely wind pollinated with most olive varieties being self-pollinating, although fruit set is usually improved by cross pollination with other varieties. There are self-incompatible varieties that do not set fruit without other varieties nearby, and there are varieties that are incompatible with certain others. Incompatibility can also occur for environmental reasons such as high temperatures.

Fruit: The olive fruit is a green drupe, becoming generally blackish-purple when fully ripe. A few varieties are green when ripe and some turn a shade of copper brown. The cultivars vary considerably in size, shape, oil-content and flavor. The shapes range from almost round to oval or elongated with pointed ends. Raw olives contain an alkaloid that makes them bitter and unpalatable. A few varieties are sweet enough to be eaten after sun drying. Thinning the crop will give larger fruit size. This should be done as soon as possible after fruit set. Thin until remaining fruit average about 2 or 3 per foot of twig. The trees reach bearing age in about 4 years.

CULTURE

Location: Plant olive trees in full sun and away from sidewalks to avoid stains from fallen ripe fruit. Non-fruiting trees are available which can be planted in areas where fruit may be a problem. Strong winds will "sculpt" the trees, but otherwise they are quite wind-tolerant.

Soils: Olives will grow well on almost any well-drained soil up to pH 8.5 and are tolerant of mild saline conditions.

Irrigation: Irrigation is a necessity in California with its dry summers. A monthly deep watering of home grown trees is normally adequate. Because of its small leaves, with their protective cuticle and slow transpiration, the olive tree survives even extended dry periods.

Fertilization: Fertilizing olive trees with additional supplies of nitrogen has proved beneficial. In California farmers systematically apply fertilizers well ahead of the time flowers develop so the trees can absorb the nitrogen before fruit set. Many growers in Mediterranean countries apply organic fertilizers every other year.

Pruning: Proper pruning is important for the olive. Pruning both regulates production and shapes the tree for easier harvest. The trees can withstand radical pruning, so it is relatively easy to keep them at a desired height. The problem of alternate bearing can also be avoided with careful pruning every year. It should be kept in mind that the olive never bears fruit in the same place twice, and usually bears on the previous year's growth. For a single trunk, prune suckers and any branches growing below the point where branching is desired. For the gnarled effect of several trunks, stake out basal suckers and lower branches at the desired angle. Prune flowering branches in early summer to prevent olives from forming. Olive trees can also be pruned to espaliers.

Propagation: None of the cultivated varieties can be propagated by seed. Seed propagated trees revert to

the original small-fruited wild variety. The seedlings can, of course, be grafted or chip budded with material from desired cultivars. The variety of an olive tree can also be changed by bark grafting or top working. Another method of propagation is transplanting suckers that grow at the base of mature trees. However, these would have to be grafted if the suckers grew from the seedling rootstock.

A commonly practiced method is propagation from cuttings. Twelve to fourteen inch long, one inch wide cuttings from the two year old wood of a mature tree are treated with a rooting hormone, planted in a light rooting medium and kept moist. Trees grown from such cuttings can be further grafted with wood from another cultivar. Cutting grown trees bear fruit in about four years.

Pests and diseases: The olive tree is affected by some pests and diseases, although it has fewer problems than most fruit trees. Around the Mediterranean the major pests are medfly and the olive fruit fly, *Dacus oleae*. In California, verticillium wilt is a serious fungal disease. There is no effective treatment other than avoiding planting on infested soils and removing damaged trees and branches. A bacterial disease known as olive knot is spread by pruning with infected tools during rainy months. Because the olive has fewer natural enemies than other crops, and because the oil in olives retains the odor of chemical treatments, the olive is one of the least sprayed crops.

Harvest: Olive fruits that are to be processed as green olives are picked while they are still green but have reached full size. They can also be picked for processing at any later stage up through full ripeness. Ripe olives bruise easily and should be handled with care. Mold is also a problem for the fruit between picking and curing. There are several classical ways of curing olives. A common method is the lye-cure process in which green or near-ripe olives are soaked in a series of lye solutions for a period of time to remove the bitter principle and then transferred to water and finally a mild saline solution. Other processing methods include water curing, salt curing and Greek-style curing. Explicit directions for various curing and marinating methods can be found in several publications including Maggie Blyth Klein's book, <u>Feast of the Olives</u>, and the University of California Agricultural Sciences Publications Leaflet 21131. Both green-cured and ripe-cured olives are popular as a relish or snack. For California canned commercial olives, black olives are identical to green olives. The black color is obtained by exposure to air after lye extraction and has nothing to do with ripeness. Home production of olive oil is not recommended. The equipment required and the sheer mass of fruit needed are beyond most households.

Commercial Potential: Commercial olive production is a multimillion dollar business in California. In the Mediterranean region olives and olive oil are common ingredients of everyday foods. Raw olives are sometimes sold in speciality produce stores, and home growers in California often sell their excess crop to others interested in home curing. There is also a growing interest in specialty olive oils, often produced commercially from small groves of olive trees.

CULTIVARS

Over the centuries mankind has produced and propagated a myriad of olive varieties. Today several dozen varieties are grown commercially around the world. Five commercially important varieties are grown in California: Manzanillo, Sevillano, Mission, Ascolano and Barouni, listed in descending order of crop size. Some representative olive cultivars including the commercial California varieties are listed below.

Ascolano

Very large, ellipsoidal fruit. Skin color very light even when ripe, pit very small. Fruit is tender and must be handled carefully. Contains very little bitterness and requires only moderate lye treatment. Excellent for pickles, but needs proper aeration during pickling to develop "ripe" color. Tree a heavy bearer, widely adapted.

Barouni

Large fruit, almost as large as Sevillano. Trees spreading and easy to harvest. Withstands extremely high temperatures. The variety usually shipped to the East Coast for making home-cured olives. Originally from Tunisia.

Gordal

Medium to large, plump fruit, ripening early. Resembles Sevillano. A popular pickling olive and principal cultivar in Spain, producer of most of the world's table olives.

Manzanillo

Large, rounded-oval fruit. Skin brilliant purple, changing to deep blue-black when mature. Resists bruising. Ripens early, several weeks earlier than Mission. The pulp parts readily with its bitterness and is exceedingly rich when pickled. Excellent for oil and pickles. Tree spreading, vigorous, a prolific bearer.

Mission

Medium-sized, oval fruit. Skin deep purple changing to jet-black when ripe. Flesh very bitter but firm, freestone. Ripens rather late. Good for pickling and oil, specially ripe pickles. Most widely used for cold-pressed olive oil in California. Tree vigorous, heavy-bearing. More cold resistant than other cultivars. Grown at the old missions in California.

Picholine

Small, elongated fruit. Skin light green, changing to wine red, then red-black when ripe. Pulp fleshy, firm-textured. Tree vigorous, medium-sized, bears heavy crops regularly. Cured olives have a delicate, subtle, lightly salty, nut-like flavor. Usually salt-brine cured. Popular in gourmet and specialty markets.

Rubra

Medium-small, ovate fruit. Skin jet-black when ripe. Ripens 3 to 4 weeks earlier than Mission. Best suited for oil, but is also used for pickling. Tree large, precocious, often producing fruit the second year. An exceptionally prolific bearer. Very hardy and reliable even in dry situations. Originated in France.

Sevillano

Very large fruit, bluish-black when ripe. The largest California commercial variety. Stone large, clinging. Ripens early. Low oil content, only useful in pickling. Used for making Sicilian style salt brine cured olives, also the leading canning cultivar. Tree a strong grower and regular bearer. Require deep, rich, well drained soil. Will not stand much cold.

FURTHER READING

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- Ferguson, Louise, G. Steven Sibbett and George C. Martin. *Olive Production Manual*. University of California, Division of Agriculture and Natural Resources: Publication 3353. 1994

- Hartmann, H.T., K. W. Opitz and J. A. Beutel. *Olive Production in California*. University of California, Agricultural Sciences Publications: Leaflet 2474. 1980.
- Klein, Maggie Blyth. The Feast of the Olive. Chronicle Books. 1994
- Stebbins, Robert and Lance Walheim. Western Fruit and Nuts. HP Books, Inc. 1981. p. 108.
- York, George. *ABC's of Home-Cured, Green-Ripe Olives*. University of California, Agricultural Sciences Publications: Leaflet 21131. 1979.

See <u>Index of CRFG Publications</u>, 1969 - 1989 and annual indexes of <u>Fruit Gardener</u> for additional articles on the olive.

Here is the list of additional CRFG Fruit Facts.

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Five Fatalities Confirmed After Mudslides Engulf Montecito, Carpinteria, Shut Down Highway 101

independent.com/news/2018/jan/09/mudslides-engulf-montecito-carpinteria-shut-down-f/
 By Nick Welsh

For the most up-to-date information on the Tuesday mudslides sparked in the aftermath of the Thomas Fire, visit our full <u>Thomas Fire coverage page</u>.

[Update, 10:50 a.m.] In a phone call from Montecito, where he lives, *Independent* reporter Keith Hamm described multiple roadways in the area completely blocked with debris. "There's basically no way to get from Montecito to Santa Barbara," he said. Residents are wandering the streets without umbrellas speaking to one another and surveying damage.

An entire row of power lines was knocked down on Hot Springs Road between Highway 192 and Casa Dorinda, Hamm said. A backed-up storm drain near Danielson and Olive Mill roads has flooded the intersection and is being dredged by heavy machinery. The mud flats deposited on roadways appear relatively shallow, said Hamm, but in actuality are deep and dangerous. Multiple helicopters buzzed overhead during a break in the heavy weather earlier this morning.

First responders used multiple large helicopters and dozens of ground units to respond to a backlog of at least 75 calls for help at one point.

Hamm spoke with Martin Tait, a 65-year-old retired homebuilder who lives on Crespi Lane. Tait described the structure fire that began in the 600 block of El Bosque Road at around 3 a.m., soon after the worst of the heavy weather arrived. Officials believe the fire was started by a ruptured gas line. He witnessed tall flames and plumes of smoke as emergency responders descended. Tait said despite living in a mandatory evacuation zone, he had decided to stay put. "After two and a half weeks of being evacuated by fire, we decided to hang tight and see what happens," he said. "We got lucky."



Paul Wellman

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Massive mudslides on Montecito caused by the first winter storm in the burn area of the Thomas Fire (Jan. 9, 2018)

[Update: Jan. 9, 10:14 a.m.] Officials have confirmed five deaths associated with mudslides

and debris flows. The identities of the victims have not been released.

Scanner traffic indicates up to a half inch of rain is on its way this morning and that more debris flows are possible. The National Weather Service's Eric Boldt stated a strong storm cell is currently west of the Sherpa burn, being pushed to the north by winds. Until late afternoon, similar heavy rain cells could develop along Santa Barbara's south coast, which could cause further debris flows. Safety is paramount, said county spokesperson Gina DePinto, and people who've experienced flood and mud already or live in low-lying areas are advised to head for higher ground.

[Update: Jan. 9, 10 a.m.] Stretches of Highway 101 have been transformed overnight to a river of mud a few feet deep, choked with all the flotsam and jetsam that last night's pounding winter storm could yank downstream. File cabinets, boulders, rocks, trees, and prescription drug vials all littered what was normally a flowing stream of cars. Train tracks have been covered as well. How long it will take to get it all unburied remains to be seen.

While authorities have yet to confirm any fatalities along the 101, the covered body of what appears to be a middle-aged woman has been seen off the side of the road, reported Paul Wellman, *Independent* photographer.

In the pre-dawn hours after the initial debris flows that swept through Montecito, first responders worked to clear roads in an effort to respond to dozens of calls for help.

[Update: Jan. 9, 9 a.m.] Two deaths have been confirmed as a result of the floods that have followed in the Thomas Fire's wake. As of this writing, seven helicopters have been deployed to carry out emergency rescue and evacuation operations and another four are on the way. More than 100 firefighters are engaged in search and rescue efforts as well. Rescue operations will be organized out of Earl Warren Showgrounds with an incident command structure comprising the United States Coast Guard, Cal Fire, the City of Santa Barbara Fire Department, the County Fire Department, the National Guard, and California Emergency Operations. The number of rescues undertaken already has yet to be determined, as is the number of evacuations currently being sought.

Cottage Hospital reports seven patients have been checked into the Emergency Department as a result of the mudslides, with at least two more on the way. Those numbers are likely to increase. Paul Wellman, *Santa Barbara Independent* photographer, reports that evacuation efforts have targeted those being sheltered at the ad hoc medical emergency station at All Saints-by-the-Sea Episcopal Church in Montecito.

Santa Barbara City officials are patrolling Coast Village Road to determine damage. Because many city employees live in Ventura and commute to Santa Barbara, a number of city departments will be short full staffing. In a precautionary move, dozens of city police officers were put up in hotels overnight so as to ensure full staffing. Currently, 24 sworn officers are on duty. To date, the City of Santa Barbara has sustained only glancing blows compared to Montecito and Carpinteria, which remains awash in mud and will remain the site of a major dig-out for the days and weeks ahead.

Traffic on Highway 101 is possible for northbound motorists north of the Milpas Street exit.



By Paul Wellman

Traffic of Highway 101 has been halted from Santa Barbara to Ventura.

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Death Total in Montecito Mudslides Climbs to 17

(i) independent.com/news/2018/jan/10/mudslide-death-total-climbs-17/

By Nick Welsh

The number of bodies removed from the crusting soup of the Montecito mudslide has now risen to 17, up from 15 earlier today. In response to the increased volumes, the Santa Barbara County Coroner has received assistance from the Los Angeles Coroner's office. No names of the deceased are being released yet pending family notification and body identification. The latter process began today.

The number of persons still missing is also 17. At a press conference Wednesday afternoon, Sheriff Bill Brown said it was merely coincidental that the two numbers happened to be identical and assured those present that those still reported missing were not stockpiled in the county morgue. The number of missing actually dropped on Wednesday, going from 24 at the beginning of the day to 17.

Brown lauded the assistance Santa Barbara first responders were receiving from Ventura, San Luis Obispo, and Los Angeles counties, noting that the National Guard had also chipped in with some heavy-duty all-terrain vehicles capable of navigating even the most viscous of environments. Even while praising the help these new vehicles offered, he acknowledged that some of the terrain was so forbidding that they could not pass.

A Coast Guard Jayhawk helicopter from San Diego rescues a Montecito family of five, including the mother, father, their newborn, seven-year-old son, three-year-old daughter, and two dogs.

Cottage Health CEO Ron Werft said the hospital has been forced to take exceptional measures to maintain staffing levels, flying 14 employees in from Ventura and transporting another 38 via boat service provided by Island Packers. Dr. Brett Wilson, medical director for the Cottage Emergency Department, stated Cottage had not received any additional patients as a result of the mudslides. He said 20 patients were checked in and 12 currently remain. Of those, he said four remained in critical condition.

Wilson surged those within earshot to look after those injured and traumatized by their experiences. "Be a listener," he suggested. "Let them tell their story." He also cautioned that the road ahead might not be simple or linear. "Keep an eye on them; after they get past the trauma, they may become disconnected."





By Mike Eliason/ Santa Barbara Co Fire

The force of the flash flooding Tuesday morning left a crumpled Hummer H3 and a Honda at the mouth of Montecito Creek.

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More Rescuers Arrive to Search Montecito

(i) independent.com/news/2018/jan/11/more-rescuers-arrive-search-montecito/

By Brandon Yadegari (Contact), Jean Yamamura (Contact)

Incident commanders gathered their troops this morning before sending them out on their mission to find and rescue people who might be trapped in Montecito's mudflow. Earl Warren Showgrounds was full of Cal Guard (the new name for the National Guard) carriers with six-foot-tall wheels to get through the thigh-high mud. About 700 rescuers were on the job from fire departments statewide, the Navy and Coast Guard, and the state Conservation Corps, though the mess hall cooks were told to prep for a thousand as more were expected to arrive today.

Nine of the rescuers are pairs of search dogs and their handlers, including Santa Barbara County's Eric Gray and his dog, Riley. Six have come from Los Angeles County Fire, and one each from Orange County and Long Beach fire companies, the Search Dog Foundation stated.

The death toll stood at 17 this morning, with 28 injured and eight known to be missing, according to the morning update update. Homes destroyed were counted at 65 and those damaged at 446. Eight commercial buildings had been destroyed and 20 damaged. A full and accurate assessment will not be known until downed power lines are repaired and access restored.

FEMA officials declared on Wednesday evening that the flooding, mudflows, and debris flows directly related to the wildfires would be covered under the Thomas Fire disaster declaration. This should make state and local governments and certain private organizations eligible "on a cost-sharing basis for emergency work and the repair or replacement of facilities damaged by wildfires in Santa Barbara and Ventura counties."

Internet service has been down for many remaining in Montecito, with cell reception sporadic, and electricity nonexistent for about 1,350 homes as of Wednesday afternoon. Cox Cable stated workers were on standby to go into the area as soon as allowed. Further information is at @coxcalifornia.

As fire engines and giant troop carriers left Earl Warren for the day's work between 8:30 and 10 a.m., traffic along Las Positas and Calle Real swiftly became clogged, slowing down their exit significantly. The public has been ordered to stay out of the areas of Montecito hardest hit by the mudflow to avoid getting underfoot while rescuers work. Major television broadcasters, however, have been setting up in Montecito yards, an incident official said. One with 15 reporters, producers, and crew members was a particular disturbance to muddy search crews.

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Montecito Mudslide Evacuation Orders, Emergency Alerts Explained

(i) independent.com/news/2018/jan/16/it-was-dark-and-stormy-night-emergency-operations-/

By Jean Yamamura

At 10 at night the Monday before the storm, Rob Lewin told his people at the Emergency Operations Center (EOC) to grab a cot and get some sleep, or go home if it was nearby, but be ready to work in four hours' time. He and his staff had warned Montecito and Carpinteria of the pending rains at a press conference the Friday before and sent alerts to 21,000-40,000 contacts by every means possible — save snail mail — since then. They'd put in the direst terms that serious floods — both mud and water — were threatened from the rainstorm headed for Santa Barbara's south coast early Tuesday morning. Now they had to wait for it to arrive.

Out in Montecito, a swift water rescue squad and urban search and rescue teams were standing by. Six inmate crews had spent the day clearing creek beds, following up on three weeks of debris basin clearing by county Public Works. High-clearance military trucks had arrived. More support had been requested from the state in advance of the storm, unheard of among California emergency planners.

Sheriff's deputies had spent the day banging on doors, informing people of the coming floods and the mandatory evacuation order in place above State Route 192. Of the 1,400 contacted, 200 said they'd leave. Most in Montecito were weary from almost two weeks of Thomas Fire evacuations, and gentle sprinkles of rain gave the lie to what they were being told. Many stocked up on sandbags.

"In our minds, we were geared up," Lewin said. "We'd been trying since Friday to say the creeks that are normally dry are going to turn into raging rivers of trees and rocks. Roads are going to be taken out." Lewin, formerly the Cal Fire chief in San Luis Obispo, had been reading up on floods from Montecito's past, including in the winter after 1964's Coyote Fire. He knew flooding and mudflows were possible all the way down to Coast Village Road and the highway.





County of Santa Barbara

The corner of San Ysidro and East Valley roads after a flood that followed the Coyote Fire of 1964

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DigitalGlobe

Satellite Imagery Reveals Overwhelming Extent of Montecito Damage

Before and After Looks at San Ysidro Creek, Knowlwood Tennis Club Neighborhood, and Fernald Point

https://www.independent.com/news/2018/jan/18/satellite-imagery-rev...

By Brandon Yadegari (Contact), Tyler Hayden (Contact)

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New bird's-eye perspectives from DigitalGlobe, a satellite imagery company, reveal the true extent of the devastation wrought on Montecito when debris flows and mudslides triggered by the season's first big rainstorm ripped through the seaside community on January 9. Twenty people were killed and 128 homes were destroyed in the disaster.

Use the vertical scrollbar in the images below to compare how three specific areas looked in April to how they appeared on Thursday, January 11. The comparisons were first compiled and published by the *Washington Post* and have been re-created by the *Santa Barbara Independent* staff.

San Ysidro Creek



Homes and streets around the upper stretches of San Ysidro Creek were hit particularly hard in the storm. The Thomas Fire had scorched the Santa Ynez Mountains directly above, dramatically destabilizing the landscape and priming it for the massive debris flow that followed. Pictured here in the area along Highway 192, the debris flow measured 400 feet in length. Further to the north, above San Ysidro Ranch, it was over 1,000 feet wide.

Montecito Creek



After Cold Spring Creek and Hot Springs Creek converge to the north, they become Montecito Creek and typically flow under Highway 192, pictured above. During the debris flowed, Montecito Creek breached its banks and destroyed dozens of homes both to the north and south of Highway 192, in mandatory and voluntary evacuation zones.

Highway 101 and Coast Village Road



Water and churned earth traveled nearly two miles from the mountains to the ocean, swallowing a whole stretch of Highway 101 near Fernald Point and inundating much of Coast Village Road.



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More like this story

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- <u>A Drone's-Eye View, South of Montecito's Highway 192</u>
- Majority of Montecito Mudslide Victims Were Not Under Mandatory Evacuation Orders
- Thomas Fire Pushes South and West into Montecito Foothills, Triggers Evacuations in Santa Barbara
- Next Debris Flow Could Take Different, Unknown Path

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Majority of Montecito Mudslide Victims Were Not Under Mandatory Evacuation Orders

(1) independent.com/news/2018/jan/22/majority-montecito-mudslide-victims-were-not-under/

By Tyler Hayden

<u>Seventeen of the 21 Montecito residents</u> who perished in the January 9 mudslides lived in an evacuation warning area, not a mandatory evacuation zone. The two people who remain missing and feared dead — 17-year-old Jack Cantin and 2-year-old Lydia Sutthithepa — also lived in the warning area. Only four victims lived in the mandatory zone.

The east-west line of Highway 192 bisected the community into two distinct emergency notice regions, with evacuation orders issued north of the boundary and warning notices made below the highway. The 7,000 residents in the mandatory zone were told Sunday, January 7, two days before the storm hit, to leave their homes immediately. Sheriff's deputies went door-to-door Monday to repeat the order.

By contrast, the 23,000 people in the warning area were advised to pack their bags and load their cars, and be ready to flee at a moment's notice. But by the time emergency alerts went out on the night of the storm — one at 2:46 a.m. targeting Montecito residents registered with the county's Aware & Prepare program, and another at 3:51 a.m. to all county residents — it was too late for many to escape the trains of mud and rock that came crashing through their neighborhoods.

The map above identifies the home address of each victim and where their bodies were found. It also highlights the evacuation zones and paths of debris flows. Click on the brackets in the top right-hand corner to enlarge. (Map by Brandon Yadegari & Chinelo Ufondu for the *Independent*)

The evacuation zones were originally developed after the 2009 Jesusita Fire when the Sheriff's Office, which is responsible for drawing and enforcing emergency-time boundaries, determined it needed a fast way to select easily identifiable areas and the intersections required to keep them closed. "The 192 is the only straight east-west arterial that there was," said Sheriff Bill Brown in an interview last week. "Everything else was a winding spaghetti of neighborhood streets." The county had never before conducted an evacuation in response to a flood threat, and the zones were not drawn to follow the downstream flow of creek channels.

In the days leading up to the storm, forecasters had predicted a heavy rainstorm would pound the Thomas Fire burn scar directly above Montecito, and they said the flood risk was 10 times greater than a normal year. But they didn't anticipate the record-breaking violence of the downpour or the massive size of the debris flows that followed. "The expectation was that rainfall of one inch per hour could kick something loose, but that it wouldn't go very far," said Kevin Cooper, a biologist with the U.S. Forest Service, in an earlier interview. "As slopes lessen, the debris drops out. For something to push all the way out to the ocean like it did had to be

an extraordinary event."



By Brandon Yadegari

A fire crew enters a home that suffered substantial damage when Montecito Creek veered to the west before crossing over East Mountain Drive, cutting a new path near Sycamore Canyon Road.

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Death Toll Approaches 23 in the Worst Disaster in Santa Barbara History https://www.independent.com/news/2018/jan/18/death-toll-approache...



Brandon Yadegari

Firefighters from Kern County assess a home near Sycamore Canyon Road. The crew had been working on the site for two days after a body was recovered in the home. The instability of the wreckage demanded precision in entering and searching what remained.

Death Toll Approaches 23 in the Worst Disaster in Santa Barbara History

Tracing the History and Coping with the Reality of 20 Lost and Three Still Missing

Thursday, January 18, 2018

By Nick Welsh (Contact)

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Sometimes words fail.

The scientific term is "debris flow." Commonly we call it a "mudslide." Neither comes close to conveying the awesome geologic violence wrought upon Montecito and the entire South Coast early on January 9.

Hurricanes, tornadoes, and fires all have first names. Katrina. Harvey. Irma. And most recently, our very own Thomas, now the biggest fire in state history. By contrast, the monster that just turned our community upside down has no name, first, last, or otherwise.

As of this writing, Santa Barbara has officially abandoned hope of finding more survivors. But the truly intrepid rescue teams, with their amazing search dogs, continue working to unbury the missing. Should the grim arithmetic be borne out, the death toll for the event with no name will reach 23. It could well go higher. In the meantime, official documents set the mortality count at 20. Add to this the 127 single-family homes that were destroyed and the 294 that were damaged.

By Santa Barbara standards, this ranks as our worst catastrophe – natural or otherwise – ever. The great earthquake of 1925 – still the single most transformative event to hit Santa Barbara in the past 200 years – claimed the lives of 13 people. Psychopaths such as David Attias in 2001, Jennifer San Marco in 2006, and Elliott Rodger in 2014 killed four, seven, and six on their respective rampages. The 1923 disaster at Honda Point ties as the county's worst, claiming the lives of 23 sailors when seven Navy ships out of San Francisco ran aground on what is now known as Destroyer Rock.

First responders used multiple large helicopters and dozens of ground units to respond to a backlog of at least 75 calls for help at one point.

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Rage, inevitably, is right around the corner.

Santa Barbara, as some like to say, lies perched on the edge of nature. Last week, nature pushed us off. The storm event began in earnest early Tuesday morning around 3:30. For about half an hour, lacerating rains slashed away the steep hillsides. Only two weeks before, the Thomas Fire had roiled through those same hills. Firefighters had mounted a heroic defense, miraculously protecting most of Montecito. With only 27 single-family homes destroyed in Santa Barbara County, the thousands of evacuated residents breathed a sigh of relief, thinking they had dodged a bullet. But the greatest horror lay waiting in the dirt itself.

High-intensity heat from fires such as Thomas slowly cooks the top few inches of soil, turning it into a fine, crumbly powder. Any roots that once kept the top mantle of soil intact have been blowtorched into oblivion. Flood-control experts, who refer to this condition as "dry creep," swear they can hear it sloughing its way down the mountain.



By Paul Wellman

The Thomas Fire burns in the foothills of Montecito pre-dawn Saturday. (Dec. 16, 2017)

Add to that the gnarled canopy of chaparral covering Santa Barbara's backcountry, and the picture gets more ominous. Chaparral plants contain waxy compounds that, when heated, ooze out onto the soil as liquid paraffin. This waxy shell in turn deflects raindrops that might otherwise be absorbed by the soil.

Now turn up the volume to 11.

Imagine the longest drought in Santa Barbara history, followed by the biggest natural fire in California history. Then, while that fire is still smoldering, watch a latenight winter rainstorm dive-bombing the scorched earth with four times more impact than the direst forecasts. Meteorologists were freaking out when predicting Tuesday's rains, which they feared might deliver as much as one to two inches an hour. It turns out they didn't freak out enough. In some places, we got half an inch of water in five minutes.

Radar imagery from NOAA and compiled by the county shows how the January 9 storm struck Montecito.

Hence the disaster with no name.

Torrential rivers of dirt, silt, and ash careened down the steep hillsides, racing toward the meandering creek basins that make Montecito such a bucolic paradise. Along the way, it gathered more steam, sucking up and vomiting out much of the burned rubble from the fire: trees, logs, gravel, rocks, and boulders the size of tour buses. This blackened slurry creates a seemingly impossible buoyancy that allows even the most massive rocks to float. It also rushes by faster than humans can bring themselves to believe.

Last week's debris flow was hardly Santa Barbara's first. Jim Stubchaer, then an engineer with County Flood Control, remembers the avalanche of mud that took 250 homes back in November 1964 when heavy rains followed quickly on the heels of the Coyote Fire. He was there in 1969 and 1971 when it happened again. "We had a saying back in the day for those canyons," said Stubchaer about Santa Barbara's steep mountain slopes. "We said they were shotguns, loaded with rocks and set off by fire."

Indeed.

Disaster response efforts were in place well before the sky began to fall in the predawn hours on January 9. The night before, teams of firefighters – engines and strike teams from multiple agencies – and about 200 first responders were positioned throughout Montecito and Carpinteria in anticipation of flash floods. All fire stations were put on alert. A multiagency incident command was created for an incident that had yet to happen.



By Paul Wellman

Massive mudslides on Montecito caused by the first winter storm in the burn area of the Thomas Fire (Jan. 9, 2018)

Three days before the onslaught, all the usual suspects in the world of emergency responders convened in front of television cameras. They predicted flash floods 10 times worse than normal because of the fire-scarred hillsides. Supervisor Das Williams intoned the term "clear and present danger." Mandatory evacuation orders were announced for 7,000 people living in the foothills upslope from Highway 192, effective Monday at noon. Another 23,000 people – living downslope from Highway 192 – were put on warning.

Nobody screamed or shouted. Maybe they should have.

In the end, only 15 percent of those living in the mandatory evacuation zone got out. That's considerably more, however, than those who lived in the warning zone. How these zones were mapped – and why the evacuation zones were not drawn to adhere to the downstream flow of creek channels rather than the geographically irrelevant Highway 192 – will be the subject of intense discussion and, in all probability, litigation in the months to come.



Q

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Kim Reierson

A U.S. Coast Guard chopper carries a rescuer headed toward people trapped on v roofs on San Leandro Lane.

Firefighters, emergency planners, law enforcement officers, and other first responders – traumatized from risking life and limb; working long, harrowing hours; and pulling dead bodies out of the muck – bristle at the suggestion they didn't do everything possible. Emails, texts, emergency alerts, and phone calls were made. Doors were knocked on. Homeless camps along creek bottoms were rousted. What else could they do?

Beverley Jackson, an imposing Montecito doyenne and longtime society columnist for the Santa Barbara News-Press and the Independent, recalled getting the knock and refusing to budge. "I had just got back from spending eight days in a motel because of the Thomas Fire," she said. "I didn't want to be evacuated again. I have a dog. And I felt very comfortable there." Jackson added she'd been through multiple floods and fires during her time in Montecito. "At 89, I wanted to prove I could do it," she said. "I'm not going to age gracefully."

However, there are also residents living in the warning zone who felt that they'd been given a false sense of security. Many – old hands now at the evacuation drill – had their bags packed and cars loaded when the storm hit. But by the time county emergency alerts went out, it was too late. They couldn't get out. Or as one longtime emergency-planning expert put it, "Of course people are going to be stupid. Our job is to work around them, not blame them."



By Brandon Yadegari

Michael Zirolli assessed the debris flow that separates him form his home on East Mountain Drive.

The dance of droughts, fires, and floods is ancient and endemic to Southern California's landscape. It's how creeks change course and mountains move. But as California's extreme weather gyrations grow ever more extreme, pushed no doubt by climate change and global warming, new emergency response strategies will be needed. Abe Powell, a member of the Montecito Fire board and one of Montecito's most active public citizens, noted that this was the first time a flood event – as opposed to fires – was occasion for an organized evacuation effort.

As South Coast emergency planners re-engineer ways to warn – and mobilize – area residents about future disasters, Montecito and Santa Barbara face the more immediate challenges of digging their way out of this one. Highway 101, we are told, won't be open for yet another week. In the meantime, about 15,000 people who live in Ventura and work in Santa Barbara can't get to their jobs. Cottage Hospital is reportedly putting up about 200 workers in local hotels and motels, flying some in and transporting others by boat. Many Santa Barbara companies depend on out-of-town workers. The Montecito Water District is facing multiple breaks to its primary mains used to get water from its reservoirs to storage basins. At this point, about half its customers can get no water at all; another half can get some but just barely. In this grim context, the good news is that things could be even worse but aren't. The main conduit connecting Montecito staff locate and assess damages. In the meantime, however, the district was the target of the first lawsuit filed in the wake of last week's catastrophe, charging that the nine million gallons that leaked out of one of Montecito's storage reservoirs made a bad situation that much worse.

In the meantime, Santa Barbarans are responding to disaster the way they always do: with massive outpourings of community support. As can be expected, there's been some grandstanding by a few self-serving publicity hounds. But mostly, community residents are striving for ways to chip in and help out.

In the years to come, January 9, 2018, will be considered the measuring stick by which all subsequent disasters will be compared. Future generations can only pray they don't measure up.



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Editor's Note: This story added on January 19 information on the Honda Point incident.

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- Straight Talk on Montecito Evacuation Reaction and the Flood
- As Number of Missing Grows, Questions Arise Over County Warning

Death Toll Approaches 23 in the Worst Disaster in Santa Barbara History

(1) independent.com/news/2018/jan/18/death-toll-approaches-23-worst-disaster-santa-barb/

By Nick Welsh

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By Paul Wellman

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Remapping Montecito

(1) independent.com/news/2018/mar/29/remapping-montecito/

By Melinda Burns

Last week, the owners of a one-story house on Santa Elena Lane sought preliminary approval from the Montecito Board of Architectural Review for an 800-square-foot addition and a new wall in the front yard to deflect floodwaters from Montecito Creek.

The 1/9 Debris Flow carried mud right up to the house but not inside. The property was greentagged; county inspectors did not find any structural damage. But on Thursday, planners put the proposed addition on hold until the Federal Emergency Management Agency (FEMA) draws a "recovery map" for Montecito. Thiep Cung, the board vice-chair, objected to the delay and said he was tired of looking at piles of mud all over the place. "It's refreshing to see a project come in and not waste any time getting back to the new normal," he said. "I don't want this process to drag out for three months."

If Cung is frustrated, so are the owners of 350 homes that were destroyed or badly damaged on January 9. They have been advised by the county not to spend money on their rebuilding plans until FEMA finishes its work. "We're asking people to hold off," said Petra Leyva, a county supervising planner — but if they want to move forward right away, she added, they can request a meeting with county officials.



Brandon Yadegari (file)

Getting the power grid back online was one of the earliest efforts of Montecito's long road to recovery.

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Montecito Pushes Back on Streamlined Rebuild Process

(1) independent.com/news/2018/apr/22/montecito-pushes-back-streamlined-rebuild-process/

By Melinda Burns

On May 15, the county Board of Supervisors will consider amending the county zoning ordinance to streamline and speed the gargantuan task of rebuilding Montecito in the wake of a catastrophic debris flow.

It's all in the spirit of helping 216 families whose homes were destroyed or damaged on the fateful morning of January 9 to get their lives back soon as possible.

But in the spirit of Pearl Chase, the legendary Santa Barbaran who helped transform the city after a magnitude 6.8 earthquake in 1925, Montecito's leaders are asking the county to hold off on voting so soon.

"This is a Pearl Chase moment for resiliency," Joe Cole, chairman of the Montecito Planning Commission and a 40-year resident of the wealthy unincorporated community, said. (Cole is also a part owner of the *Santa Barbara Independent*.) "The county needs an overall strategy that would include a threat analysis, early warning monitoring, slope protections and neighborhood zoning based on actual hazard maps."

Citing concerns for neighborhood safety, privacy and aesthetics, the commission voted 4-0 last week to recommend that the county postpone any ordinance amendments for debris flow victims until after the Federal Emergency Management Agency finishes a "recovery map" of the devastated area.

"We need to use FEMA mapping to figure out where the real risks are," Cole said, noting that the county has advised homeowners to hold off on rebuilding until the maps come out. The proposed zoning amendments don't "move the ball forward as far as making the community safer as a whole," Cole said.

But the fast-track schedule is already in place. On Wednesday, the county Planning Commission will make its own recommendations to the county Board of Supervisors. If the board approves the amendments next month, they will go into effect on June 14, about the same time the FEMA map is expected to be released.





Melinda Burns

Homes that existed before county creek setbacks were established may have to be relocated on properties, which could raise roof height and lot location issues.

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County Leaders Tackle the Hard Facts of Montecito's Future

(1) independent.com/news/2018/may/03/county-leaders-tackle-hard-facts-montecitos-future/

By Melinda Burns , Nick Welsh (Contact)

Fifty scientists, engineers, and emergency officials met Monday at the Santa Barbara County Office of Emergency Management (OEM) for an all-day symposium to evaluate the 1/9 Debris Flow — and what they had to say was not reassuring. The worst news came from Kevin Cooper, a U.S. Forest Service biologist who served on the Burn Area Emergency Response (BAER) team for the Thomas Fire. New vegetation covers only 5-10 percent of the bare mountainside above Montecito, he said, and not much more rain is expected this season. "It's a combination of a late fire, very dry soils, late rains, loss of soil, and [poor] germination," Cooper said during a debriefing with a reporter on Monday. "In these cases, we have to wait for nature to take its course."

Shrubs with deep roots are sprouting a little new growth, but, crucially, the grasses have not come back, he said. By comparison, a year after 2009's Jesusita Fire burned 8,700 acres above Santa Barbara, upward of 80 percent of the vegetation had returned, including grasses four feet high. What the poor vegetation recovery means, said OEM Director Rob Lewin, is that the county will keep the current rainfall threshold for evacuations, 0.5 inches of rain per hour.

The county also wants to know when it will be safe to shrink evacuation zones, Lewin said, based on the creeks and debris basins that have been cleared and the amount of mud and rocks still remaining above Montecito. The scientists said they may have some answers by summer's end. Montecito, they said, now faces a lower risk for a significant debris flow — no one knows how much lower — than the Carpinteria Valley. That's because a much larger mass of rock and mud came down from above Montecito than Carpinteria. But Montecito is still at risk of another big — and potentially deadly — debris flow, they added. The danger of flooding in both communities has been heightened, too, because water can easily slide off the charred surface of the soil in the burn area. (By definition, debris flows have a mud content of more than 60 percent.)





Kevin Cooper, Los Padres National Forest

Only 5-10 percent of the burned vegetation has so far regrown, as the upper reaches of the Cold Springs Canyon demonstrate. This means evacuations will continue next rain season as before.

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Preliminary Damage Assessment Report

California – Wildfires FEMA-4353-DR

Declared January 2, 2018

On December 20, 2017, Governor Edmund G. Brown Jr. requested a major disaster declaration due to wildfires beginning on December 4, 2017, and continuing. The Governor requested a declaration for Individual Assistance and Public Assistance, including direct Federal assistance for four counties and Hazard Mitigation statewide. During the period of December 15-28, 2017, joint federal, state, and local government Preliminary Damage Assessments (PDAs) were conducted in the requested counties and are summarized below. PDAs estimate damages immediately after an event and are considered, along with several other factors, in determining whether a disaster is of such severity and magnitude that effective response is beyond the capabilities of the state and the affected local governments, and that Federal assistance is necessary.¹

On January 2, 2018, President Trump declared that a major disaster exists in the State of California. This declaration made Public Assistance, including direct Federal assistance requested by the Governor available to state and eligible local governments and certain private nonprofit organizations on a cost-sharing basis for emergency work and the repair or replacement of facilities damaged by the wildfires in Santa Barbara and Ventura Counties. This declaration also made Hazard Mitigation Grant Program assistance requested by the Governor available for hazard mitigation measures statewide.²

Summary of Damage Assessment Information Used in Determining Whether to Declare a Major Disaster

Individual Assistance

³ 1,316	Total Number of Residences Impacted: ³	
	Destroyed - 1,004 Major Damage - 55	
	Minor Damage - 51	
20.00/	Affected - 200	_
80.0%	Percentage of insured residences: ⁴ 80.0%	
16.0%	Percentage of low income households: ⁵	
95.0%	Percentage of ownership households: ⁶ 95	
Total Individual Assistance cost estimate: \$4,259,63		
16.0% 95.0% te: \$4,259,6	Percentage of low income households: ⁵ Percentage of ownership households: ⁶ Total Individual Assistance cost estimate:	

Public Assistance

- Primary Impact:
- Total Public Assistance cost estimate:
- Statewide per capita impact: ⁷
- Statewide per capita impact indicator: ⁸
- Countywide per capita impact: Los Angeles County (\$1.89), San Diego County (\$0.14), Santa Barbara County (\$23.85), and Ventura County (\$88.33).

Debris Removal

\$101,790,178

\$2.73

\$1.46

• Countywide per capita impact indicator:⁹ \$3.68

³ Degree of damage to impacted residences:

- Destroyed total loss of structure, structure is not economically feasible to repair, or complete failure to major structural components (e.g., collapse of basement walls/foundation, walls or roof);
- Major Damage substantial failure to structural elements of residence (e.g., walls, floors, foundation), or damage that will take more than 30 days to repair;
- Minor Damage home is damaged and uninhabitable, but may be made habitable in short period of time with repairs; and
- Affected some damage to the structure and contents, but still habitable.
- ⁴ By law, Federal disaster assistance cannot duplicate insurance coverage. 42 U.S.C. § 5155 and 44 C.F.R. § 206.48(b)(5).
- ⁵ Special populations, such as low-income, the elderly, or the unemployed may indicate a greater need for assistance. 44 C.F.R. § 206.48(b)(3).
- ⁶ Ibid. 44 C.F.R. § 206.48(b)(3).
- ⁷ Based on State population in the 2010 Census.
- ⁸ Statewide Per Capita Impact Indicator for FY18, *Federal Register*, October 1, 2017.
- ⁹ Countywide Per Capita Impact Indicator for FY18, *Federal Register*, October 1, 2017.

¹ The Preliminary Damage Assessment (PDA) process is a mechanism used to determine the impact and magnitude of damage and resulting needs of individuals, businesses, public sector, and community as a whole. Information collected is used by the State as a basis for the Governor's request for a major disaster or emergency declaration, and by the President in determining a response to the Governor's request (44 CFR § 206.33).

² When a Governor's request for major disaster assistance under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (Stafford Act) is under review, a number of primary factors are considered to determine whether assistance is warranted. These factors are outlined in FEMA's regulations (44 CFR § 206.48). The President has ultimate discretion and decision making authority to declare major disasters and emergencies under the Stafford Act (42 U.S.C. § 5170 and § 5191).













Legend

iii

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Inspections - Finalized

- Destroyed
- Major
- O Minor
- Affected

Click "i" for more information

World Transportation



Legend

iii

>>

×

Inspections - Finalized

- Destroyed
- Major
- O Minor
- Affected

Click "i" for more information

World Transportation

Map Legend

EXTREME RISK Near a Creek or Channel

These properties are at risk of debris flows from water overtopping the banks, creating high velocity flow (debris, rocks, mud and water) that causes destruction. A creek that may be dry all year can become a raging force of debris, rocks, mud and water as they did on January 9th.



These properties are at risk as creeks and channels may leave their regular courses, impact properties and roads, and isolate residents for multiple days or longer. Roads may become impassable and deadly. Utilities may be disrupted or destroyed.



These properties are at risk from mudslides and rocks from the slopes above the property or by the debris, mud, rocks and water that is carried down the watercourses from high up on the mountain.

When you are ordered to evacuate, you need to go

If a storm occurs with limited or no warning, you also need to be prepared

During a storm, roads may be blocked by water or rocks.

You need to know the threats that surround you



ReadySBC.org

Debris Flow Risk Areas (Updated March 10th, 2018)

Search Address Here

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Thomas Fire Retimeter

<u>IMPORTANT MAP</u> <u>INFORMATION/Mapa de</u> Información Importante

.

This map shows the areas that are at Extreme Risk OR High Risk for debris flow AND flooding. It was updated on March 10th, 2018 to incorporate changes from the

City of Carpinteria.

Este mapa muestra las áreas que están en riesgo extremo o a riesgo alto para flujos de escombros e inundaciones.

Evtrama Diel/ Diacon Extrama

2mi

View Map







Guidance to Property Owners Montecito Debris Flow Rebuilds

March 13, 2018

County staff is working to assist property owners in the rebuild process following the January 9th debris flow in Montecito which occurred after a very significant rainfall event in the Thomas burn area. Unlike rebuilding after a fire, the current situation poses unique challenges. Property owners are encouraged to meet with their Planning and Development Case Manager who is assigned to their damaged or destroyed property. This will ensure the property owner has an understanding of the processes and challenges unique to recovery for their specific property.

The landforms have changed significantly, including property elevations and at some locations, the width and depths of creeks. Many survey monuments have been dislodged, and many property boundaries cannot be verified without professional surveys. The County's floodplain management ordinance is based in large part on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM). However, the current FIRM maps are no longer representative of on-the-ground conditions due to the land-changing debris flow. The base flood elevations on the current FIRM maps do not reflect current topography and are of little use in the rebuilding process where topography has changed. FEMA will be developing new FIRM maps but this is expected to take four to five years.

Additionally, according to the U.S. Forest Service Burned Area Emergency Response Team and the State of California Watershed Emergency Response Team reports, the area is subject to ongoing threats of debris flows during significant rain events (a half inch of rain or more in an hour) for the next two to five years. In order to prevent potential damage to rebuilt structures and other structures in the community, any improvements that occur during this timeframe should be done with proper attention to changes in topography and new creek profiles.

To address the information deficiency in the short term, staff is working with FEMA on a flood hazard/recovery mapping analysis. Staff is also working with private consultants to conduct land surveys and engineering studies to reflect the current conditions and be used for rebuilding. These studies are expected to be complete in three months. The Recovery Mapping will be used to make prudent technical decisions regarding rebuilding in this immediate, and two to five year time frame. The studies will also inform any changes that may be required to Chapter 15A, the County's Flood Plain Management Ordinance.

Until these studies are complete, the County is advising property owners to temporarily delay making any significant expenditure on design plans so their decisions and permit applications can be informed by this work (expected to be complete in three months).

For those property owners who choose not to wait, the County recommends meeting with your Planning and Development case manager and Flood Control staff upfront to determine the submittal requirements to facilitate the permit review process. Requirements will depend on the situation of individual properties and may include:

- 1. Current topographic survey of project site and adjacent parcels.
- 2. Property line survey.
- 3. Hydrologic analyses of the project site to reflect post-burn (Thomas) conditions. Analysis should utilize and build upon the information in BAER, WERT, and Watershed Task Force technical studies.
 - a. Calculation of the current base flood elevations, inundation limits and possibly the floodway.
 - b. Key design elements include channel geomorphology, foundation considerations, and hydraulic capacity.
- 4. Preparation of plans may require utilization of experts in geotechnical, civil and hydraulic engineering, soil erosion, hydrology, and engineering geology.

As property owners consider the best method of rebuilding or repairing their properties, talking with your own experts about how to incorporate the debris deposited on your property may be very helpful. Maintaining some or all of the debris may reduce the overall costs of rebuilding by eliminating the removal of all debris.



COUNTY OF SANTA BARBARA

MONTECITO PLANNING COMMISSIONSpecial Hearing of April 17, 2018JOINT MEETING WITH THE MONTECITO9:00 a.m.BOARD OF ARCHITECTURAL REVIEW MARKED AGENDA9:00 a.m.

JOE COLE, CHAIR CHARLES NEWMAN, 1ST VICE-CHAIR DONNA SENAUER, 2ND VICE-CHAIR SUSAN KELLER Santa Barbara County Planning Commission Hearing Room 123 East Anapamu Street, Room 17 Santa Barbara, CA 93101 (805) 568-2000 (Planning & Development)

MONTECITO BOARD OF ARCHITECTURAL REVIEW

* The Montecito Board of Architectural Review participated only on Item #2 Like-for-Like Rebuild (Debris Flow) Ordinance Amendments

DAVE MENDRO CLAIR GOTTSDANKER DON SHARPE JOHN WATSON, Chair SAM MAPHIS BOB KUPIEC THIEP CUNG, Vice-Chair

TV COVERAGE ANNOUNCEMENT: Montecito Planning Commission Hearings are televised live on County of Santa Barbara Television (CSBTV) Channel 20 at 9:00 A.M. in the South Coast, Lompoc, Santa Ynez Valley, Santa Maria and Orcutt areas. Rebroadcast of Montecito Planning Commission Hearings are on Fridays at 5:00 P.M. on CSBTV Channel 20. This hearing will also be streamed live on CSBTV's website at https://www.countyofsb.org/ceo/csbtv/livestream.sbc and digitally archived at https://www.countyofsb.org/ceo/csbtv/livestream.sbc and digitally archived at https://www.voutube.com/user/CSBTV20

ADMINISTRATIVE AGENDA:

- I. **HEARING CALLED TO ORDER:** by Chair, Joe Cole.
- II. PLEDGE OF ALLEGIANCE
- III. TV COVERAGE ANNOUNCEMENT: by David Villalobos.
- IV. **ROLL CALL:** All Commissioners were present. Montecito Board of Architectural Review members Watson, Gottsdanker, Kupiec, and Cung present for Item #2.
- V. AGENDA STATUS REPORT: By Jeff Wilson.
- VI. **PROJECTION REPORT:** By Jeff Wilson.
- VII. **PUBLIC COMMENT:** None.
- VIII. PLANNING COMMISSIONER'S INFORMATIONAL REPORTS: Commissioner Senauer has attended all community meetings regarding updates on recovery, as well as Montecito Water District board and community meetings. Commissioner Newman has attended 3 meetings, including the March 28 UCSB Economic Forecast, the March 29 Santa Barbara County AIA recovery team meeting, and the April 10 Montecito Association board meeting. Commissioner Keller attended the most recent community meeting and the January 26 stakeholders meeting. Chair Cole also attended a community meeting and he will also be attending a 3 day real estate/planning conference in San Francisco.

IX. **MINUTES:** The Minutes of February 21, 2018 were considered as follows:

ACTION: Approved the Minutes of February 21, 2018, as revised.

Newman/Senauer Vote: 3-0-1 (Keller abstained)

- X. **DIRECTOR'S REPORT AND BOARD OF SUPERVISORS HEARING SUMMARY:** By Dianne M. Black.
- XI. STANDARD AGENDA:

2.

1. Thomas Fire and January Mudslides Rebuilding Report Montecito

The Montecito Planning Commission will receive a report from the Planning and Development Department on rebuilding after the Thomas Fire and January Mudslides. (Continued from 1/25/18 and 2/21/18)

ACTION: The Montecito Planning Commission received a report from the County Executive Office, Planning and Development, and Public Works Departments on rebuilding after the Thomas Fire and January Mudslides. No action was taken.

18ORD-00000-00005Like-for-Like Rebuild18ORD-00000-00006(Debris Flow) Ordinance AmendmentsCountywideExempt, CEQA Guidelines Sections 15061(b)(3),Alex Tuttle, Supervising Planner (805) 884-684415302, 15305, 15265Tess Harris, Planner (805) 568-3319

Hearing on the request of the County of Santa Barbara Planning and Development Department, that the Montecito Board of Architectural Review and the Montecito Planning Commission jointly review and provide feedback on the proposed ordinance amendments, and that the Montecito Planning Commission:

- a) **18ORD-00000-00005.** Adopt by resolution a recommendation to the Board of Supervisors that the Board of Supervisors adopt an ordinance (Case No. 18ORD-00000-00005) amending Division 35.2, Montecito Zones and Allowable Land Uses, Division 35.7, Montecito Planning Permit Procedures, Division 35.9, Montecito Land Use and Development Code Administration, and Division 35.10, Glossary, of Section 35-2, the Santa Barbara County Montecito Land Use and Development Code, of Chapter 35, Zoning, of the Santa Barbara County Code; and
- b) 18ORD-00000-00006. Adopt by resolution a recommendation to the County Planning Commission that they recommend to the Board of Supervisors that the Board of Supervisors adopt an ordinance (Case No. 18ORD-00000-00006) amending Division 1, In General, Division 2, Definitions, Division 10, Nonconforming Structures and Uses, and Division 12, Administration, of Article II, the Santa Barbara County Coastal Zoning Ordinance, of Chapter 35, Zoning, of the Santa Barbara County Code.

The proposed ordinance amendments revise existing regulations, development standards, permit procedures, and definitions in order to accommodate the rebuilding of structures that have been damaged or destroyed during a debris flow event or other natural event resulting in a significant change in topography or alteration of drainage features. Pursuant to Section 35-180.3 of Article II, the Director formally initiated the Ordinance Amendments, including the Amendment to the Local Coastal Program, following direction provided by the Board of Supervisors during their March 13, 2018 meeting.

- ACTION: The Montecito Planning Commission and the Montecito Board of Architectural Review reviewed the Like-for-Like Rebuild (Debris Flow) ordinance amendments, and provided feedback on the proposed ordinance amendments. No action was taken. The Montecito Board of Architectural Review then adjourned.
- **ACTION:** The Montecito Planning Commission re-affirmed the guidance provided to property owners included in the March 13, 2018 Memorandum entitled "Guidance to Property Owners on Montecito Debris Flow Rebuilds," in particular the fourth paragraph on the first page. Consistent with this guidance, recommended that the Board of Supervisors wait to take action on the proposed Ordinance Amendment to the Montecito Land Use and **Development Code (MLUDC) and recommended that the County Planning** Commission recommend that the Board of Supervisors wait to take action on the proposed Ordinance Amendment to Article II, the Coastal Zoning Ordinance, until the Flood Hazard/Recovery Mapping comes out in June 2018, members of the public have had sufficient time to review the Ordinance Amendments in context with the new advisory base flood elevations, and resiliency and adaptive management strategies have been considered. Upon receipt of this information, the Montecito Planning Commission requests that the Ordinance Amendments be referred back to the Montecito Planning Commission for further review and recommendations.

If the Board of Supervisors chooses not to follow the Montecito Planning Commission's Recommendation #1, above, the Montecito Planning Commission recommends the following actions: Make the required findings for approval, including CEQA findings; recommend that the Board of Supervisors determine the Ordinance Amendments are exempt from CEQA; adopt a resolution recommending that the Board of Supervisors approved Case No. 18ORD-00000-00005, as revised; and adopt a resolution recommending that the County Planning Commission adopt a resolution recommending that the Board of Supervisors approve Case No. 18ORD-00000-00006, as revised.

Keller/Senauer Vote: 4-0 Appeal process not applicable.

Agricultural Employee				
3.	18ORD-00000-00003	Dwelling Ordinance Amendment	Countywide	
	14NGD-00000-00014	David Lackie, Supervising Pla	anner (805) 568-2023	
		Jessi Steele, Pla	anner (805) 884-8082	

Hearing on the request of the Planning and Development Department that the Montecito Planning Commission recommend that the County Planning Commission recommend that the Board of Supervisors adopt an ordinance (Case No. 18ORD-00000-00003) amending Division 4, Zoning Districts, and Division 7, General Regulations, of Article II, the Coastal Zoning Ordinance, of Chapter 35, Zoning, of the Santa Barbara County Code, and recommend to the County Planning Commission the that the County Planning Commission recommend that the Board of Supervisors, after considering the Negative Declaration (14NGD-00000-00014) adopted for the 2015-2023 Housing Element Update, determine that as reflected in the CEQA findings, no subsequent Negative Declaration or other environmental review document shall be prepared for this project pursuant to CEQA Guidelines Section 15162. The proposed Article II amendment will streamline the permit process for agricultural employee dwellings in the

Agriculture I (AG-I) and Agriculture II (AG-II) zones in the Coastal Zone.

ACTION: Made the required findings for approval, including CEQA findings; recommended to the County Planning Commission that they recommend that the Board of Supervisors determine that no subsequent Negative Declaration or other environmental review document shall be prepared for this project; and adopted a resolution recommending that the County Planning Commission adopt a resolution recommending that the Board of Supervisors approve Case No. 18ORD-00000-00003.

Keller/Senauer	Vote: 3-0-1 (Newman recused)
	Appeal process not applicable.

The Montecito Planning Commission Agenda, Marked Agenda and Staff Reports are available on the Planning and Development Web Site at <u>www.sbcountyplanning.org</u>

Jeff Wilson Secretary to the Montecito Planning Commission

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Montecito Pushes Back on Streamlined Rebuild Process

(1) independent.com/news/2018/apr/22/montecito-pushes-back-streamlined-rebuild-process/

By Melinda Burns

On May 15, the county Board of Supervisors will consider amending the county zoning ordinance to streamline and speed the gargantuan task of rebuilding Montecito in the wake of a catastrophic debris flow.

It's all in the spirit of helping 216 families whose homes were destroyed or damaged on the fateful morning of January 9 to get their lives back soon as possible.

But in the spirit of Pearl Chase, the legendary Santa Barbaran who helped transform the city after a magnitude 6.8 earthquake in 1925, Montecito's leaders are asking the county to hold off on voting so soon.

"This is a Pearl Chase moment for resiliency," Joe Cole, chairman of the Montecito Planning Commission and a 40-year resident of the wealthy unincorporated community, said. (Cole is also a part owner of the Santa Barbara Independent.) "The county needs an overall strategy that would include a threat analysis, early warning monitoring, slope protections and neighborhood zoning based on actual hazard maps."

Citing concerns for neighborhood safety, privacy and aesthetics, the commission voted 4-0 last week to recommend that the county postpone any ordinance amendments for debris flow victims until after the Federal Emergency Management Agency finishes a "recovery map" of the devastated area.

"We need to use FEMA mapping to figure out where the real risks are," Cole said, noting that the county has advised homeowners to hold off on rebuilding until the maps come out. The proposed zoning amendments don't "move the ball forward as far as making the community safer as a whole," Cole said.

But the fast-track schedule is already in place. On Wednesday, the county Planning Commission will make its own recommendations to the county Board of Supervisors. If the board approves the amendments next month, they will go into effect on June 14, about the same time the FEMA map is expected to be released.







Melinda Burns

Homes that existed before county creek setbacks were established may have to be relocated on properties, which could raise roof height and lot location issues.


COUNTY OF SANTA BARBARA

Planning and Development -

Guidelines for the Implementation of the California Environmental Quality Act of 1970 As Amended

Adopted by the Santa Barbara County Board of Supervisors September 12, 1988

> Revised November 12, 1991 Revised July 7, 1992 Revised August 24, 1993 Revised January 1, 1994 Revised April 8, 1997 Revised November 22, 2005 Revised January 8, 2008 Revised May 25, 2010

Published June 2010

123 East Anapamu Street Santa Barbara, California 93101 805.568.2000 624 West Foster Road, Suite C Santa Maria, California 93455 805.934.6250

NOTE:

This document is updated on a periodic basis in order to include amendments adopted by the Board of Supervisors. Recently adopted amendments may not yet be incorporated into this copy. Please check with the Planning and Development Department Zoning Information Counter located at either 123 East Anapamu Street, Santa Barbara, or 624 West Foster Road, Suite C, Santa Maria, for information on amendments approved subsequent to the date shown on the front of this publication.

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ARTICLE I - PURPOSE

The purpose of these Guidelines, is to provide the County of Santa Barbara, other agencies of which the Board of Supervisors is the governing Board, applicants and the public with definitions, procedures, and forms to be used in the implementation of CEQA, the California Environmental Quality Act (Public Resources Code Section 21000 and following) and to supplement the State CEQA Guidelines, (14 Cal. Admin. Code Section 15000 and following).

ARTICLE II - INCORPORATION OF STATE CEQA GUIDELINES

The full text of the State Guidelines for the implementation of the California Environmental Quality Act (14 Cal. Admin. Code Section 15000 and following), as they may be amended from time to time, is incorporated by reference into this Article of the County Guidelines as if fully set out, and shall supersede any inconsistent provisions of these County Guidelines.

ARTICLE III - DEFINITIONS

The following words, where not defined in the State Guidelines, shall have the meaning ascribed to them in these definitions. These definitions are intended to clarify County process by supplementing definitions used in the State CEQA Guidelines.

- A. Beneficial Ecological Restoration Project. Beneficial ecological restoration projects by definition exclude required mitigation projects. Beneficial ecological restoration projects include the following projects and activities resulting in habitat enhancement: invasive exotic species removal, barrier removal or modification, creek/draining day-lighting, culvert replacement or modification, native habitat (e.g., wetland) expansion, enhancement, creation or restoration, revegetation with ecologically appropriate native species, water quality improvements, or other similar habitat restoration projects, where adverse impacts, if any, are short-term and temporary, where habitat restoration is the primary purpose of the project, and where there are no significant, unmitigated adverse impacts on biological resources. Beneficial ecological restoration projects apply a minimum 1:1 mitigation ratio. The project overall must have a recognized, long-term ecological benefit conducted in the best interests of the County's biological resources.
- **B.** Lead Department. The County department or agency of which the Board of Supervisors is the governing Board, which has the principal responsibility for carrying out, approving, or causing the approval by a decision-making body of a project. The process for designating the lead department is set out in Paragraph C of Article IV of these Guidelines.
- **C.** Threshold of Significance. Quantitative and qualitative criteria used to determine whether an environmental impact may be significant. Thresholds of significance are standards used to further refine the guidelines for determining significance provided in State CEQA Guidelines Sections 15064, 15382, and Appendix G.
- **D. Planning and Development Department (P&D)**. The planning department of Santa Barbara County. The Department has several divisions, including the Divisions of Development Review North, Development Review South, Building and Safety, and Energy.
- **E.** Master Environmental Assessment (MEA). A database covering a geographical or issue area that may involve cumulative impacts from a number of separate projects within the geographical area or involving the issue under study.
- **F. Decisionmaker.** The Official, Board or Commission responsible for taking final action on a project under state law or County ordinances.

ARTICLE IV - RESPONSIBILITIES FOR PREPARATION OF ENVIRONMENTAL DOCUMENTS

- **G. Public Projects.** Those projects proposed to be carried out by a department of the County or by a dependent special district governed by the Board of Supervisors.
- **H. Hearing Officer.** The County Executive Officer (CEO) or designee for public projects. The Director of the Planning and Development Department or designee for private projects. Generally, Supervising Planners or equivalent provide oversight of CEQA document preparation, sign draft and final environmental documents, and conduct environmental hearings.
- I. Environmental Coordinator. Appointed by the County Executive Officer as the Hearing Officer. Responsible for:
 - 1. Ensuring that the preparation of the public plan or program EIR by the department that has the principle authority for the project complies with the requirements of CEQA and the County's CEQA Guidelines; and
 - 2. Fulfilling the duties of the Hearing Officer for the respective project.
- **J. Application.** A permit application, including environmental information request provided by the Planning and Development Department and submitted on all non-exempt projects to assist the Planning and Development Department in the preparation of an initial study.
- **K. Dependent Special District.** Any local agency of which the Santa Barbara County Board Supervisors of the County is the governing board (e.g. Flood Control and Water Conservation District, Laguna Sanitation District, County Water Agency).
- L. Mitigation Monitoring and Reporting Program. All impact mitigation measures adopted as conditions of a development project permit approval including a monitoring component which describes the timing and the party responsible for monitoring and\or reporting on the measure to ensure compliance. Describes how monitoring will occur when it is not clear from mitigation language.
- **M.** Environmental Quality Assurance Plan. Plan required for large and/or complex projects for which multiple monitoring activities will be necessary to ensure compliance with mitigation measures during project implementation. Plan developed after project approval to supplement Mitigation Monitoring and Reporting Program.

ARTICLE IV - RESPONSIBILITIES FOR PREPARATION OF ENVIRONMENTAL DOCUMENTS

- **A. Public Projects.** The following responsibilities and procedures apply to public projects undertaken by the County:
 - 1. Initial Studies. An Initial Study (IS) shall be prepared either by the lead department or the Planning and Development Department, at the lead department's option. If the lead department prepares the Initial Study, consultation with the Hearing Officer shall occur prior to the preparation of the Initial Study to discuss the Initial Study scope of analysis. If the Planning and Development Department is to prepare the Initial Study, the lead department shall first submit a detailed project description and/ or plan, and an environmental information request. All Initial Studies shall be signed by the Hearing Officer, with a one week review time unless other arrangements are made. If a public scoping meeting is held (pursuant to Paragraph J of Article V), the Hearing Officer shall conduct the meeting. Should a disagreement occur over the Initial Study analysis or determination, a consultation on the Initial Study shall be convened within five working days of lead agency receipt of signed Initial Study according to the process described in Paragraph K of Article V of these Guidelines.

- 2. Document preparation and processing. The environmental document (negative declaration, environmental impact report, supplement, addendum, etc.) shall be prepared and managed either by the lead department or the Planning and Development Department, at the lead department's option. All draft documents and final documents shall be reviewed for adequacy and signed by the Hearing Officer, with one week review times unless other arrangements are made. The Hearing Officer shall conduct any separate environmental hearings on the document. The department preparing and managing the document shall be responsible for all other applicable aspects of document processing, including early consultation with Responsible Agencies; the Notice of Preparation (NOP) with the attached Initial Study signed by the Hearing Officer; consultant contracting and management; preparation of the Draft and Final documents; Notices of Completion (NOC), noticing and distribution of Draft and Final documents; and the Notice of Determination (NOD). For documents prepared by the lead department, CEQA findings to be considered for adoption by the decisionmaker shall be prepared by the lead department, and reviewed and approved by the Hearing Officer. If a discretionary permit for the project is being processed by the Planning and Development Department, the CEQA findings shall be prepared by the Planning and Development Department. Disagreements raised with respect to environmental analysis or application of mitigation measures shall be discussed and resolved between the lead department and Hearing Officer, or if not resolved by the meeting, shall then be submitted for arbitration by the County Executive Officer or designee for resolution.
- **B. Private Projects.** Where a private project is subject to a discretionary approval by the County or district governed by the Board of Supervisors, the applicant shall prepare an application, including environmental information. The Planning and Development Department shall review the application and either determine that the project is exempt from CEQA or prepare the Initial Study and ND, or draft and final EIR. The Planning and Development Department shall conduct any hearing on the environmental document and recommend findings to the decisionmaker as to its adequacy under CEQA.
- **C. Designation of Lead Department.** Where two or more departments of the County are involved with a project, the lead department shall be determined by the following criteria:
 - 1. If the project is to be carried out by a department of the County, the lead department shall be the department or dependent special district which proposes to carry out the project.
 - 2. Where the project is proposed by an applicant other than the County or a dependent Special District, the lead department shall be the department with the authority to process or grant permits, or the department with the greatest responsibility for supervising, approving or causing the approval by a decision making body of the project as a whole.
 - 3. In the event that designation of lead department is in dispute among departments of the County, any department may submit the question to the Board of Supervisors of the County which shall designate the lead department.
- **D. Applicant Involvement in Environmental Review Process.** The lead department responsible for a CEQA environmental review process shall consult with the applicant at key points throughout the process as described below, to ensure accuracy of project information and to obtain timely input of the applicant's views on the analysis and process. It is important that all parties understand, however, that the lead department must maintain objectivity in preparing the environmental analysis in accordance with the requirements of CEQA.
 - **1. Pre-application consultations.** As described in Paragraph B of Article V of these Guidelines, at the request of potential applicants prior to application, the lead department shall provide

³

consultation about CEQA environmental review considerations at the public information counters or through paid staff consultations and pre-application conferences.

- 2. Application review. As part of the preliminary review of applications for completeness in the first 30 days following application submittal, the lead department shall begin consideration of CEQA environmental review issues and convey a preliminary assessment to the applicant. Examples of information at this stage could include an initial determination of whether a project is exempt from CEQA; additional project description or environmental setting information or technical studies that will be needed in order to analyze the project under CEQA; identification of possible significant environmental impacts; a preliminary assessment of probable environmental document type (e.g., ND, EIR, Supplement, Addendum); and preliminary identification of project redesigns, mitigation measures and/or alternatives that might sufficiently reduce potentially significant effects such that the project may qualify for a mitigated negative declaration rather than an EIR.
- **3. Initial study.** During preparation of the Initial Study, the lead department shall consult with the applicant as necessary to confirm the accuracy of the project description and to request any additional information regarding the environmental circumstances of the site or surrounding area, and to discuss any issues regarding impact analysis or document type arising from early consultation with affected agencies. As described in Paragraph K of Article V of these Guidelines, the applicant shall be notified of the initial study determination and may request a consultation/ appeal meeting to discuss clarification of the Initial Study analysis or appeal of the Initial Study determination. On projects for which potentially significant impacts are identified, the lead department shall consult with the applicant regarding any measures that could be incorporated into the project to sufficiently lessen impacts such that the project could qualify for a mitigated negative declaration rather than an EIR. The applicant must agree to such mitigation measures in writing prior to release of a draft negative declaration for public review.
- 4. **Scoping.** The applicant shall receive a copy of any Notice of Preparation and/or notice of a scoping hearing for the environmental document. The lead department shall consult with the applicant regarding any document scoping issues and any problems that arise from consultation with affected agencies and the public.
- 5. Consultant selection. Upon completion of an Initial Study and document scoping process leading to EIR preparation, the lead department staff shall prepare and issue a request for proposals to several (usually three) of the best qualified and available consultants from among authorized consultants. The applicant shall receive a copy of the request for proposals and list of consultants to receive it. The applicant may choose to have the request for proposals sent to additional consultants either on open services contract with the County or not. A copy of the consultant proposals shall be forwarded to the applicant for review and comment to staff. The staff shall rate the proposals and identify any inadequate proposals. Staff shall discuss recommendations with the applicant. The applicant shall select an EIR consultant from among the proposals rated as adequate, and the County shall hold and manage the contract with the EIR consultant.
- 6. Administrative Draft and Draft EIR preparation. The lead department staff shall consult with the applicant during preparation of the administrative draft and draft environmental document as necessary to confirm the project description, project objectives, and identification of alternatives; to discuss the progress content and findings of the analysis and any problems

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or conflicts which arise; and to discuss the feasibility of identified mitigation measures.

Once the administrative draft environmental document is completed, it shall be circulated to other county departments as necessary for review and comment. Additionally, with the exception of joint agency documents as provided for in Section C.2 of Article VII of these Guidelines, the applicant shall have the opportunity to receive a copy for review and comment. Should the applicant receive a copy of the administrative draft environmental document, the document shall also be made available to any other member of the public upon request.

Should the lead agency hire a consultant to prepare the environmental document, all communications between the consultant and either the applicant or county staff shall be with the applicant and county staff both participating, and any communications between the consultant, county staff and the applicant that result in a change in the administrative draft shall be memorialized in writing and be made part of the public record.

- 7. **Public review period.** The applicant shall receive a copy of notices of document availability, public comment period, and any environmental hearings. The lead department staff shall consult with the applicant regarding public and agency comments received, and applicant comments on the draft document.
- 8. **Final EIR.** The lead department staff shall consult with the applicant to discuss the progress of preparation of responses to comment, Final EIR, and CEQA findings.

ARTICLE V - INITIAL EVALUATION OF PROJECTS

- A. Applicability. CEQA applies to activities that may result in a direct or reasonably foreseeable indirect physical change in the environment. A project subject to CEQA means the whole of an action resulting in such an environmental effect that a public agency undertakes, funds, and/or permits by a discretionary permit.
- **B.** Early Consultation on CEQA Determinations. Upon request of a potential project applicant, the Lead Department shall provide consultation prior to filing of a project permit application, regarding CEQA environmental review considerations, including the range of actions, potential alternatives, mitigation measures, and any potential and significant effects on the environment. Such consultations are conducted through regular departmental processes including the public information counter and paid staff consultations or pre-application conferences.
- **C.** Adequacy of Project Description. The information required to adequately describe proposed projects for the purpose of environmental review must be provided in the application. These information requirements for application submittals include all the details needed to review routine projects. Large or complex projects may require additional information in order to complete accurate environmental assessment.

Detailed information on site conditions, particularly any unique characteristics such as environmentally sensitive habitats or geologic hazards is required. Design features or measures incorporated into the proposed project intended to avoid, reduce, or otherwise mitigate project impacts should be described.

For projects which may utilize or generate hazardous materials, or which may pose a threat to public health or safety, information regarding the engineering basis and design of the project facilities and the effects of project operations is required.

The County's Comprehensive Plan requires that an emergency response plan, a fire protection plan,

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and for petroleum projects, an oil spill response plan must be submitted as part of certain applications. These plans form an important part of assessing potential environmental effects. They should be specific to the project proposed.

For projects which require permits from other County departments or other agencies (County Air Pollution Control District, U.S. Forest Service, State Coastal Commission, State Department of Fish and Game, etc.), information needed by such departments or agencies may be required to accompany an application to the Planning and Development Department. Any information submitted to other departments or agencies shall be consistent with that submitted to the Planning and Development Department.

Prior to the expiration of the period during which application completeness is to be determined, the Planning and Development Department shall identify any deficiencies in the project description for purposes of environmental review, and notify the applicant. The applicant may submit a revised application.

- **D. Determining Exemption, Notice.** The lead department shall determine whether the proposal is not a project, or is an emergency, statutorily exempt, categorically exempt, or ministerial project under CEQA, or may be found exempt under the general rule when it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment.
 - 1. A Notice of Exemption shall be filed with the Clerk after project approval for those classes of exemption identified in Appendix B of these Guidelines.

The lead department may, in its discretion, also file exemptions for other classes of exemption, which starts a 35 day statute of limitations period on CEQA challenges to the exemption.

- 2. Whenever a Notice of Exemption is prepared it shall be posted at the Planning and Development Department at least six days prior to consideration of the project by the decisionmaker, and shall be filed with the Clerk of the Board of Supervisors within five days after project approval. The notice shall be posted in the office of the Clerk within 24 hours of receipt, and shall remain posted for a period of 30 days, then returned to the lead department. The Board of Supervisors may, for good cause, waive the six day posting requirement.
- 3. Project approval, as defined in the State Guidelines means the decision by a public agency which commits the agency to a definite cause of action in regard to a project.

County rules for the exact date of approval of public projects for purposes of CEQA for public projects shall be as proposed by the various departments, approved by the Board of Supervisors and included in Appendix C (Reserved) to these Guidelines.

- 4. A determination that a project is not exempt may not be appealed; a determination that a project is exempt may be reviewed by the decisionmaker at the time of consideration of the project, and if the decisionmaker disagrees with the determination of exemption, the decisionmaker shall instruct the Planning and Development Department to prepare an Initial Study.
- 5. For public projects which require a permit processed through the Planning and Development Department, the exemption must be accepted by the decisionmaker. For these projects, the lead department will not issue an exemption until the project application is submitted and then only in consultation with the Planning and Development Department.
- **E. Initial Study.** For non-exempt projects, the applicant, or the lead department for a public project, shall prepare and file an application including project description and environmental information

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request on a form prescribed by the Planning and Development Department as part of the application. Within 30 days of a determination of application completeness, the Planning and Development Department shall initially determine whether or not the project may have a significant effect on the environment.

If the Initial Study shows that there is no substantial evidence that the project will cause a significant effect on the environment, the lead department shall prepare a Negative Declaration or Addendum to a prior ND or EIR.

The Lead Agency shall prepare a Mitigated Negative Declaration if the Initial Study determines that the project may result in a significant effect, but revisions to the project proposal made by or agreed to by the applicant before the draft Negative Declaration is released for public review would avoid or mitigate the effects to a point where clearly no significant effect would occur, and there is no substantial evidence before the agency that the project as revised may have a significant effect.

If the Initial Study determines that the project may result in a significant effect on the environment, the lead department shall: (1) prepare an EIR, or (2) use a previously prepared EIR which adequately analyzes the current project, or (3) determine that some effects were adequately analyzed by a prior EIR or ND, and prepare a subsequent document (EIR, supplement or Addendum) focusing on effects not analyzed adequately in the previous document.

Initial Study determinations as to whether a project may have a significant impact on the environment shall be based on substantial evidence in light of the whole record before the lead agency. Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly inaccurate or erroneous, or evidence of social or economic impacts which do not contribute to, or are not caused by, physical impacts on the environment, is not substantial evidence. Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts. The existence of public controversy over the environmental effects of a project shall not require preparation of an environmental impact report if there is no substantial evidence in light of the whole record before the lead agency that the project may have a significant effect on the environment. Initial Studies shall provide brief explanations of evidence supporting identified environmental impact levels.

F. Environmental Thresholds, Rules for Use and Amendment. The Planning and Development Department's Initial Study determination on whether or not a project may have a significant effect on the environment shall be based in part on thresholds of significance. These thresholds are measures of environmental change which are either quantitative, or as specific as possible for topics which are resistant to quantification such as aesthetics, cultural resources, and biology. Thresholds of significance are intended to supplement provisions in the State Guidelines for determination of significant environmental effect including Sections 15064, 15065, 15382 and Appendix G incorporated herein, and the thresholds shall be applied consistent with these State provisions.

In application, a project which has no effect above threshold values individually or cumulatively shall generally be determined not to have any significant effect, and a negative declaration shall be prepared as provided by Article VI below. Projects which have an effect above a threshold of significance will generally require an EIR, unless mitigation is identified and accepted by the applicant which is sufficient to mitigate impacts to a less than significant level. Thresholds of significance provide general guidance for determining significant impacts, but are not ironclad definitions of significant impacts. Each project must be judged individually for its potential for significant impacts, based on specific circumstances and evidence.

The Planning and Development Department shall maintain detailed descriptions of current thresholds (County of Santa Barbara Planning and Development Department Environmental

Thresholds and Guidelines Manual, available for purchase at the Planning and Development Department), which shall be publicly available, and which shall be revised periodically as necessary to maintain a standard which will afford the fullest possible protection to the environment, within the reasonable scope of CEQA, by imposing a low threshold requirement for the preparation of an EIR. For issue areas for which there are no thresholds, the guidance provided in CEQA Sections 15064, 15065, 15382 and Appendix G shall provide the basis for determining significance.

- 1. Quantitative thresholds. Impacts associated with air quality, groundwater resources, noise, traffic, and solid waste are measured by quantitative thresholds. Numerical values reflecting degrees of environmental change which are deemed generally insignificant are derived from federal or state standards, comprehensive plan elements, or scientific data.
- 2. Qualitative thresholds. For some impacts, including agricultural resources, biological resources, and cultural resources, a combination of numerical indices and qualitative values based on professional judgment is used. The evaluation of aesthetics, in contrast, is based entirely on qualitative criteria.

3. Thresholds and guidelines amendment and adoption.

a. Basis for thresholds amendment.

- (1) **General.** Several threshold methodologies include a mechanism to enable them to respond automatically to environmental change. For example, changes in attainment status relative to air quality standards, changes in traffic levels on roads, and changes in the balance between water supplies and water use all affect how thresholds determine significance. However, other changes in environmental conditions or environmental information may require an alteration to the methodology used to evaluate significance.
- (2) Change of scientific basis and criteria. The underlying basis of threshold criteria may change with the discovery of new data or theories about relationships between environmental change and environmental quality. When data from scientific publications, reports, or conference proceedings, etc. suggest the need for such a change, County shall review these data and determine the justification for threshold revisions.
- (3) Change in environmental circumstances. Environmental characteristics such as groundwater levels, traffic counts and sensitive biological habitat acreage are subject to constant change due to development trends. In order to ensure reasonable significance determinations, thresholds will be changed to reflect changes in environmental carrying capacity, resource scarcity and resource use. Information on such changes may come from resource managers (e.g. water purveyors, Air Pollution Control District), applicants or the public.

b. Process for thresholds amendment and adoption.

(1) New or revised thresholds. The *Environmental Thresholds and Guidelines Manual* shall be periodically amended by the Board of Supervisors, as necessary to reflect new information or changed environmental circumstances; and new thresholds or guidelines for additional topical areas may be adopted by the Board of Supervisors as deemed necessary. In accordance with Board of Supervisors authorization, the Planning Commission will hold noticed public hearings in north and south county locations to consider (1) existing thresholds and the need for refinement or revision, (2) specific proposed changes to thresholds and guidelines, and/or (3) new thresholds and guidelines for additional topics. The public hearings will have the purpose of advising the public of the basis for thresholds, of obtaining public comment on thresholds and revisions, and of gathering relevant data for inclusion in thresholds data bases. The Planning Commission will provide direction for thresholds revisions and development of new thresholds, and will forward new or revised thresholds for final adoption by the Board of Supervisors.

- (2) Interim thresholds. Interim thresholds revisions may be authorized by the Board of Supervisors without the above public process when immediate revisions are necessary. Any interim changes in thresholds made without the above public hearing process shall be posted in a public area of the Planning and Development Department for a period of 30 days following authorization of the changes, and shall be reviewed at the next public workshop hearing.
- 4. Analysis of projects near airports. For projects located within an Airport Land Use Plan area or within two miles of a public use airport, the California Department of Transportation (CALTRANS) Aeronautics handbook shall be consulted to provide guidance on analysis of noise and safety impacts.
- **G. Mitigation Measures.** Measures capable of reducing or avoiding potentially significant impacts shall be identified during the preliminary evaluation of non-exempt projects. A broad range of potential mitigations should be considered to maximize the potential for project modifications which mitigate adverse impacts and enable projects to qualify for negative declarations. The list of mitigation measures identified at the Initial Study stage must later be refined and specified to meet the standards for inclusion in environmental documents (reference Paragraph B of Article VI and Paragraph D of Article VII of these Guidelines).
- **H. Beneficial Ecological Restoration Project Requirements.** Beneficial ecological restoration projects apply a minimum of 1:1 mitigation ratio. The project overall must have a recognized, long-term ecological benefit conducted in the best interests of the County's biological resources. The following criteria are applicable in beneficial ecological restoration projects.
 - 1. The purpose of the beneficial ecological restoration project is to enhance or restore biological or habitat resources. These projects may have additional benefits such as soil conservation, water conservation, water quality improvements, etc., but may not be considered in conjunction with a development project.
 - 2. The beneficial ecological restoration project restores, expands, enhances or recreates the existing or previously existing habitat as in the affected area, but no net loss in total habitat area results from the restoration project.

A beneficial ecological restoration project proposing to replace one habitat for another (such as conversion of upland habitat to expand wetland habitat) shall document why the desired habitat is preferential. Preferential criteria might include habitat for endangered, rare or threatened species, species of concern, or habitat values of local, statewide or federal importance.

- 3. The beneficial ecological restoration project's restoration plan is consistent with the County's biological performance standards (e.g., spatial density of plantings) specified in the County's environmental thresholds.
- 4. Environmental review concludes the beneficial ecological restoration project will result in significant, long-term improvement to natural resources and habitat quality, and will not result in the long-term net loss of habitat area or value (i.e., demonstrates increase in habitat quality

compared to existing conditions). In order to find no net loss in habitat area or value, this may require enhancement of adjacent areas (weeding or other improvements) that ensure successful restoration.

- 5. The beneficial ecological restoration project is consistent with applicable County plans and policies.
- 6. The beneficial ecological restoration project is consistent with State and Federal agency requirements. Project applicants are encouraged to consult early with the applicable agencies regarding the scope of the restoration project.
- 7. The party conducting the beneficial ecological restoration project has retained the necessary expertise and experience to implement the restoration and appropriate monitoring to ensure the success of the beneficial ecological restoration (i.e., the party is or retains a resource agency or biological consultant or biologist with appropriate biological restoration expertise as determined by the County). Proposed projects utilizing volunteers to implement and monitor the restoration activity will have the training and oversight by a qualified expert.
- 8. The applicant for a beneficial ecological restoration project shall document adequate implementation resources to exist to complete the beneficial project and ensure appropriate maintenance and monitoring.
- 9. Successful implementation and monitoring of the beneficial ecological restoration project can be satisfied by the property owner, party conducting the project or a sponsoring agency by submittal of a completion report documenting the following:
 - a. Summary of the implementation activity dates and personnel.
 - b. Before and after photo documentation.
 - c. Field information on the status of the restored area (may include survey data such as plant and wildlife species lists, and native plan percent coverage).
 - d. Completion reports shall be provided annually for three years or for the duration specified by a sponsoring agency.
- 10. The property owner of the beneficial ecological restoration project is encouraged to maintain the project area for its habitat value or, if applicable, for the duration specified by a sponsoring agency.
- 11. Beneficial ecological restoration projects are encouraged to use appropriate native species from the local habitat area and/or seed stock when feasible.
- I. Master Environmental Assessments. From time to time the County may choose to prepare a Master Environmental Assessment (MEA) to identify and organize environmental information for a region or issue within its jurisdiction.
 - 1. **Purposes.** The primary objective of a Master Environmental Assessment is to identify and organize environmental information for a region or an issue, and to reduce the scope, cost and time of the environmental review process on a case specific basis.

A Master Environmental Assessment should focus on the identification of area-wide resources, constraints, and opportunities for undeveloped parcels.

Environmental data is generally contained on a number of base maps at varying scales and in cumulative impact tables contained in numerous certified environmental documents. A Master Environmental Assessment should integrate these materials to centralize and automate the

data for particular areas or issues within the County.

- 2. Standard mitigation measures. A Master Environmental Assessment should provide a set of standardized mitigation measures responding to recurring environmental and infrastructure problems. During the Initial Study process and during preparation of the environmental document, as recurring environmental impacts are identified, the standardized mitigation measures will be applied to resolve the problems whenever possible to do so.
- **3. Application.** When an EIR is required for a project that is a part of an area for which a Master Environmental Assessment has been prepared and approved by the County, the EIR on the specific project shall be used where possible to provide background information or information on cumulative effects.

Where applicable the Planning and Development Department or the Energy Division shall set forth a summary of the Master Environmental Assessment in the specific project EIR and indicate where a copy of the Master Environmental Assessment may be obtained or reviewed.

J. Notice of Preparation and Scoping Meetings.

- 1. Notice of EIR preparation. Following an Initial Study determination that an environmental impact report will be required, the lead department shall prepare and distribute a Notice of Preparation (NOP) of the EIR. The Notice of Preparation shall be sent to Responsible and Trustee Agencies and involved federal agencies, and may be sent to other interested agencies, groups and individuals. The Notice of Preparation is sent to provide notice that an EIR will be prepared and to obtain comment on the EIR scope of analysis, and shall be filed with the Clerk of the Board of Supervisors. The notice shall be posted in the office of the Clerk within 24 hours of receipt, and shall remain posted for 30 days, then returned to the lead department.
- 2. Scoping meetings. On potentially controversial projects or marginal cases where it is not clear whether a project may have a significant effect, early consultation with the public is helpful in determining whether an EIR will be required and what issues it should address.
 - a. Purposes.
 - (1) To allow for public and agency input on the environmental effects of a project at the earliest possible time in the process.
 - (2) To focus project-related impact assessment on significant environmental issues and their mitigation.
 - (3) To determine the focus of EIRs, based on public input and thresholds.
 - (4) To identify feasible mitigation measures.
 - (5) To identify realistic and feasible alternatives for refinement within EIRs.
 - **b. Applicability.** Public scoping meetings may be called by the Planning and Development Department if the project has one or more of the following features:
 - (1) It is near one or more controversial projects
 - (2) Public concern has already been expressed over environmental effects of the project
 - (3) It will require a Comprehensive Plan Amendment or Rezone
 - (4) It is clear that it may have a significant effect in one issue area, but not clear in other areas

- c. Notice. Scoping meetings shall occur as early as practicable, and generally within 30 days of the Initial Study determination or within the Notice of Preparation period. Noticing for public scoping meetings shall include Responsible, Trustee, interested and affected agencies, General Plan or Community Advisory Committees as well as residents within 1,000 feet of the project site and organizations and members of the public expressing interest. Notice shall be given at least 10 days prior to the scoping meeting and should contain a copy of the draft Initial Study or summary scoping paper.
- **d.** Use. Subsequent to the scoping meeting, lead agency staff shall make any appropriate changes to the Initial Study and advise the applicant whether an ND or an EIR is required.
- **K. Consultation/Appeal Process for Initial Study Determinations.** The purpose of this procedure is to provide an opportunity for an applicant or the lead department for public projects, once an initial study has been prepared, to correct inaccurate information and/or to provide evidence which might tend to establish that the conclusions of the initial study may be incorrect pursuant to State CEQA Guidelines Section 15063(g). Where a determination is made that an EIR is required, the applicant shall be immediately notified of this determination by certified mail.

Within five working days following receipt of notification of the Initial Study determination, the applicant or lead department may request and receive a meeting with the Director of the Planning and Development Department for the purpose of consultation to clarify or correct the Initial Study analysis or to appeal the Initial Study finding. The request for an Initial Study consultation/appeal meeting shall be by letter, and shall specify the basis for the Initial Study appeal. A representative of County Counsel shall be present when appeals are heard as a formal advisor to the Planning and Development Director and non-voting member of the appeals process.

The focus of the consultation/ appeal shall be as follows:

- 1. The applicant may provide information to correct factual errors in the Initial Study.
- 2. The applicant may submit additional information to assist in deciding whether to prepare an EIR or ND.
- 3. The applicant may propose modifications to the project description to mitigate potentially significant adverse impacts to levels of insignificance, thereby enabling the project to qualify for an ND.

Any changes to the findings of the Initial Study based upon the consultation shall be supported by substantial evidence to show a material error or incorrect conclusion in the Initial Study, or modifications to the project. Such evidence supporting errors or incorrect conclusions should be documented by engineering reports or certified by a competent professional in the appropriate field, and should consist of new material not already considered in the Initial Study.

Upon consideration of the information submitted, the Director of the Planning and Development Department shall affirm, reverse or modify the conclusions of the Initial Study and provide a copy to the applicant or lead department. This determination is not appealable.

ARTICLE VI - NEGATIVE DECLARATIONS

A. Responsibility For Preparation.

1. For private projects, the Planning and Development Department shall prepare the proposed ND or cause it to be prepared by a private contractor. Contractors may be used when workload exceeds available staff resources or when the proposed ND requires expertise not available

from existing staff.

- 2. The Planning and Development Department shall determine whether the proposed ND is complex or non-complex. Complex ND's require an environmental hearing; non-complex ND's do not. Complex ND's include complex analysis or analysis of environmental issues which are subject to controversy over the presence or absence of significant adverse effects. Non-complex NDs include only analysis which is clear cut and precise and which is likely to be subject to little or no controversy over environmental effects. Public controversy over planning or policy issues rather than the identification of environmental effects does not establish that an ND is complex. The Planning and Development Department's determination on complexity is not appealable.
- **B.** Mitigation Measures. Where the identification of mitigation measures enables an applicant or lead department to modify a project during the initial study to mitigate all potentially significant impacts to a less than significant level before an EIR is prepared, a Mitigated Negative Declaration incorporating those mitigations into the project description shall be prepared. Mitigation measures in Negative Declarations must meet the standards for adequacy described in Paragraph D of Article VII of these Guidelines. Furthermore, mitigations forming the basis of a finding of no significant impact must be accepted in writing by the applicant or lead department proposing the project, and incorporated into the project description before the proposed negative declaration is released for public review. Mitigation measures must be made fully enforceable through permit conditions or other agreements.
- **C. Mitigation Monitoring and Reporting Program.** When adopting a mitigated Negative Declaration, a Mitigation Monitoring and Reporting Program will also be adopted which incorporates mitigation measures meeting the standards for adequacy described above and a monitoring component for each measure described in Section E of Article VII of these Guidelines. The lead department will be responsible for ensuring that monitoring and reporting is carried out as indicated after the project is approved.

D. Review Period.

- 1. Within 10 work days of completion of a draft ND, the lead department shall initiate a 20 day public review period. If a State Clearinghouse review is required, the public review period for the ND shall be 30 days. Should issues related to new environmental information, changed environmental circumstances, or applicant changes to the project description occur, an extended public review period may be required at the discretion of the Hearing Officer.
- 2. All complex draft NDs shall be set for a public hearing conducted by a Hearing Officer prior to the close of the review period. The Hearing Officer shall hold the public hearing for the purpose of receiving comments by interested and affected agencies, the public and the applicant on the accuracy and adequacy of the proposed ND.

All proposed non-complex NDs shall be presented to the advisory and/or decision-making body in a public hearing after the close of the public review period for the ND as part of the proposed action unless the Planning and Development Department determines that public comment indicates the proposed ND should have been classified as complex. In this case, the Department may set a separate environmental hearing after 10 days notice pursuant to State CEQA Guidelines Section 15072 before presenting the proposed ND to the advisory or decisionmaking body.

3. Notice of ND availability, review period, and environmental hearing, if applicable, will be given by posting on the Planning and Development Department public bulletin board, by

publishing in a newspaper of general circulation in the project area, by mailings to properties within 300 feet and contiguous occupants, and interested community groups. In a case where the 300 foot criterion would require mailings to more than 200 individual properties, another means of public notification shall be allowed (posting of site, display ad in a newspaper of general circulation, etc.). In cases where the project's impacts would extend beyond 300 feet, an attempt shall be made to notify affected properties beyond 300 feet. The notice will include: a brief description of the proposed project and location; a summary listing of potentially significant but mitigable (Class II) impacts anticipated to result from the project; identification of the preparer of the draft ND; the length of the review period in which comments will be received by the lead department; the date, time and place of the public comment hearing on the ND if applicable, and the places where copies of the ND and documents referenced in the ND are available for public review.

4. Comments from the public and the applicant received during the public hearing or review period shall be considered and where appropriate will be incorporated into the final draft ND.

E. Findings and Recommendations for Approval.

1. NDs set for Environmental Hearing. If, after the comment period and public hearing, the Hearing Officer determines that there is no substantial evidence that the project may have a significant effect, a final ND shall be prepared, including changes where appropriate in response to comments. All comments received during the review period shall be attached to the proposed final ND and transmitted to the decisionmaker, with proposed findings that 1) there is no substantial evidence that the project will have any significant effect, 2) for projects subject to Public Resources Code Section 21080(c)(2), the project description and mitigation measures with their corresponding monitoring requirements are the monitoring program for the project, and with a recommendation for approval of the document.

There shall be no appeal from the Hearing Officer's proposed findings on the Negative Declaration, but objections raised during the public hearing shall be deemed preserved and may be raised before the discretionary decisionmaker. The decisionmaker shall approve the ND at the time the project is approved.

2. NDs set for hearing before the advisory and/or decision-making body. NDs determined to be non-complex shall be set for hearing before the advisory and/or decision-making body. If, after the comment period, the Hearing Officer determines that there is no substantial evidence that the project may have a significant effect, a final ND shall be prepared, including changes as appropriate in response to comments. All comments received during the review period shall be attached to the proposed final ND and transmitted to the advisory and/or decision-making body, with a proposed finding that there is no substantial evidence that the project will have any significant effect, and a recommendation for approval of the document.

There shall be no appeal from the Hearing Officer's proposed findings on the ND, but objections raised during public review shall be deemed preserved and may be raised before the discretionary decisionmaker.

- 3. Mitigation measures which are equivalent or more effective in reducing potentially significant impacts may be substituted by the lead agency during the approval process without recirculating the ND.
- **F.** Determination by Hearing Officer that ND is Inadequate. If, after review the Hearing Officer determines that there is substantial evidence that the project may have a significant effect, an EIR shall be prepared pursuant to Article VII. In such a case, the time limit for preparation of the

environmental document shall be one year from the date the application was found complete for processing.

- **G.** Determination by Decisionmaker that ND Is Inadequate. If, upon review of the project, the decisionmaker determines that the ND is inadequate, the project shall be referred to the lead department for appropriate revisions or preparation of an EIR. Consideration of the project shall be deferred until the ND is approved or an EIR is certified, consistent with mandatory time lines for action.
- **H.** Notice of Determination Within five days of the approval of a public or private project for which a final ND has been prepared, the lead department shall file a Notice of Determination with the Clerk of the Board of Supervisors, and with the State Clearinghouse only if a discretionary permit is required from a state agency. The notice shall be posted in the office of the Clerk within 24 hours of its receipt, and shall remain posted for a period of 30 days, after which it will be returned to the lead department.

ARTICLE VII - PREPARATION OF EIRs

- **A. Responsibility for Preparation.** For private projects, the Planning and Development Department shall prepare the EIR or cause it to be prepared by a private contractor. Upon receipt of an executed EIR contract and deposit from the private applicant, the Planning and Development Department may proceed with consultant selection and contracting with a qualified consultant to prepare a draft and final EIR, in accordance with procedures outlined in Section D.5 of Article IV and Section C.1 of Article VII of these Guidelines.
- **B.** Focus of EIR Analysis. EIRs shall focus on analysis of potentially significant impacts. Impacts which will be less than significant may be summarized briefly or reference may be made to the Initial Study analysis of impacts determined to be less than significant. However, for projects located under jurisdiction of the County's Local Coastal Program and for projects requiring conditional use permit or development plan approval, analysis of all impacts shall be sufficient to provide a basis for required findings as to whether all adverse impacts are mitigated to the maximum extent feasible.

C. Administrative Draft EIRS for Private Projects.

1. **Preparation of Administrative Draft EIRs for private projects.** A draft EIR for a may be prepared directly by a lead department's own staff, or may be initially prepared by a consultant and then reviewed and modified as needed by the lead department staff prior to issuance for public review. An initial draft EIR prepared by a party other than the lead department is termed by the County an "administrative draft" EIR.

The following options are available for preparing an administrative draft EIR for a private project:

- a. When the Planning and Development Department determines that an EIR can be prepared with its own staff, the applicant has the choice of EIR preparation either by a consulting firm or the Planning and Development Department staff. The option for staff-prepared EIRs is generally only available for analysis that is small in scope, having only one or two potentially significant impact areas to analyze.
- b. When a consulting firm is to prepare the document, the Planning and Development Department staff chooses three firms to receive the Request for Proposals (RFP) from a list of qualified firms. If the applicant believes the staff's choice of firms was too narrow,

the applicant may add additional firms to receive the RFP from the list of qualified firms on open services contract with the County or not.

c. After EIR proposals are received, the Planning and Development Department staff disqualifies any unacceptable proposals. These could include proposals which staff finds non-responsive, or proposals for which staff concludes that substantial revision of the EIR would likely be needed prior to release of the public draft, or proposals from firms that would have a conflict of interest, etc. At least two proposals would be available from which the applicant could select. The applicant makes the final selection of EIR firm for recommendation to the County contracting authority (Director of the Planning and Development Department or Board of Supervisors), and the County holds and manages the contract with the EIR consultant.

In the case of a joint agency document process involving a County agreement with another CEQA agency or National Environmental Policy Act (NEPA) agency, consultant selection shall occur in accordance with the process identified by the joint agency agreement, and may involve consultant selection by the joint powers agency rather than the applicant.

In accordance with State CEQA Guidelines Section 15084, before using a draft prepared by another party, the lead department must first subject the draft to the department's own scrutiny. The draft EIR which is issued for public review must reflect the independent judgment of the lead department. The lead department is responsible for the adequacy and objectivity of the draft EIR.

2. Public availability of Administrative Draft EIRs for private projects. In order to provide for public tracking of analysis leading to the draft EIR, administrative draft EIRs for private projects shall be made available to the public according to the following procedures, except as noted below. Notice of public availability of an administrative draft EIR shall be provided as part of the notice for the public review draft EIR. Upon request by an applicant or member of the public, an administrative draft EIR for a private project shall be made available for inspection together with written comments from the lead department staff to the EIR-preparer regarding changes to the document, as of the start of the public review period for the draft EIR. The Public Records Act provisions for confidentiality are waived in order to authorize public inspection of administrative draft EIRs and written staff directions to consultants on administrative draft EIRs for private projects.

In a case where an applicant requests and receives a copy of the administrative draft EIR prior to circulation of a draft EIR (as provided in Section D.6 of Article IV) the administrative draft EIR shall also be made available to any other member of the public upon request. Additionally, any communications between the consultant, county staff and the applicant that result in a change in the administrative draft shall be memorialized in writing and be made part of the public record.

In the case of a joint agency document process involving a County agreement with another CEQA agency or National Environmental Policy Act (NEPA) agency to maintain confidentiality of administrative draft materials, the Public Records Act exemption from disclosure is maintained, and the administrative draft EIR shall not be made available to the applicant or public.

D. Mitigation Measures. Mitigation measures conceived during the initial evaluation of projects must be refined in EIR's to ensure their feasibility, specificity and enforceability. Mitigations shall be explicitly written in language which can be directly applied to conditions of approval by the

decisionmakers. Where appropriate and feasible, each mitigation measure shall contain the mitigating action, any related activities which must occur to ensure the action takes place (deposit fees, revise plans), any required applicant reports and the timing for each required action. The development of mitigation measures shall be coordinated with appropriate County departments. Where a County department would be responsible for implementing a mitigation measure, the environmental document shall identify a mechanism to link the timing and funding of the mitigation to the approval of the project. Where mitigation measures require action by agencies other than the County, the agency should be identified. Determination of the feasibility of mitigation measures shall take into account economic, legal, social, and technological considerations, including considerations of employment opportunities for highly trained workers. Mitigation measures must be made fully enforceable through permit conditions or other agreements.

E. Mitigation Monitoring and Reporting Program (MMRP). Each mitigation measure will have a corresponding monitoring component which will describe at a minimum, the party responsible for monitoring and when the monitoring shall occur. The monitoring component will also describe specific monitoring actions if they are not evident from reading the mitigation measure. For very large and/or complex projects where project implementation will occur over multiple sites or will include multiple activities for which monitoring is required, an Environmental Quality Assurance Plan (EQAP) will be prepared to supplement the MMRP. This determination will be made by the Planning and Development Department. The EQAP will be prepared by the applicant and approved by the County prior to land use clearance and will list all mitigation measures according to the timing of each measure, list all monitoring components and provide for coordinated monitoring by all field monitors during project implementation. The EQAP will also contain chain of authority and communication between construction personnel, monitoring personnel (hired by the County) and the Planning and Development Department project coordinator. The lead department will be responsible for ensuring that monitoring and reporting is carried out as indicated after the project is approved.

F. Analysis of Project Alternatives.

- 1. All EIRs shall include a discussion of project alternatives. Development of project alternatives should focus on options which have the potential to reduce significant environmental impacts and attain project objectives. While consideration of a broad spectrum of alternatives is encouraged early in the process, the range of options should be narrowed to those which are consistent with the following principles:
 - a. Consistency with the general plan (when a general plan amendment is not requested).
 - b. Reduction of significant adverse environmental effects.
 - c. Compatibility with neighboring uses.
 - d. Feasibility.

Determination of the feasibility of alternatives shall take into account economic, legal, social, and technological considerations, including considerations of employment opportunities for highly trained workers. The EIR should describe the rationale for selection of alternatives and identify alternatives considered but rejected as infeasible.

2. Expanded alternatives/alternative sites analysis. An expanded discussion of project alternatives shall be required in EIR's when it is demonstrated that one or more significant and unavoidable (Class I) environmental impacts would result, and when feasible project alternatives may effectively reduce Class I environmental impacts to acceptable levels. The alternatives analyzed should include a reduced or modified scope of operations at the same

site, and alternative sites. An expanded discussion of project alternatives focusing on alternative sites shall also be required for EIR's dealing with specialized facilities which inherently raise issues of potential land use incompatibility, including such uses as landfills, oil and gas facilities, camps, schools, and stockyards.

Factors to be considered in the analysis of alternative sites should include, but are not limited to, the following:

- a. Whether the alternative site feasibly attains the basic objectives of the project. The fact that an applicant may own a particular site, and no other feasible site in the general area, will not by itself preclude consideration of other sites, although the ability of the applicant to reasonably acquire, control or otherwise have access to an alternative site may be considered as a factor.
- b. Whether the project requires necessary changes in existing land use designations;
- c. Whether the project is of major size or intensity with resulting significant environmental impacts;
- d. Whether the proposed site contains areas of special environmental sensitivity;
- e. Whether the range of alternative sites is reasonably limited, i.e. by parcel size or special location requirements;
- f. Whether the proposed project at the proposed site is incompatible with surrounding uses;
- g. Whether similar development is simultaneously proposed or likely to be proposed at an alternative site in the reasonably foreseeable future;
- h. Whether it is unlikely that more than one such project will be approved, based on the tolerance of the area for the likely environmental effects.
- i. Whether alternative sites are feasible, in consideration of site suitability, economic viability, availability of infrastructure, consistency with general plans and other plans, regulatory constraints, and jurisdictional boundaries.

G. Cumulative Impact Evaluation.

- 1. **Cumulative project list.** The potential effects of development not included in baseline data will be analyzed for cumulative impact evaluation if they result from projects which are:
 - **a. Partially occupied or under construction.** Those projects which, though only partially occupied or under construction, should be included to the extent that their impacts are not yet fully incorporated into the environmental setting against which the project's impacts will be assessed.
 - **b. Approved.** Those projects which have received final discretionary approval from the decisionmakers.
 - **c. Under review.** Those projects which have been deemed "complete" for processing and are currently undergoing review by lead agencies.
 - **d. Proposed projects.** Those projects which have submitted pre-application assessment with a lead agency, or have been discussed publicly by an applicant. Unless these projects' pre-application data contain a high degree of specificity and a probable time frame, they should not be included on the full cumulative list, but may be included as advisory information on the scope of possible development in the area.

- 2. Public projects. Public projects which are partially occupied, under construction, approved, under review, or proposed, should be treated in the same manner as private projects. Projects which are included on a capital improvement program (CIP), or are reasonably expected to be funded and scheduled should also be included on a cumulative list. However, projects which are listed as needed on a capital improvement program but are not funded or scheduled should be included for information only, and not included in the cumulative impact assessment.
- **3. Project classification.** The separation of projects into the different categories (i.e., projects under review, approved, or under construction) provides information as to their relative timing and the potential phasing of mitigation measures needed to offset corresponding cumulative impacts. The most accurate estimation of cumulative project timing is essential to provide decisionmakers with accurate criteria to require project phasing or delay. Of particular importance is the provision of a separate assessment of impacts associated with approved projects only. While not required under CEQA, a separate analysis of the project's impacts with those of approved projects provides an estimate of what potential impacts would be under "a future environmental setting scenario." While the approved projects must also be included within the full cumulative scenario, the approved project scenario provides a realistic estimate of future conditions under which the project's impacts would occur, if no other approvals were to occur.
- **4. Significance criteria.** Unless otherwise specified in the County's adopted Thresholds of Significance, a project's potential contribution to cumulative impacts is assessed utilizing the same significance criteria as those for project specific impacts.
- 5. Geographic scale of cumulative impact assessment. Various methods are utilized for assessing a project's contribution to cumulative impacts, dependent upon the nature of the impact and its areal extent. In general, the Planning and Development Department uses a specific cumulative project list accompanied by a map depicting these projects' locations in relation to the resource to be impacted. The list should be extensive enough to contain all projects which could have a substantial effect upon the resource to be significantly impacted by the project.

Examples of the areal extent of such lists include the following:

- a. All projects withdrawing water from a particular groundwater basin.
- b. Projects sending a substantial number of trips to an intersection which would be significantly impacted by the subject project.
- c. Projects within the same viewshed or along the same scenic corridor.
- d. Projects resulting in the subdivision or development of productive agricultural land in the same producing area or watershed.

Projects which have the potential to cause impacts at a regional scale may create the need for a community or countywide assessment of cumulative impacts. While detailed cumulative project lists and maps are the preferred method for assessing cumulative impacts, due to the scope and nature of some impacts, other methods such as modeling or provision of background data may be more appropriate. In cases where the extent of impacts is extensive and difficult to define, such as air quality, provision of a detailed cumulative list is normally beyond the scope of an individual document. To evaluate cumulative air quality impacts of projects emitting regional pollutants, the contribution of project emissions to regional levels should be compared with existing programs and plans, including the Air Quality Attainment Plan. To evaluate the cumulative air quality impacts of localized pollutants, the contribution of

the project emissions in conjunction with existing and proposed projects in the local area should be considered.

For projects in communities with adopted Community Plans, the certified Community Plan EIR provides cumulative impact analysis of build-out of the community, and Community Plan policies provide some required mitigation measures for identified cumulative impacts.

6. **Impact identification.** The cumulative impact discussion within an EIR should identify whether the project's contribution to a particular impact is significant. As previously stated, each County threshold accounts for cumulative impacts either through specific standards or through incorporation of cumulative background data within its standard.

The decision to prepare a ND implies that a project's impacts are insignificant on both a project specific and cumulative level. However, where a cumulative impact is identified and the ND contains recommended mitigation measures to reduce the project's contribution to cumulative effects, information must be provided to substantiate the recommended mitigations.

H. Classification of Impacts in EIRS.

- 1. The methodology of impact analysis and criteria for determining whether or not impacts are significant shall be explained in all EIRs.
- 2. The County makes use of a Summary Impact Table in all EIRs to assist decisionmakers with adoption of Statements of Overriding Considerations and Findings. Such tables are organized substantially as follows:
 - **a.** Class I Impacts. Significant unavoidable adverse impacts for which the decisionmaker must adopt a statement of Overriding Consideration.
 - **b. Class II Impacts.** Significant environmental impacts that can be feasibly mitigated or avoided for which the decisionmaker must adopt Findings and recommended mitigation measures.
 - **c. Class III Impacts.** Adverse impacts found not to be significant for which the decisionmaker does not have to adopt Findings under CEQA.¹
 - d. Class IV Impacts. Impacts beneficial to the environment.

I. Review Period.

- 1. When the lead department proposes to offer the draft EIR for public review, it will publish a Notice of Completion Draft EIR and indicate the public comment period.
- 2. Notice will be given by posting on the Planning and Development Department public bulletin board, by publishing in a newspaper of general circulation in the project area, and by mailings to properties within 1,000 feet and contiguous occupants and to interested community groups. In cases where the 1,000 foot criterion would require mailings to more than 200 individual properties, another means of public notification shall be allowed (posting of site, display ads in a newspaper of general circulation, etc.).
- 3. The notice will include: a brief description of the proposed project and location; any unavoidable significant (Class I) and potentially significant but mitigable (Class II) impacts anticipated as a result of the project; the identity of the preparer of the draft EIR and the

¹ Under the County's Local Coastal Plan (LCP), and for projects requiring approval of conditional use permits or development plans, additional findings are required that all adverse impacts are mitigated to the maximum extent feasible.

availability of the administrative draft document; the length of the review period (30 days unless the review includes the State Clearinghouse, in which case it will be 45 days) in which comments will be received by the lead department; the date, time and place of the public comment hearing on the EIR, and the places where copies of the EIR and documents referenced in the EIR are available for public review.

- 4. The Hearing Officer shall hold a public hearing on all draft EIRs. The hearing shall be held within 45 days of the publication of the Notice of Completion. At the hearing, comments by interested agencies, the public and the applicant are solicited on the accuracy and adequacy of the draft EIR. These comments may include critiques of any part of the document including impact summary tables, forecasts of environmental effects, proposed mitigation measures and project alternatives. Comments on the merit of the project rather than its potential environmental effects and their mitigation are not appropriate, and should be reserved for the decision-making hearing on the project. The preparer of the draft may or may not provide initial responses to comments at the hearing. Formal written responses to comments shall be provided in the Final EIR.
- **J. Findings and Recommendations for Approval.** If, after the comment period and public hearing, the Hearing Officer determines that the EIR is adequate, the EIR shall be finalized by the lead department. All minor revisions, comments and responses identified during the review period and public hearing shall be incorporated into the document and transmitted to the decisionmaker with recommended findings that the final EIR be certified. For projects subject to Public Resources Code Section 21081(a), the project description and conditions which include mitigation measures with their corresponding monitoring requirements are the monitoring program for the project.
- **K.** Determination by Hearing Officer that EIR is Inadequate. If, after review, the Hearing Officer determines that the draft EIR is inadequate and requires major revisions, the document will be returned to the lead department for revision. Recirculation of the document for public review may be required (see Section M below). In this case, a new Notice of Completion shall be prepared as provided above.
- L. Determination by Decisionmaker that EIR is Inadequate. If, upon review of the prepared final EIR and the project, the decisionmaker determines that the EIR is inadequate, the EIR shall be referred to the lead department for appropriate revisions unless the decisionmaker denies the project. Consideration of the project shall be deferred until the EIR is certified by the decisionmaker(s) consistent with mandatory timelines for action.
- **M.** Criteria for Recirculation of EIR. Where a draft EIR is determined to be inadequate, it shall be recirculated for public review prior to certification where any one of the following occurs:
 - 1. The draft previously circulated did not adequately discuss substantial adverse environmental impacts, feasible alternatives, or mitigation measures.
 - 2. The information contained in the previously circulated draft was so inaccurate, incomplete, biased or misleading so as to have prevented meaningful public review.
 - 3. The draft did not reflect the independent judgment of the lead department.
 - 4. Circumstances requiring a Supplement under CEQA have arisen, namely that significant new information is added to the EIR after public review such as identification of a new significant impact, a substantial increase in the severity of an impact, or identification of a feasible mitigation measure or alternative that would lessen project impacts but the project proponent declines to adopt it.

- **N.** Changes by Decisionmaker. If the decision making body disagrees with the conclusions set forth in the EIR regarding the significance of environmental impacts or feasibility of mitigation measures and alternatives, the decision making body shall correct them and set forth its reasons for the correction.
- **O. CEQA Findings of Overriding Considerations.** In order to approve a project with identified significant unavoidable (Class I) environmental impacts decisionmakers must make findings for each significant effect based on substantial evidence that specific overriding economic, legal, social, technological or other benefits of the project outweigh the significant environmental effects.
- **P.** Notice of Determination. Within five days of the approval of a public or private project for which a final EIR has been certified, the lead department shall file a Notice of Determination with the Clerk of the Board of Supervisors, and with the State Clearinghouse only if a discretionary permit is required from a State agency. The notice shall be posted in the office of the Clerk within 24 hours of its receipt, and shall remain posted for a period of 30 days after which it will be returned to the lead department.

ARTICLE VIII - TIME LIMITS

- A. **Timely compliance.** The County shall carry out its responsibilities for preparing and reviewing environmental documents as expeditiously as possible to avoid unnecessary delays in the processing of applications for permits and other instruments for use.
 - 1. Negative Declarations. NDs must be completed and adopted within 180 days from the date the application was deemed complete for processing by the lead agency.
 - 2. Environmental Impact Reports. EIRs must be completed and certified within 365 days from the date the Lead Agency found the application complete for processing.
 - **3. Time limits for public projects.** Only private projects are subject to time limits described in the Permit Streamlining Act; County policy applies such timelines to public projects.
 - **4. Provisions for time extensions.** In the event that compelling circumstances justify additional time and the project applicant consents, a reasonable extension of the time periods specified in Sections 1through 3 above may be applied by the Lead Department.
 - 5. Consultant contracts. If a CEQA document is prepared under contract to the lead department, the contract shall be executed within 45 days from the date on which a notice of preparation is sent out by the lead department.

ARTICLE IX - RESERVED

Maintenance Activities by the County

ARTICLE X - FEES

Fees shall be charged in accordance with Fee Resolutions as adopted and amended by the Board of Supervisors. In the event the applicant fails or refuses to deposit such fees as are determined to be required, the Director may recommend to the decisionmaker that processing be suspended or the project be denied without prejudice pursuant to state CEQA Guideline Section 15109. In such a case, it shall be presumed that without preparation of adequate environmental documents required findings for project approval cannot be made.

ARTICLE XI - SEVERABILITY

If any portion of these Guidelines is held unconstitutional, invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions.

ARTICLE XII - FORMS

The Planning and Development Department shall maintain the following forms for use in implementation of these Guidelines:

- 1. Application
- 2. Notice of Exemption
- 3. Initial Study/Environmental Assessment
- 4. Notice of Proposed Negative Declaration and Public Hearing
- 5. Notice of Preparation
- 6. Notice of Completion
- 7. Notice of Determination
- 8. Statement of Consideration of EIR by Decisionmaker
- 9. Statement of Overriding Considerations
- 10. Checklist for Determination of Application Completeness
- 11. Information Requirements for Application Submittals
- 12. Request for Consultation/ Appeal (Initial Study)

APPENDIX A

List of Ministerial Permits Approved by County Department and Officers

The following types of permits shall be presumed to be ministerial:

- 1. Issuance of building permits and related permits (e.g. demolition, plumbing, electrical) Planning and Development Department.
- 2. Approval and installation of individual utility source connections and disconnections Planning and Development Department.
- 3. Demolition permits Planning and Development Department.
- 4. Certificates of Occupancy Planning and Development Department.
- 5. Grading permits without conditions other than set out in County Code Planning and Development Department.
- 6. Non-schedule refuse collectors' licenses, permits to use County dumps Public Works Department.
- 7. Road excavation and encroachment permit Public Works Department.
- 8. Overweight and oversize vehicle permits Public Works Department.
- 9. Certificate for parcel map and final subdivision map Planning and Development Department.
- 10. Temporary road closures for events (event permits) Public Works Department.
- 11. Filming permits Planning and Development Department.
- 12. Certificates of Compliance Public Works Department, Surveyor's Office.
- 13. Lot combinations (voluntary merger) Public Works Department, Surveyor's Office.
- 14. Reversion to acreage Public Works Department Surveyor's Office.
- 15. Technical modification to recorded maps Planning and Development Department.
- 16. Records of survey Public Works Department.
- 17. Welding permits Fire Department.
- 18. Issuance of Fire Department permits necessary for the safeguarding of life and property Fire Department.
- 19. Bicycle licenses Fire Department.
- 20. Camping permits, boating permits on Lake Cachuma Parks Department.
- 21. Group picnic permits and park use permits Parks Department.
- 22. Park festival permits Parks Department.
- 23. Food facility permit Environmental Health Services.
- 24. Small water system permit Environmental Health Services.
- 25. Septic tank pumper registration permit Environmental Health Services.
- 26. Public and semi-public swimming pool permit Environmental Health Services.
- 27. Organized camp permit Environmental Health Services.
- 28. Water well construction, modification, inactivation & destruction permits Environmental Health

Services.

- 29. Individual Water system permit Environmental Health Services.
- 30. Shared water system permit Environmental Health Services.
- 31. Small public water system permit Environmental Health Services.
- 32. Massage technician permit Environmental Health Services.
- 33. Massage establishment permit Environmental Health Services.
- 34. Underground storage tanks permit (permits to operate, construct and abandon) Fire Department.
- 35. Hazardous waste generator permit Fire Department.
- 36. Infectious waste generator permit Environmental Health Services.
- 37. Solid waste facility permit Environmental Health Services.
- 38. Marriage licenses -County Clerk.
- 39. Issuance of business licenses Tax Collector.
- 40. Dog licenses Animal Control Officer.
- 41. Approval of final subdivision maps Board of Supervisors.
- 42. Land use permits except for "major projects" Planning and Development Department.
- 43. Elevation Certificate Flood Control District.
- 44. Creek encroachment permit Flood Control District.

APPENDIX B

Exemptions for which Notice is Required to be Filed with the County Clerk, Pursuant to These Guidelines

The State Guidelines provide that certain categories of projects are exempt from environmental review except in certain instances (i.e. unusually sensitive location or other circumstances. See Guidelines Section 15300.2). The County Guidelines in Article V provide that Notices of Exemption must be prepared, posted and filed after project approval for certain of these exempt projects. This Appendix lists categories of projects for which an exemption shall be filed:

- 1. 14 California Administrative Code Section15302. Replacement or Reconstruction.
- 2. 14 California Administrative Code Section15303. New Construction or Conversion of Small Structures.
- 3. 14 California Administrative Code Section15304. Minor Alterations to Land:
 - (a) Grading on land with slope of less than 10 percent;
 - (c) Filling of excavated land;
 - (d) Alterations which improve habitat for fish or wildlife;
 - (g) Maintenance dredging;
 - (h) Bicycle lanes on existing rights-of-way, (only).
- 4. 14 California Administrative Code Section15305. Minor Alterations in Land Use Limitations:
 - (a) Minor lot line adjustments (only).
- 5. 14 California Administrative Code Section 15307. Actions by Regulatory Agencies for Protection of Natural Resources.
- 6. 14 California Administrative Code Section 15310. Loans.
- 7. 14 California Administrative Code Section 15311. Accessory Structures:
 - (b) Small parking lots (only).
- 8. 14 California Administrative Code Section 15312. Surplus Government Property Sales.
- 9. 14 California Administrative Code Section 15313. Acquisition of Lands for Wildlife Conservation Purposes.
- 10. 14 California Administrative Code Section15314. Minor Additions to Schools.
- 11. 14 California Administrative Code Section15315. Minor Land Divisions.
- 12. 14 California Administrative Code Section15316. Transfer of Ownership of Land in Order to Create Parks.
- 13. 14 California Administrative Code Section15318. Designation of Wilderness Areas.
- 14. 14 California Administrative Code Section15319. Annexations of Existing Facilities and Lots for Exempt Facilities:
 - (b) Annexations small parcels for facilities exempt by §15303 (only).
- 15. 14 California Administrative Code Section15327. Leasing New Facilities.

- 16. 14 California Administrative Code Section15328. Small Hydroelectric Projects at Existing Facilities.
- 17. 14 California Administrative Code Section15329. Co-generation Projects at Existing Facilities.
- 18. Public Resources Code Section21080.14. Specified construction on conversion of up to 45 units of housing affordable to lower income households in urbanized areas.
- 19. Public Resources Code Section 20180.10. Specified construction or conversion of low income agricultural employee housing.

APPENDIX C

Reserved



COUNTY OF SANTA BARBARA

Planning and Development ·

Environmental Thresholds and Guidelines Manual

Revised January 1995 Revised October 2001 Revised October 2002 Replacement Pages July 2003 Interim Revision to Air Quality Subsection October 2006 Revised January 2008 Revised September 2008 Revised July 2015

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123 East Anapamu Street Santa Barbara, California 93101 805.568.2000 624 West Foster Road, Suite C Santa Maria, California 93455 805.934.6250 NOTE:

This document is updated on a periodic basis in order to include amendments adopted by the Board of Supervisors. Recently adopted amendments may not yet be incorporated into this copy. Please check with the Planning and Development Department Zoning Information Counter located at either 123 East Anapamu Street, Santa Barbara, or 624 West Foster Road, Suite C, Santa Maria, for information on amendments approved subsequent to the date shown on the front of this publication.

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1. INTRODUCTION

This manual has been prepared to assist the public, the applicant, environmental consulting firms, and County decision makers in understanding the use and application of various environmental impact thresholds as they relate to project proposals.

The Emergence of the Environmental Impact Assessment Process in California

At the height of the environmental movement, the California State legislature passed the Environmental Quality Act of 1970 (CEQA)¹. The California law, closely patterned after the National Environmental Policy Act (NEPA), included a requirement that assessments be made of the environmental impact of all proposed, publicly sponsored projects. These assessments were to take the form of "environmental impact reports" (EIR) that were nearly identical to the "environmental impact statements" (EIS) of NEPA. Like the EIS, the EIR was intended to be a source of data which would better inform the decision maker of the implications of approving or disapproving a publicly undertaken or funded project.

The EIR, which environmentalists considered a rather limited document in 1970, became one of their principal tools when in 1972, the State Supreme Court handed down its "Friends of Mammoth" decision.² The court held that an EIR is required before state or local government may grant a permit authorizing the construction of privately undertaken projects which may have a significant effect on the environment.

Subsequently, the State Secretary for Resources devised procedures for the writing and processing of EIRs. These County Guidelines are available for purchase or review at the Planning and Development Department located at 123 East Anapamu Street, Santa Barbara, 93101, or 624 Foster Road, Suite C, Santa Maria, 93455.

Additionally, the State Guidelines set out what decisions and tasks have to be performed by local government in the processing of EIRs. First of all, local governments are charged with the duty of determining if a proposed project has the potential to significantly affect the environment. In typically legalistic fashion, the guidelines define "significant effect" as "a substantial adverse impact on the environment", and "environment" as " the physical conditions which exist in the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, objects of historical or aesthetic significance." (CEQA Section 15382)

Secondly, the local governments must determine if the proposed activity is a "project" as defined by the state. The guidelines define "project" as: the whole of an action, resulting in physical impact on the environment, directly or ultimately, that is any of the following:

- 1. An activity directly undertaken by any public agency including but not limited to public works construction and related activities, clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption of local General Plans or elements thereof;
- 2. An activity undertaken by a person which is supported in whole or in part through public agency contracts, grants, subsidies, loans, or other forms of assistance for one or more public agencies;
- 3. An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies. (CEQA Section15378)

The local governments must also determine if the proposed project calls for a discretionary decision or merely ministerial approval or non-approval. The guidelines define a discretionary project as one

¹ California Public Resources Code §§21000-21151.

 ² Friends of Mammoth vs. Board of Supervisors of Mono County, 8 Cal. 3d 1, 500 P.2d 1360, 104 Ca. Rptr. 16 (1972), modified, 8 Cal. 3d 247, 502 P.2d 1049, 104 Cal. Rptr. 761 (1972)

"which requires the exercise of judgment, deliberation, or decision on the part of the public agency or body in the process of approving or disapproving a particular activity, as distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations.

Determining whether or not a proposed project is "categorically exempt" from CEQA is also a function of the local governments. The state has listed a number of project types to which CEQA does not apply. In general, these "categorically exempt" projects include: construction or replacement of single structures in environmentally non-crucial areas, minor alterations to the land, and governmental regulatory action intended to manage resources.

Determining whether or not a project will have a "significant effect" on the environment is an additional decision to be made by local government. This is the first important decision in that it involves the discretion of the agency. A positive finding commits the agency to request that the project description (i.e. plans/proposals) be substantially revised to avoid significant impact, or failing in that, to have prepared an EIR. If no possible significant effect is foreseen, a "negative declaration" is prepared and the proposed project is processed as it would have been prior to CEQAs enactment.

It is the responsibility of the local government to commission the drafting of an EIR. Most local agencies do not have the staff to prepare an EIR, consequently the task is normally contracted to a consulting firm.

Lastly, local government is charged with the duty of reviewing and finalizing the EIR. The state guidelines require that all interested agencies have the opportunity to review and comment on the adequacy of a draft EIR. Before the agency can make a decision regarding the project at hand, the draft EIR has to be finalized by including and responding to, if necessary, the comments made during review. Once the EIR is finalized, it is considered an official document containing data for the decision maker.

Several state and federal court decisions have defined the terms: substantial, potentially adverse, adverse, and significant. The following narrative is a brief sketch of conclusions related to only one of the court cases which have a substantial bearing upon the Guidelines and Thresholds used in this manual to determine levels of significant impact.

"The important feature of this decision was that an EIR must be prepared whenever it can be fairly argued on the basis of <u>substantial evidence</u> that the project <u>may</u> have a significant environmental impact. Further, the interpretation of significant effect "which will afford the fullest possible protection to the environment within the reasonable scope of the statutory language is one which will impose a <u>low threshold</u> requirement for preparation of an EIR." (California Supreme Court decision in the case of <u>No Oil, Inc. vs. City of Los Angeles, 12/10/1974</u>)

As a consequence, many California cities and counties use guidelines or thresholds of significance to determine whether or not a project proposal may have a significant effect on the environment.

In terms of addressing potentially significant adverse environmental impacts, the following thresholds are used as guidelines to determine the level of significance for any given impact. The discussions which follow are designed to provide an understanding of how thresholds of significance are applied to projects under review by the Planning and Development Department. Should projects exceed these thresholds, an Environmental Impact Report may be warranted.

These environmental thresholds and guidelines are intended to supplement provisions in the State Guidelines for determination of significant environmental effect including Sections 15064, 15065, 15382 and Appendix G.

2. RULES FOR USE AND CRITERIA FOR AMENDMENT

The following passages from Santa Barbara County's *Guidelines for the Implementation of CEQA* describe how thresholds are to be used and amended.

Rules for Use

The Planning and Development Department's determination on whether or not a project may have a significant effect on the environment shall be based in part on thresholds of significance. These thresholds are measures of environmental change which are either quantitative, or as specific as possible for topics which are resistant to quantification such as aesthetics, cultural resources, and biology. A project which has no effect above threshold values individually or cumulatively shall be determined not to have any significant effect, and a negative declaration shall be prepared as provided by Article IV. Projects which have a potential effect above a threshold of significance will require an EIR.

Thresholds of significance are intended to supplement provisions in the State Guidelines for determination of significant environmental effect including Sections 15064, 15065, 15382 and Appendix G incorporated herein. The Planning and Development Department shall maintain detailed descriptions of current thresholds, which shall be publicly available, and which shall be revised periodically as necessary to maintain a standard which will afford the fullest possible protection to the environment, within the reasonable scope of CEQA, by imposing a low threshold requirement for the preparation of an EIR. For issue areas for which there are no thresholds, the guidance provided in CEQA Sections 15064, 15065, 15382 and Appendix G shall provide the basis for determining significance.

Criteria for Amendment

- A. General. Several threshold methodologies include a mechanism to enable them to respond automatically to environmental change. For example, changes in attainment status relative to air quality standards, changes in traffic levels on roads, and changes in the balance between water supplies and water use all affect how thresholds determine significance. However, other changes in environmental conditions or environmental information may require an alteration to the methodology used to evaluate significance.
- **B.** Change of Scientific Basis and Criteria. The underlying basis of threshold criteria may change with the discovery of new data or theories about relationships between environmental change and environmental quality. When data from scientific publications, reports, or conference proceedings, etc. suggest the need for such a change, the Planning and Development Department shall review these data and determine the justification for threshold revisions.
- C. Change in Environmental Circumstances. Environmental characteristics such as groundwater levels, traffic counts and sensitive biological habitat acreage are subject to constant change due to development trends. In order to ensure reasonable significance determinations, thresholds will be changed to reflect changes in environmental carrying capacity, resource scarcity and resource use. Information on such changes may come from resource managers (e.g. water purveyors, Air Pollution Control District), applicants, or the public.
- **D.** Workshops. The Planning and Development Department will hold public workshops on environmental thresholds at least once a year. The workshops have several purposes: to advise the public of the technical basis for thresholds and how they are used in the environmental review process; to propose revisions as necessary; to obtain public comment on each threshold and the need for revisions; and to gather relevant data from the public for inclusion in threshold data

bases. These workshops and threshold revisions will occur annually unless new information suggests that the purpose of a threshold can only be served by immediate revision. Any changes in thresholds made without opportunity for comment at a public workshop shall be posted in a public area of the Planning and Development Department for at least 30 days following adoption of the changes and shall be reviewed at the next workshop. A determination by the Planning and Development Department to revise a threshold may not be appealed.

E. Application of Threshold Revisions to Projects in the Review Process. When thresholds are revised due to new information, updated cumulative impact assessment, an improved methodology, or any other reason that provides a more accurate response to or reflection of existing conditions, the revised threshold shall be applied to projects in process up until an environmental document is found to be adequate and complete by the environmental hearing officer. Alternatively, if a threshold revision is simply a matter of applying a different standard, such a revision shall only be applied to any projects which are found to be complete after the threshold is revised.

3. RELATIONSHIP BETWEEN THRESHOLDS AND POLICIES

Environmental thresholds are often but not always based on policies and standards from the Comprehensive Plan. The agricultural resources guidelines, biological resources guidelines, and noise thresholds are examples of thresholds that are partially derived from and consistent with Comprehensive Plan policies. Although consistency between thresholds and policies is a general goal, there are situations in which strict consistency is not desirable. For example, due to concerns about the existing severity of these problems, policies relating to water and traffic are in many cases more restrictive than the thresholds for these issues. Lowering the thresholds to make them consistent with restrictive policies would greatly increase the burden of complying with CEQA on both applicants and the County. Instead, the County's thresholds for water and traffic impacts are designed to indicate cutoff points at which at a project's contribution to these cumulatively significant problems become substantial. Achieving planning goals through the use of strict policies is both justifiable and efficient and does not undermine the use of CEQA and environmental thresholds to move toward those same goals.

4. AGRICULTURAL RESOURCE GUIDELINES (Approved by the Board of Supervisors August 1993)

A. Introduction.

The State: California's 36,000,000 acres of agricultural land produce important economic and environmental benefits to the people of the state, nation, and world. Covering one-third of the state, agricultural land supports one of California's major industries and is responsible for the production of an important portion of the nation's food and fiber. The state is also a major exporter of produce to the rest of the world. A unique combination of geography, climate and soils enables California agriculture to produce many crops that are produced nowhere else in the United States.

The state's agricultural land also plays a critical environmental role. Farmland is an important filter for rain and snowfall runoff, allowing groundwater basins to recharge themselves. Farms and ranches are wildlife habitats for many common game and endangered species. Agricultural land provides valuable open space, giving visual relief for urban dwellers, and protecting the rural way of life important to farmers, ranchers, and small-town residents. Because of these great public benefits, the unnecessary and/or premature conversion of agricultural lands to urban uses should be discouraged.

Achieving the goal of agricultural land conservation requires wise and efficient land use, and a strong commitment to that goal by local officials. A California appeals court in <u>Cleary vs. County of Stanislaus</u> (1981) 118 Section App. 3d 348, has indicated that the conversion of agricultural land to nonagricultural uses may in itself be considered a significant environmental impact. To assure that the impacts of agricultural land conversion are considered in project decisions, environmental documents should contain information about the impacts of projects on agricultural land. Government officials can make better decisions affecting agricultural land when they have complete data about the land and its relationship to the agricultural economy.

The County: Agriculture continues to be Santa Barbara County's major producing industry with a gross production value for 1991 of more than \$500 million. This is an increase of nearly two hundred million dollars from the 1981 total. Santa Barbara County's agricultural industry includes vegetable, field, fruit and nut, and seed crops, nursery products, livestock, poultry, and aviary products. (Santa Barbara County 1991 Agricultural Report)

The diversity of our agriculture continues to provide a strong economic base through its multiplier effect on our local economy. With thirty-seven different commodities exceeding a million dollars in value, our local agricultural diversity provides stability against the cyclic nature of weather, pests, and especially market fluctuations which currently are plaguing agriculture in other parts of the nation. (Op cit)

Agricultural preservation in the County has been extremely successful to date in placing lands adjacent to urban areas, as well as more remote lands, under Williamson Act agreement which provides for taxation according to agricultural rather than market value of the land.

Qualifications for lands to be designated as agricultural preserves are found in "Criteria for Agricultural Preserves", adopted by the Santa Barbara County Board of Supervisors. The land must either be in a Class I or II Soil Capability classification, as prescribed by the U.S. Soil Conservation Service, or qualify for an 80 to 100 rating in the Storie Index System to be designated prime land, in which case the minimum size of a preserve is 40 acres. Land also can qualify as prime if it fulfills one of the following: it supports livestock at a density of one animal per acre; is in orchard use that can return at least \$200 per acre; or is devoted to other agricultural production that generally would return \$200 per acre. Farm land not meeting these qualifications is classified as non-prime, and the minimum

size for an agricultural preserve is 100 acres. However, in certain instances, super prime land of at least 5 acres in a separate ownership may be combined with adjacent prime land to meet the 40 acre minimum requirements.

B. Determination of Significant Effect.

CEQA Section 15064 states that:

- "(b) The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data. An ironclad definition of significant effect is not possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area.
- (d) In evaluating the significance of the environmental effect of a project, the Lead Agency shall consider both primary or direct and secondary or indirect consequences.
 - (1) Primary consequences are immediately related to the project such as the dust, noise, and traffic of heavy equipment that would result from construction of a sewage treatment plant and possible odors from operation of the plant.
 - (2) Secondary consequences are related more to effects of the primary consequences than the project itself and may be several steps removed from the project in a chain of cause and effect. For example, the construction of a new sewage treatment plant may facilitate population growth in the service area due to the increase in sewage treatment capacity and may lead to an increase in air pollution."

CEQA Appendix G states that a project will normally have a significant impact on the environment if it will:

- 1. Conflict with adopted environmental plans and goals of the community where it is located.
- 2. Convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land.

C. Comprehensive Plan Policies and Goals.

The following agricultural goals and policies are taken from the County's Comprehensive Plan Land Use Element, the Environmental Resources Management Element (ERME), the Local Coastal Plan, the Agricultural Element, and adopted Community Plans.

Land Use Element

<u>Agriculture</u>: In the rural areas, cultivated agriculture shall be preserved and, where conditions allow, expansion and intensification should be supported. Lands with both prime and non-prime soil shall be reserved for agricultural uses.

<u>Carpinteria - Summerland Area Goal</u>: The agricultural economy and the semi-rural qualities of the area should be preserved. Every effort should be made to preserve fertile lands for agriculture.

Santa Ynez Valley Area Goal: Agriculture should be preserved and protected as one of the primary economic bases of the Valley.

<u>Goleta Area Goal</u>: Existing orchards and groves should be preserved, and expansion of agricultural land use, particularly orchards and grazing, should be encouraged.

<u>Lompoc Area Goal</u>: Prime agricultural lands should be preserved for agricultural use only. Preservation of lesser grades of presently producing or potential agricultural land should be actively

encouraged.

Environmental Resource Management Element (ERME)

The Santa Barbara County Comprehensive Plan Environmental Resources Management Element (ERME) states that existing croplands on prime soils should be preserved. For agricultural lands on less than prime soil, is should be preserved insofar as possible.

Under Category A, Urbanization should be prohibited in:

- Existing croplands with a high agricultural suitability rating (within study areas) or a Class I or II soil capability classification. Modification to permit urban uses may be made, within Urban areas, on parcels of 10 acres or less.
- Agricultural preserves subject to Williamson Act agreements.

Under Category B, Urbanization should be prohibited except in a relatively few instances in:

- Existing croplands with a moderate or low agricultural suitability rating (in urban areas) or a Class III or IV soil capability classification.
- Lands highly suitable for expansion of cultivated agriculture.

It is noted that agricultural preserves, although not subject to environmental constraints, are included in Category A. The reason is that in entering into Williamson Act agreements, the County has made a legal commitment that the land will remain in agricultural use for a minimum of ten years, subject to automatic annual renewal.

Agricultural Element

The Agricultural Element Goals and Policies can be found on pages 7 - 14 of the document. These goals and policies are briefly summarized below:

<u>Goal I</u> speaks to the preservation, encouragement, and enhancement of agriculture. This is accomplished through policies which discourage incompatible uses, promote an agriculturalist's freedom for determining methods of operation, encouraging land improvement programs, supporting the Williamson Act, recognizing certain nuisances are part of agricultural operations, protecting the availability of resources for agriculture, and encouraging sustainable agricultural practices on agricultural land.

<u>Goal II</u> calls for agricultural land to be protected from adverse urban influence. This is accomplished through policies which prevent flooding and silting from urbanization, protect agricultural property from being illegally violated, discourage expansion of urban spheres of influence, and discouraging conversion of highly productive agricultural lands.

<u>Goal III</u> calls for the preservation of remaining agricultural lands in cases where it is necessary to convert agricultural lands to other uses. This accomplished through policies which discourage expansion of urban development into active agricultural lands, and to promote and retain productive agricultural land within urban boundaries.

<u>Goal IV</u> recognizes that agriculture can enhance and protect natural resources, and therefore these operations should be encouraged to incorporate resource protection techniques. This is accomplished through policies which encourage range improvement and fire reduction programs, the use of agriculture on certain slopes to prevent erosion, and preventing grading and brush clearing on hillsides which would cause excessive erosion.

<u>Goal V</u> calls for the County to allow for areas and installations of uses supportive to agriculture. It accomplishes this through policies allowing the installation of commercial support uses on-farm, and

allowing areas for supportive agriculture services within a reasonable distance to the farm user.

Goal VI calls for making provisions to allow for effective access to agricultural areas. This includes a policy which encourages the County to design roads in agricultural areas with agricultural vehicles in mind.

Coastal Land Use Plan

Agricultural policies in the Coastal Land Use Plan (CLUP) are found on Pages 106 - 113 of that document, and are listed as Policies 8-1 through 8-10. Briefly, these policies speak to the following issues:

- Defining the criteria for assigning agricultural land use designations in rural areas.
- Defining the criteria for allowing conversion of agriculturally designated land not contiguous with an urban/rural boundary.
- Defining the criteria for allowing conversion of agriculturally designated land contiguous with an urban/rural boundary.
- Defining the finding which must be made for approving a land division of any land designated as Agriculture I or II.
- Setting the criteria and findings for environmental review of greenhouse projects of 20,000 or more square feet.
- Setting setback and maximum lot coverage requirements for greenhouses, hothouses, and accessory structures.
- Setting landscaping and screening requirements for greenhouses and/or accessory buildings.
- Setting the criteria for the protection of large, non-prime agricultural operations of 10,000 acres or more in the Gaviota Coast or North Coast planning areas or large, non-prime operations in the Channel Islands planning area, including the findings and conditions which must be made/required in order to approve any development/land division on such property.
- Setting the criteria for subdivision of legal parcels of non-prime agricultural land in excess of 2,000 acres which are designated as AG-II-320.

Goleta Community Plan

<u>Policy LUA-GV-1</u>: Land designated for agriculture within the urban boundary shall be preserved for agricultural use, unless the County makes findings that the land is no longer appropriate for agriculture or there is an overriding public need for conversion to other uses for which there is no other land available in the Goleta urban area.

<u>Policy LUA-GV-2</u>: New development adjacent to agriculturally zoned property shall include buffers to protect agricultural operations.

<u>Policy LUS-GV-4</u>: In consideration of conversion of any agricultural land within the urban boundary to urban uses, the County shall first consider smaller, more isolated parcels with greater urban/agricultural conflicts prior to larger blocks of agricultural land.

Summerland Community Plan

<u>Policy LUA-S-1</u>: Existing land designated for agriculture shall be preserved for agricultural use.

<u>Policy LUA-S-2</u>: New development adjacent to agricultural zoned property shall include buffers to protect the viability of agricultural operations adjacent to the community.

Montecito Community Plan

<u>Policy LUG-M-2.1</u>: Agricultural activities on residential parcel that are consistent with the provisions of the applicable residential zone district shall be supported and encouraged by the County.

D. Methodology in Determining Agricultural Suitability and Productivity

The County Initial Study form contains two questions pertaining to impacts on agricultural resources. The first is as follows:

"10.d. Will the proposal result in the conversion of prime agricultural land to non-agricultural use, impairment of agricultural land productivity (whether prime or non-prime), or conflict with agricultural preserve programs?"

The following weighting system is provided to perform a preliminary screening of a project's agricultural impacts during the initial study process. The initial study screening looks at the value of a site's agricultural suitability and productivity, to determine whether the project's impact on loss or impairment of agricultural resources would be a potentially significant impact. These are guidelines, to be used with flexibility in application to specific sites, taking into account specific circumstances and specific agricultural uses.

The weighted point system is utilized to assign relative values to particular characteristics of a site's agricultural productivity (e.g., soil type, water supply, etc.). Where the points from the following formula total 60 or more, the following types of projects will be considered to have a potentially significant impact:

- A division of land (including Parcel and Final Maps, etc.) which is currently considered viable but would result in parcels which would not be considered viable using the weighting system.
- A Development Plan, Conditional Use Permit, or other discretionary act which would result in the conversion from agricultural use of a parcel qualifying as viable using the weighting system.
- Discretionary projects which may result in substantial disruption of surrounding agricultural operations.

If a potentially significant impact is identified using these criteria, further more detailed, site-specific evaluation of agricultural impacts is completed in an EIR. This analysis should focus upon the factors and criteria, but not the points, in the weighting system of these guidelines, and any other relevant factors such as the history of agricultural use on the site, land use trends, etc. Final determination of the project's level of impact will be based on this analysis.

As a general guideline, an agricultural parcel of land should be considered to be viable if it is of sufficient size and capability to support an agricultural enterprise independent of any other parcel. To qualify as agriculturally viable, the area of land in question need only be of sufficient size and/or productive capability to be economically attractive to an agricultural lessee. This productivity standard should take into consideration the cultural practices and leasehold production units in the area, as well as soil type and water availability. For dry land farming and grazing operations the production or carrying capacity should be based upon normal rainfall years only, not periods of drought or heavy rainfall. It should be noted that the Santa Barbara County Cattlemen's Association has stated that an appropriate threshold for impacts to grazing land in the County is the displacement or division of land capable of sustaining between 25 to 30 animal units per year. This "threshold" utilizes a carrying capacity threshold similar to the weighting system below. Because of this, on grazing projects, detailed information of the number of animal units supportable on a particular parcel should also be considered in the project's environmental document.

The Agricultural Threshold is weighted toward physical environmental resources rather than economics. This emphasis is in keeping with CEQAs emphasis on physical environmental impacts and not social or economic impacts (State CEQA Guidelines Section 15131). Given high land values in the County and the subdivision and turnover of agricultural lands in some areas of the County, agricultural production on some lands may be economically marginal. Because of these factors, economics is considered primarily a planning issue and will not be addressed in environmental documents.

The following determination of agricultural land value is divided into nine components which are weighted according to their estimated resource value. These nine areas are:

Parcel size	Agricultural Suitability	Adjacent Land Uses
Soil Classification	Existing & Historic Land Use	Agricultural Preserve Potential
Water Availability	Comprehensive Plan Designation	Combined Farming Operations

1. **Parcel Size.** Large parcel size is, in general, an important indicator of potential agricultural suitability and productivity. However, because of the wide variability in the value of various agricultural products, suitable and productive parcel sizes also vary. Smaller parcels may be viable for high value crops, while significant acreage is necessary for viable grazing operations.

Project Parcel Size	Points Assigned
less than 5 acres	0 - 3
5 acres to less than 10 acres	4 - 6
10 acres to less than 40 acres	7 - 8
40 acres to less than 100 acres	9 - 10
100 acres to less than 500 acres	11 - 12
500 acres to less than 1000 acres	13 - 14
1000 acres or greater	15

2. Soil Classification. Points in this category are based primarily upon soil capability classes from the US Soil Conservation Services Soil Surveys.

The Soil Conservation Service has defined eight soil capability classes. Classes I and II are considered to be prime agricultural soils because they impose few limitations on agricultural production, and almost all crops can be grown successfully on these soils. More limited agricultural soils are grouped into Classes III and IV either because fewer crops can be grown on these soils, special conservation and production measures are required, or both these conditions exist. Classes V, VI, and VII include soils that are suited primarily for rangeland. (Class V is not found in the County.) Finally, soils and landforms that are unsuited for agricultural use are placed in Class VIII.

Where a variety of soil types are present on a site, weight should depend upon extent of useable prime/non-prime acreage. As appropriate, points may be assigned according to approximate percentages of site area containing various soil classifications.

Application of points within the ranges should be based on area and site-specific considerations. For grazing land, the SCS survey should be checked for opinion on soil suitability, and site vegetation should be inspected for forage value. Sites with soils which can support good forage should be assigned higher points within the range. Similarly, sites with soils classified as non-prime, but which can support specialized high cash crops (e.g., strawberries, avocados and specialty crops) should be assigned higher points within the

ranges.

In addition, initial studies should note whenever a site contains large, contiguous areas of prime soil, as this may constitute a separate significant impact.

Soil Classification	Points Assigned
Class I (prime)	14 - 15
Class II (prime)	11 - 13
Class III	8 - 10
Class IV	6 - 7
Class V	1 - 5
Class VI	1 - 5
Class VII	1 - 5
Class VIII	0

3. Water Availability. Availability of water of suitable quantity and quality is a critical component of agricultural suitability and productivity. Assignments of points within the ranges should take into account suitability of water resources for the type of agriculture practiced (i.e. crops or grazing).

Water Availability	Points Assigned
Land has an adequate water supply from on/offsite sources suitable for crops or grazing	12 - 15
Land has water, but may be marginal in quantity or quality suitable for crops or grazing	8 - 11
Land does not have developed water supply but an adequate supply is potentially available	3 - 7
Land does not have developed water and potential sources are of poor quality/quantity	0 - 2

4. Agricultural Suitability. Based upon the Conservation Element of the Comprehensive Plan (p. 195) County lands were assessed and mapped for agricultural suitability classifications based on a computer model which applied weighted factors, including soil classification, water availability, slope, and environmental constraints (flood hazard, local water resources, biological tolerance-intensity, and high groundwater).

Because the Conservation Element does not fully account for the effects of weather on crop suitability, the assessment of suitability should account for the approximate frequency and intensity of frosts and other climactic factors in applying points within the ranges. Parcels which are relatively frost free and may accommodate multiple croppings may be considered more suitable than those which can support only a single crop or limited crop types due to climactic factors.

Agricultural Suitability	Points Assigned
CROPS	
Highly suitable for irrigated grain, truck and field, orchard, or vineyard crops	8 - 10
Highly suitable for irrigated ornamentals, pasture, alfalfa, or dry farming	6 - 8
Moderately suitable for irrigated crops, orchard, ornamentals or dry farming	4 - 5
Low suitability for irrigated crops, orchard, ornamentals or dry farming	1 - 3
Unsuitable for crop production because of soil capabilities, environmental constraints, etc.	0
GRAZING	

Highly suitable for pasture or range	6 - 10
Moderately suitable for pasture or range	3 - 5
Low suitability for pasture or range	1 - 2
Unsuitable for pasture or range	0

5. Existing and Historic Land Use. Current or previous use of a property for agriculture can provide a practical measure of its suitability for agriculture, while urban development generally indicates a lack of suitability.

Existing and Historic Land Use	Points Assigned
In active agricultural production	5
In maintained range/pasture	5
Unmaintained, but productive within last ten years	3 - 5
Vacant land: fallow or never planted with range of suitabilities of agricultural potential	1 - 3
Substantial urban or agricultural industrial development onsite	0

6. Comprehensive Plan Designation. The County general plan land use maps designate property for long-range uses. Agricultural and open space designations generally provide an indicator of agricultural suitability. However, some older land use designations provide for smaller agricultural parcel sizes than are suitable or viable for sustaining agriculture today. Designations applied more recently by the County as part of community plan updates establish agricultural designations with more realistic parcel sizes. This should be taken into account in assessing suitability with this factor.

Comprehensive Plan Designation	Points Assigned
A - II	5
A-I	4
МА	3 - 4
Existing public/private open space or recreation	3 - 4
Proposed public/private open space or recreation	3 - 4
Open lands	3 - 4
Rural residential 40 - 100 acres	3 - 4
Residential Ranchette 5 - 20 acres	2
Residential less than 5 acres	0
Commercial, Industrial, Community Facility	0

7. Adjacent Land Uses (existing). Adjacent land uses can play an important role in the continuing suitability and productivity of a property for agricultural uses. In general, being surrounded by agricultural or open space is conducive to continued agricultural use, while encroachment of urban uses may be problematic. However, applying points within the ranges should be based on specific circumstances and uses, recognizing that some urban uses are more compatible with agricultural, (e.g., industrial, public facilities), while others conflict (e.g., residential). In addition, the existence or ability to create buffers between incompatible uses should be considered in assessing agricultural suitability with this factor. The adequacy of agricultural support in the vicinity may be another factor affecting agricultural suitability.

Adjacent Land Uses	Points Assigned
Surrounded by agricultural operations or open space in a region with adequate support uses	9 - 10
Surrounded by agricultural operations or open space in a region without adequate agricultural support uses	7 - 8
Partially surrounded by agriculture/open space with some urban uses adjacent, in a region with adequate agricultural support uses ^{1, 2}	7 - 8
Partially surrounded by agriculture/open space with some urban uses adjacent, in a region without adequate agricultural support uses ^{1, 2}	3 - 6
Immediately surrounded by urban uses, no buffers	0 - 2

Notes:

- 1. Various types of urban uses create more potential conflicts than others (e.g., residential could create more spraying problems than light industrial).
- 2. If project is well buffered, it may be agriculturally viable even with adjacent urban uses (e.g., stream, roadway).
- 8. Agricultural Preserve Potential. Qualifying for agricultural preserve designation under State Williamson Act agreement for prime and non-prime preserves entails meeting criteria for soil type, parcel size [individually or jointly with adjacent parcel(s)], and/or productivity/value on return. Agricultural preserves have constituted one of the most successful means of sustaining and preserving land in agriculture in California.

Agricultural Preserve Potential	Points Assigned
Can qualify for prime agricultural preserve by itself, or is in a preserve	5 - 7
Can qualify for non-prime agricultural preserve by itself	2 - 4
Can qualify for prime agricultural preserve with adjacent parcels	3 - 4
Can qualify for non-prime agricultural preserve with adjacent parcels	1 - 3
Cannot qualify	0

9. Combined Farming Operations¹. This section is designed to award bonus points to parcels which provide a component of a combined farming operation. The reason these points are assigned as a bonus is to address cumulative impacts and to recognize the importance of combined farming operations in Santa Barbara County.

Bonus Points for Combined Farming Operations	Points Assigned
Provides a significant component of a combined farming operation	5
Provides an important component of a combined farming operation	3
Provides a small component of a combined farming operation	1
No combined operation	0
Cannot qualify	0

E. Use of State Important Farmlands Map

A second question on agricultural land resources is included in the Initial Study under Land Use:

¹ Combined farming operation refers to more than one separate parcel managed as a single agricultural operation.

- "e. Will the proposal result in any effect [potentially significant adverse effect] upon any unique or other farmland of State or Local Importance?"
- The State Important Farmlands Map is used in answering this question. The map is also considered in applying points under the "Agricultural Suitability" category.

The map identifies lands in the following categories:

Prime Farmland - (Land with the best combination of physical and chemical features for the production of agricultural crops)

Farmland of Statewide Importance - (Land with a good combination of physical and chemical features for the production of agricultural crops)

Unique Farmland - (Land of lesser quality soils used for the production of the State's leading agricultural cash crops)

Farmland of Local Importance - (All dry land farming area and permanent pasture)

Grazing Land - (Land on which the existing vegetation is suited to the grazing of livestock)

Urban and Built-up Land - (Land occupied by structures or infrastructure to accommodate a building density of at least one unit to one and one-half acres, or approximately six structures to ten acres)

Other Land - (Land which does not meet the criteria of any other category)

5. AIR QUALITY THRESHOLDS (Approved by the Board of Supervisors April 19, 1994; Interim revisions to Section C.2.a and Section D of Chapter 5 approved by the Board of Supervisors October 3, 2006)

A. Introduction.

Air quality thresholds of significance are intended to help local agencies determine whether a discretionary project will individually or cumulatively have a significant effect on air quality. Santa Barbara County does not meet the state clean air standards for ozone and the state standard for fine particulate matter. Unmitigated air pollution emissions from the operation of some development projects could impair the region's progress in meeting the ozone and fine particulate matter standards.

These thresholds are designed to be used by environmental professionals preparing documents under the California Environmental Quality Act (CEQA) and the land use decision makers who rely on these documents. The goal is to identify projects which may have a significant affect on air quality in Santa Barbara County, so that measures to reduce the impact can be incorporated into the project.

A separate implementation document, <u>Air Quality Analysis for EIRs</u>, explaining how to apply the air quality thresholds of significance is available from the County Planning and Development Department.

- 1. **Resource Setting.** The federal government and the state of California have established ambient air quality standards to protect public health. California's standards are more protective of public health than the federal standards. State and federal standards have been established for the following pollutants, known as "criteria pollutants":
 - ozone (O₃)
 - carbon monoxide (CO)
 - nitrogen dioxide (NO₂)
 - sulfur dioxide (SO₂)
 - suspended particulate matter 10 microns or less in diameter (PM_{10})
 - lead

In addition, California standards have been established for:

- sulfates (SO₄)
- hydrogen sulfide (H₂S)
- vinyl chloride
- visibility reducing particles.

Table 1 shows the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for ozone, CO, H_2S , NO_2 , and PM_{10} . The table also shows whether the air in Santa Barbara County meets these standards (attainment) or violates them (non-attainment).

Sulfur dioxide, lead, sulfates, vinyl chloride, and visibility reducing particles are not generally a problem in this region and are not discussed further in this document. However, these and other pollutants are regulated by the APCD under their rules and regulations.

The entire County of Santa Barbara violates the federal and state standards for ozone and the state standard for PM_{10} (particulate matter with an aerodynamic diameter of less than 10 microns). Ozone air pollution is formed when reactive organic compounds (ROC) and nitrogen oxides (NO_x) react in the presence of sunlight. Ozone is a regional pollutant; ozone concentrations throughout the county do not always correspond with the location of sources of the ozone precursors ROC and NO_x. The major sources of ozone precursor emissions in Santa Barbara County are motor vehicles, the petroleum industry and solvent usage (paints,

consumer products and certain industrial processes). Sources of PM_{10} include mineral quarries, grading, demolition, agricultural tilling, road dust, and vehicle exhaust. Additional information on ozone, PM_{10} , and other pollutants of concern is provided in the 1991 Air Quality Attainment Plan.

Table 1 - Federal and State Ambient Air Quality Standards and Attainment Status of Selected Pollutants
in Santa Barbara County

Pollutant &	Standard		Attainment Status	
Averaging Time	Federal	State	Federal	State
Ozone			Non-attainment ^a	Non-attainment ^a
1 hour	0.12 ppm	0.09 ppm		
NO ₂				
Annual Average	0.053 ppm		Attainment	Attainment
1 hour		0.25 ppm		
CO				
1 hour	35 ppm	20 ppm	Attainment ^b	Attainment ^b
8 hours	9 ppm	9 ppm	Attainment	Attainment
H ₂ S				Attainmant ^c
1 hour		0.03 ppm		Attainment
PM ₁₀				
24 hours	150 ug/m ³	50 ug/m^3	Attainment	Non-attainment
AGM^d		30 ug/m^3		Non-attainment
AAM ^e	50 ug/m^3		Attainment	

Notes:

a. Non-attainment for entire County. Based on monitoring data as of 1993, the County has achieved the Federal ozone standard and the APCD will be applying to the USEPA for re-designation to an "attainment area".

b. "Hot spots" at congested intersections may violate standards during the peak hour.

c. Recently designated as attainment.

d. Annual Geometric Mean.

e. Annual Arithmetic Mean.

2. Air Pollution Control District Rules and Regulations. The Santa Barbara County Air Pollution Control District (APCD) is the agency responsible for regulating stationary sources (businesses and industry) of air pollution in Santa Barbara County. Examples of businesses that emit air pollution include gasoline stations, auto body shops, dry cleaners, oil and gas facilities, and water treatment plants. The APCD regulates these and other businesses by issuing permits and adopting rules, as required by state and federal air pollution control laws.

The air quality thresholds are intended to provide guidance in evaluating the significance of adverse long-term air quality impacts from all sources, including businesses not regulated by the APCD and motor vehicles. These thresholds of significance are unrelated to the permitting requirements of the APCD and cannot be used to determine whether a project will need an APCD permit. For information on whether a project will require an APCD permit, please contact the Permitting Section Supervisor of the APCD. For assistance in applying the thresholds in this manual please contact the Supervisor of the Interagency Review Section of the APCD. Both section supervisors may be reached at (805) 961-8800.

3. The California Environmental Quality Act (CEQA). The air quality impact analysis in an environmental document required under CEQA should include the elements described in

the APCD's <u>Scope and Content of Air Quality Sections in Environmental Documents</u>. This document is available upon request from the Interagency Review section of the APCD. Briefly, the air quality impact analysis in an Environmental Impact Report (EIR) should include:

- existing environmental setting of the area affected by the project, in terms of climate and current air quality;
- a discussion of all direct and indirect, long term and short term, air quality impacts of the proposed project and the classification of the significance of long-term impacts using established criteria;
- significant cumulative air quality impacts of the project;
- consistency of the project with local and regional plans, including the Air Quality Attainment Plan;
- mitigation measures to reduce or avoid potentially significant air quality impacts, including effectiveness of mitigation measures and discussion of residual impacts;
- feasible alternatives to the project which would reduce air quality impacts, including the air quality impacts of the "No Project" alternative and the environmentally superior alternative;
- potential growth inducing effects of the project on air quality;
- required air quality mitigation measures in the Mitigation Monitoring and Reporting Plan (MMRP).
- appendices containing all calculations and assumptions used in assessing long-term air quality impacts.

The air quality sections of Negative Declarations (NDs) should include a brief description of the air quality setting as it relates to project impacts, mitigation measures and inclusion of all air quality mitigation measures in the MMRP.

B. Determining Significance of Air Quality Impacts.

The two major criteria for determining if a project will have a potentially significant adverse air quality impact are listed below. These criteria are based on Appendix G of the State CEQA Guidelines. If the project meets either of the two listed criteria, the impacts must be discussed and analyzed in detail and appropriate mitigation measures must be identified. Section 3 provides the quantitative emission thresholds and screening tables to determine the significance of long-term (operational) impacts of the project. Sections 4 and 5 discuss cumulative impacts and consistency with the AQAP. Section 6 provides guidance on how other air quality considerations should be described.

A significant adverse air quality impact may occur when a project, individually or cumulatively, triggers any one of the following:

- interferes with progress toward the attainment of the ozone standard by releasing emissions which equal or exceed the established long-term quantitative thresholds for NO_x and ROC;
- equals or exceeds the state or federal ambient air quality standards for any criteria pollutant (as determined by modeling);

Cumulative air quality impacts and consistency with the policies and measures in the Air Quality Supplement of the Comprehensive Plan, other general plans, and the Air Quality Attainment Plan (AQAP) should be determined for all projects (i.e., whether the project exceeds the AQAP emission

projections or growth assumptions).

The following issues should be discussed only if they are applicable to the project.

- Emissions which may affect sensitive receptors (e.g. children, elderly or acutely ill);
- Toxic or hazardous air pollutants in amounts which may increase cancer risk for the affected population; or
- Odor or another air quality nuisance problem impacting a considerable number of people.

C. Quantitative Emission Thresholds.

CEQA requires that the significance of a project's direct and indirect emissions be determined for both short-term (construction) and long-term (operational) impacts. If a project's air quality impacts are found to be significant, then mitigation measures will be required. Numeric emission thresholds of significance have been established for the ozone precursors NO_x and ROC. Criteria for triggering modeling have been established for carbon monoxide (CO). In order to determine if a project exceeds these quantitative thresholds, the expected emissions of these pollutants from the project must be calculated. Because calculations can be time consuming, the APCD has developed screening tools to identify projects not likely to exceed the thresholds. These sizes of projects are based on simple calculations that show the relationship between the size of a project and potential emissions.

If a project is smaller in size than the project sizes listed, project-specific emission calculations are generally not required. If the project is equal to or larger than any size listed, is not similar to any of the categories listed, or is subject to an APCD permit, then emission calculations may be required. Emission calculations in the environmental document must provide the methodology used to estimate the emissions, including input data, assumptions, and all calculations. Emission calculation methods or modeling inputs using URBEMIS, EMFAC, CALINE or other air quality analysis tools must be fully documented so that the calculations or modeling can be duplicated and confirmed by the APCD. In order to be given emission reduction credits for mitigation measures which can be quantified, emission calculations must be approved by the APCD.

1. Short-term/Construction Emissions. Short-term air quality impacts generally occur during project construction. CEQA requires a discussion of short-term impacts of a project in the environmental document. The reasoning for considering short-term impacts insignificant is provided below.

No quantitative threshold has been established for short-term, construction related PM_{10} (which is 50 percent of total dust). However, this impact should be discussed in all environmental documents for projects involving ground disturbance. Dust control measures are required under the County of Santa Barbara's Grading Ordinance for most projects. Some projects have the potential for construction-related dust to cause a nuisance. Also, Santa Barbara County violates the state standard for PM_{10} . Therefore, dust mitigation measures are required for all <u>discretionary</u> construction activities. The standard dust mitigation measures are based on policies in the 1979 AQAP and are listed in a separate implementation document, <u>Air Quality Analysis for EIRs</u>, available from Planning and Development.

The short-term thresholds for NO_x and ROC emissions from construction equipment were not established. Emissions of NO_x from construction equipment in the County are estimated at 1000 tons per year of NO_x . When compared to the total NO_x emission inventory for the County of approximately 17,000 tons per year, construction emissions comprise approximately six percent of the 1990 county-wide emission inventory for NO_x (Santa Barbara County 1993 Rate-of Progress Plan). In general, this amount is considered insignificant.

- 2. Long-term/Operational Emission Thresholds. Long-term air quality impacts occur during project operation and include emissions from any equipment or process used in the project (e.g., residential water heaters, engines, boilers, operations using paints or solvents) and motor vehicle emissions associated with the project. These emissions must be summed in order to determine the significance of the project's long-term impact on air quality.
 - a. Ozone Precursors (NO_x and ROC). A proposed project will not have a significant air quality effect on the environment, if:

Operation of the project will:

- emit (from all project sources,¹ mobile and stationary), less than the daily trigger² for offsets set in the APCD New Source Review Rule, for any pollutant; and
- emit less than 25 pounds per day of oxides of nitrogen (NOx) or reactive organic compounds (ROC) from motor vehicle trips only; and
- not cause or contribute to a violation of any California or National Ambient Air Quality Standard (except ozone); and
- not exceed the APCD health risk public notification thresholds adopted by the APCD Board; and
- be consistent with the adopted federal and state Air Quality Plans.

Long-term project emissions primarily stem from motor vehicles associated with the land use project and stationary sources which may require permits from the APCD. Examples of stationary emission sources include: gas stations, auto body shops, dry cleaners, oil and gas production and processing facilities, and water treatment facilities. Some stationary sources such as residential heating and cooling equipment, wood burning stoves and fireplaces, or other individual appliances do not require permits from the APCD. Emissions from wood burning stoves may be significant for housing developments of 250 homes or more. Emissions from appliances may be significant for developments of about 1000 homes or for commercial projects. These emissions should be included in the operational phase emission evaluation. The APCD should be contacted for assistance with estimating direct emissions from stationary sources. Stationary source emissions must be added to transportation source emissions prior to applying the project-specific threshold of significance.

b. Carbon Monoxide (CO). A project will have a significant air quality impact if it causes, by adding to the existing background CO levels, a carbon monoxide "hot spot" where the California one-hour standard of 20 parts per million carbon monoxide is exceeded. This typically occurs at severely congested intersections.

Project Screening for CO Impacts:

¹ Portable equipment registered under the California Air Resources Board Statewide Portable Equipment Registration Program (PERP) shall not be included a proposed project's emission total. Emissions from these sources are in compliance with the ARB PERP program, and are exempt from APCD permits.

² Currently 55 pounds per day for NO_x and ROC, and 80 pounds per day for PM₁₀. Where projects exceed the offset trigger, the significant effect shall be considered mitigable to insignificance where APCD rules require offsets and net emissions after offsets are less than the trigger for offsets.

- 1) If a project contributes less than 800 peak hour trips, then CO modeling is <u>not</u> required.
- 2) Projects contributing more than 800 peak hour trips to an existing congested intersection at level of service (LOS) D or below, or will cause an intersection to reach LOS D or below, may be required to model for CO impacts. However, projects that will incorporate intersection modifications to ease traffic congestion, are not required to perform modeling to determine potential CO impacts.

CO concentrations at congested intersections can be estimated using air quality impact modeling such as CALINE4 or similar models. The CALINE4 model requires intersection-specific, operational data on vehicles per hour and hourly departure volumes obtained from a project-specific traffic study. The methodology is described in the <u>Air Quality Analysis for EIRs</u>, available from the Planning and Development Department.

D. Cumulative Impacts.

Cumulative air quality impacts are the effect of long-term emissions of the proposed project on the projected regional air quality or localized air pollution problems in the County. As discussed in the County's 1993 CEQA Guidelines (<u>Guidelines for the Implementation of the California Environmental</u> <u>Quality Act of 1970, as amended (revised January 2008)</u>, the cumulative contribution of project emissions to regional levels should be compared with existing programs and plans, including the AQAP. To evaluate the cumulative impacts of localized pollutants, the contribution of the project's emissions to background levels should be considered. Due to the county's non-attainment status for ozone and the regional nature of the pollutant, if a project's total emissions of the ozone precursors, NO_x or ROC, exceed the long-term threshold, then the project's cumulative impacts will be considered significant. For projects that do not have significant ozone precursor emissions or localized pollutant impacts, emissions have been taken into account in the AQAP growth projections and therefore, cumulative impacts may be considered to be insignificant.

E. Consistency with the AQAP and Other Planning Documents

Consistency with local and regional plans, such as the Air Quality Attainment Plan (AQAP), the Congestion Management Plan (CMP) and the Regional Transportation Plan (RTP) is required under CEQA. Under the Federal Clean Air Act, projects which receive federal funding or are subject to federal approval must show conformity with the State Implementation Plan, of which the AQAP is a part. Proposed projects subject to AQAP consistency determinations include a wide range of activities such as commercial, industrial, residential, and transportation projects. By definition, consistency with the AQAP, for the project subject to these guidelines, means that stationary and vehicle emissions associated with the project are accounted for in the AQAP's emissions growth assumptions. The AQAP generally relies on the land use and population projections provided in the Santa Barbara County Association of Governments' <u>Regional Growth Forecast</u>. The current criteria for determining consistency of these projects are explained in the implementation document, <u>Air Quality Analysis for EIRs</u>.

Consistency with the <u>Air Quality Supplement of the County's Land Use Element</u> must also be analyzed. The air quality policies in the Comprehensive Plan encourage mixed use development and alternative transportation modes. Specifically, project alternatives for proposed housing projects should consider land development design policies aimed at reducing air pollutant emissions, such as pedestrian-oriented and transit-oriented development (TOD). The TOD concept involves a mixed-use community within a typical 2,000-foot walking distance of a transit stop and core commercial area. The design, configuration and mix of uses emphasize a pedestrian-oriented environment and reinforce the use of alternative modes of transportation. TOD designs can help to reduce the number of auto trips and vehicle miles traveled by creating opportunities to walk and bike, while enhancing the area's quality of life and protecting affordable housing goals. The APCD may be contacted for reference material on these concepts. The APCD also encourages early consultation prior to the CEQA determination by the lead agency.

F. Other Air Quality Issues Which May Be Applicable.

The following issues should be discussed if they are applicable to the project.

- 1. Siting Criteria for Schools. CEQA Section 21151.8 requires school districts to consider the impacts of siting a new school within one-quarter mile of existing facilities that emit toxic or hazardous air pollutants. The Interagency Review Section of the APCD should be contacted in writing for assistance in identifying the locations of such facilities within the proximity of proposed school sites. The APCD should also be contacted for assistance with health risk assessment methodology, if necessary.
- 2. Toxic or Hazardous Air Pollutants. Some classifications of projects are more likely than others to emit toxic pollutants. Table 2 lists examples of commercial or industrial activities that may be associated with toxic air pollutants. This list is not all inclusive.

ACTIVITY	CHEMICAL	
Gas Stations	Benzene	
Dry Cleaning	Tetrachloroethylene (Perchloroethylene)	
Dry Cleaning	Carbon Tetrachloride	
Medical Sterilization	Ethylene Oxide	
Rubber/ Plastic Fabrication	Xylene	
Electronic and Parts Manufacturing	1,1,1 Trichloroethylene and other chlorinated	
Electronic and Faits Manufacturing	hydrocarbon solvents	
Landfills	Vinyl chloride, Benzene, etc.	

 TABLE 2 - Examples of Projects Which May Emit Toxic Air Pollutants

If any of these or other projects which emit toxic air pollutants, such as auto body shops, funeral homes etc., are involved, the APCD should be contacted for information. For most of these projects an APCD permit will be required. Health risk management decisions regarding the project will be addressed during the APCD permitting process to ensure that toxic emissions from the project are reduced to the maximum extent feasible.

3. Nuisance. Construction projects have a high probability of creating objectionable dust impacts. Also fugitive dust from construction is roughly 50 percent particulate matter that is 10 microns (or less) in diameter (PM_{10}). PM_{10} is a criteria pollutant with adverse health impacts. Sensitive receptors may be affected because of their location downwind. Dust mitigation measures are required under the County's Grading Ordinance for all projects involving earth moving activities over 50 cubic yards regardless of location.

If a project has the potential to cause an odor or other long-term air quality nuisance problem impacting a considerable number of people, the environmental document (Initial Study, ND or EIR) should describe the history of complaints from pre-existing conditions, the number of people affected and other relevant information so that the impacts can be mitigated where feasible. This information may be available in APCD files for certain areas. New projects that have a high probability of emitting objectionable odors or new developments that may be affected because of their location downwind should be identified

²²

early in the Initial Study. This may prevent nuisance problems after the project is built. Odor issues can sometimes be resolved by changing the location of the equipment or the process. Nuisance impacts need not be quantified at the initial study stage and may be analyzed qualitatively on a case by case basis.

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6. BIOLOGICAL RESOURCES (Approved by the Board of Supervisors September 27, 1994)

A. Introduction.

Federal and State laws and adopted County policies require the protection of natural habitats and associated wildlife and vegetation in recognition of their many values, including maintaining a healthy balance between urban built areas and supportive natural environment, nutrient recycling, providing for watershed protection, protection against erosion, cleansing of air and water, food chain support, scientific and medical research, education, recreation, aesthetics, and for the intrinsic value of wildlife and vegetation and their natural ecosystems.

Santa Barbara County has a wide diversity of habitat types, including chaparrals, oak woodlands, wetlands and beach dunes. Preservation of large contiguous habitat areas is the key to preserving biodiversity and avoiding additional species becoming rare, endangered or extinct.

Due to the complexities of ecosystems and the many factors involved in assessing the value of biological resources and project impacts, general qualitative guidelines rather than numerical thresholds are provided.

B. Legal Authority.

1. CEQA Guidance for Biological Impact Assessment. The following sections of the State CEQA Guidelines provide general direction for the evaluation of biological resource impacts as a part of the environmental review of proposed projects.

California Environmental Quality Act (CEQA) Section 15065 states that a Lead Agency shall find that a project may have a significant effect on the environment and thereby require an Environmental Impact Report (EIR) to be prepared for the project where the project has the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.

CEQA Appendix G states that a project will normally have a significant effect on the environment if it will:

- "(a) Conflict with adopted environmental plans and goals of the community where it is located;
- (c) Substantially affect a rare or endangered species of animal, plant or the habitat of the species;
- (d) Interfere substantially with the movement of any resident or migratory fish or wildlife species; and
- (e) Substantially diminish habitat for fish, wildlife or plants."
- 2. Federal and State Requirements for Protection of Biological Resources. Environmental impact analysis and mitigation needs to take into account Federal and State biological resource regulations.. The Federal Endangered Species Act and California Endangered Species Act formally list plant and animal species determined to be rare, threatened or endangered, or candidate species, and establish regulations for protecting these species and their habitats. Additional information regarding these statutes is provided in a separate technical document (Planning and Development Department Biological Resources Technical References, 1994).

Other federal statutes include the National Environmental Policy Act (NEPA), the Clean Water Act Section 404 (for protection of wetlands), Bald Eagle Protection Act, Migratory Bird Treaty Act, Executive Order 11990 (wetlands protection), Rivers and Harbors Act Section 10, Marine Protection, Sanctuary and Research Act, Marine Mammal Protection Act, and Section 1601 and 1603 Stream Alteration Agreements.

3. County Biological Resources Policies. Requirements for the protection of biological resources in the unincorporated area of Santa Barbara County are provided by the Comprehensive Plan Conservation Element, Environmental Resource Management Element (ERME), Land Use Element, Community Plans, and the Coastal Land Use Plan. These documents identify sensitive habitats and species, and provide measures to direct project design and policies to protect biological resources.

C. Guidelines for Assessment of Biological Resources Impacts.

1. Initial Study Review Process. The term "biological resources" refers to plant and animal species and habitats that support plant and animal species.

The value of a habitat and the resources present on the project site and potential project impacts are assessed preliminarily during the initial study review process. The first task in the assessment of biological impacts is an evaluation of the plant and animal resources on the project site and the second focuses on the project impact itself, using a series of assessment factors. The initial study evaluation determines whether an EIR or Mitigated Negative Declaration should be prepared based upon substantial evidence (not public controversy) that there is the potential for significant adverse biological impacts to occur as a result of a proposed project.

Based on a preliminary site assessment and review of existing historical resource information (designated environmentally sensitive habitat (ESH) areas, biological resource maps, reports, surveys, and Natural Diversity Data Base maps, available in the Planning and Development Department), staff utilizes the methodologies described below to determine whether resources on a site are biologically valuable, and whether a project may result in a significant impact to biological resources. In some instances a biological consultant survey of the site is required to determine the presence or absence of sensitive species and the value of habitat on and surrounding the project site, and to identify potential project impacts and feasible measures which could be incorporated into the project design to avoid or minimize the potentially significant impacts. Guidelines for performance of biological studies and sensitive resource definitions are provided in a separate technical document.

The determination of impact is done on a case-by-case basis. Because of the complexity of biological resource issues, substantial variation can occur between cases. The following sections identify questions and factors used in assessing the value of biological resources, and the significance of project impacts.

2. Evaluation of Resources on the Project Site.

a. Resources Inventory.

(1) What biological communities are on the site? What size area?

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(2) Is the habitat type relatively common? Is it rare and occurring in only a few places in the region, or significantly declining in extent and/or quality? Is the habitat designated as an ESH area on County planning documents, or designated

as "critical habitat" for listed species by Federal or State agencies?

- (3) Is the site in an urban, rural or outlying area? What are the uses surrounding the site? Is the habitat isolated or is it contiguous with adjacent habitat or close enough to provide a link between habitats?
- (4) Does the habitat support resident species or migratory species? Are there protected species (e.g., endangered or threatened), or species of candidate, special, or local concern or healthy rare species?

b. Condition and Quality.

- (1) Is the habitat pristine or disturbed? How much or to what degree?
- (2) How biologically productive is it? Does it support an especially rich and diverse plant and/or wildlife population?
- (3) Is the habitat resource (including the surrounding area if it is related) large enough to be viable?
- **3.** Evaluation of Project Impacts. Assessment of impacts must account for both short-term and long-term impacts. Thus the assessment must account for items such as immediate tree removal and longer-term, more subtle impacts such as interruption of the natural fire regime or interference with plant or animal propagation.
 - **a. Types of Impacts to Biological Resources.** Disturbance to habitats or species may be significant, based on substantial evidence in the record (not public controversy or speculation), if they substantially impact significant resources in the following ways:
 - (1) Substantially reduce or eliminate species diversity or abundance
 - (2) Substantially reduce or eliminate quantity or quality of nesting areas
 - (3) Substantially limit reproductive capacity through losses of individuals or habitat
 - (4) Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources
 - (5) Substantially limit or fragment range and movement (geographic distribution or animals and/or seed dispersal routes)
 - (6) Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.
 - **b.** Less Than Significant Impacts. There are many areas in the County where there is little or no importance to a given habitat and it is presumed that disruption would not create a significant impact. Examples of areas where impacts to habitat are presumed to be insignificant include:¹
 - (1) Small acreages of non-native grassland if wildlife values are low.
 - (2) Individuals or stands of non-native trees if not used by important animal species such as raptors or monarch butterflies.
 - (3) Areas of historical disturbance such as intensive agriculture.

¹ Pursuant to CEQA, a presumption based upon County thresholds that a project's impact is insignificant is rebutted if there is substantial evidence in light of the whole record before the lead agency that the project may have a significant impact on the environment (Pub. Res. Code §21082.2).

- (4) Small pockets of habitats already significantly fragmented or isolated, and degraded or disturbed.
- (5) Areas of primarily rudural species resulting from pre-existing man-made disturbance.
- **c. Impact Assessment Factors.** In addition to the criteria listed in a. "Types of Impacts to Biological Resources" above, the following questions and factors are used in assessing the significance of project impacts on biological resources.
 - (1) Size.

How much of the resource in question both on and off the project site would be impacted? (percentage of the whole area and square footage and/or acreage are both useful to know)

How does the area or species that would be impacted relate to the remaining populations off the project site? (percentage of total area or species population, either quantitatively or qualitatively.)

(2) Type of Impact.

Would it adversely indirectly affect wildlife (light, noise, barriers to movement, etc.)?

Would it remove the resource or cause an animal to abandon the area or a critical activity (e.g., nesting) in that area?

Would it fragment the area's resource?

(3) Timing.

Would the impact occur at a critical time in the life cycle of an important plant or animal (e.g., breeding, nesting, or flowering periods)?

Is the impact temporary or permanent? If it is temporary, how long would the resource take to recover?

Would the impact be periodic, of short duration, but recur again and again?

D. Habitat-Specific Impact Assessment Guidelines.

The following section provides additional impact assessment guidelines specific to several biological communities. These guidelines are to be used in conjunction with the general impact assessment guidelines described in Section III. (Note: Not all habitat types found in Santa Barbara County are addressed by these habitat-specific guidelines. Habitat types not addressed here are assessed with the general impact assessment guidelines in Section III.)

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1. Wetlands.

a. Description. Wetlands are among the most biologically productive of habitats, and the County's wetlands have been diminished both in areal extent and quality from the historic condition. As a result, naturally-occurring wetlands are an important resource, and projects with potential impacts to wetlands must be carefully evaluated. Examples of wetlands include coastal salt and brackish marshes, fresh water marshes, and vernal pools. Special cases include seasonal wetlands, vegetated flats, inter-dunal swale wetlands, and vegetated river bars and flats (riparian areas).

b. Definition. For the purposes of determining potentially significant effect, Santa Barbara County uses the following wetland definition that has been adopted by most resource protection agencies (U.S. Fish and Wildlife Service, the California Coastal Commission, the California Fish and Game Commission and the California Department of Fish and Game).² This definition reads:

"For purposes of this classification wetlands must have one or more of the following three attributes:

- a) At least periodically, the land supports predominantly hydrophytes, that is plants adapted to moist areas.
- b) The substrate is predominantly un-drained hydric soil, and
- c) The substrate is non soil and is saturated with water or covered by shallow water at some time during the growing season of each year. (Cowardin 1979)"

In order to ensure that wetland protection standards are applied equitably to affected property owners, wetlands which have only one of the defining three characteristics, especially those defined only by seasonal ponding, require careful review to ensure that highly disturbed areas with artificially compacted soils which do not have true wetland characteristics are not mistakenly identified as wetlands.

- **c.** Wetland/Upland Boundary Definition. The same category used to delineate wetland is used to delineate the boundary between wetland and upland.³ The upland limit of wetland is designated as 1) the boundary between land with predominantly hydrophytic cover and land with predominantly mesophytic (semi-dry) or xerophytic (dry) cover; or 2) the boundary between soil that is predominantly hydric and soil that is predominantly nonhydric; or 3) in the case of wetlands without vegetation or soil, the boundary between land that is flooded or saturated at some time each year and land that is not.
- **d.** Wetland Impact Assessment Guidelines. The following types of project-created impacts may be considered significant:
 - (1) Projects which result in a net loss of important wetland area or wetland habitat value, either through direct or indirect impacts to wetland vegetation, degradation of water quality, or would threaten the continuity of wetland-dependant animal or plant species are considered to have a potentially significant effect on the environment (California Environmental Quality Act: Guidelines, Appendix G; items c, d, and t).
 - (2) Wildlife access, use, and dispersal in wetland habitats are key components of their ecosystem value. For example, many upland species of wildlife could not persist without access to water. Movement between contiguous habitats through riparian areas (e.g.: from mountainous chaparral to valley grassland or coastal mesa) allows for many species to continue to persist and prevents genetic isolation. Projects which substantially interrupt wildlife access, use and dispersal

² It is the goal of Santa Barbara County to maintain a definition of wetlands consistent with Federal and State resources agencies listed above.

³ Methodologies used in delineating wetlands are consistent with those utilized by Federal and State resources agencies referenced above.

in wetland areas would typically be considered to have potentially significant impacts.

- (3) The hydrology of wetlands systems must be maintained if their function and values are to be preserved. Therefore, maintenance of hydrological conditions, such as the quantity and quality of run-off, etc., must be assessed in project review.
- e. Coastal Salt Marsh Impact Assessment Guidelines. Project-created impacts may be considered significant due to the potential to change species composition and habitat value as outlined below.
 - (1) Substantial alteration of tidal circulation or decrease of tidal prism.
 - (2) Adverse hydrologic changes (e.g., altered freshwater input), substantial increase of sedimentation, introduction of toxic elements or alteration of ambient water temperature.
 - (3) Construction activity which creates indirect impacts such as noise and turbidity on sensitive animal species, especially during critical periods such as breeding and nesting.
 - (4) Disruption of wildlife dispersal corridors.
 - (5) Disturbance or removal of substantial amounts of marsh habitats. Because of the high value and extremely limited extent of salt marsh habitat in the County, small areas of such habitat may be considered significant.
- **f.** Vernal Pools Impact Assessment Guidelines: The following types of project-related impacts may be considered significant:
 - (1) Direct removal of vernal pool or vernal pools complex.
 - (2) Direct or indirect adverse hydrologic changes such as altered freshwater input, changes in the watershed area or run-off quantity and/ or quality, substantial increase in sedimentation, introduction of toxic elements or alteration of ambient water temperature.
 - (3) Disruption of larger plant community (e.g., grassland) within which vernal pool occurs, isolation or interruption of contiguous habitat which would disrupt animal movement patterns, seed dispersal routes or increase vulnerability of species to weed invasion or local extirpation. For example, fragmentation of habitat may interrupt interaction between the habitat and the organisms within the pools (pollination, seed, invertebrate and vertebrate dispersal, provision of drinking and bathing water, etc.). These types of direct and indirect impacts are potentially significant.

2. Riparian Habitats.

a. Description. Riparian habitat is the terrestrial or upland area adjacent to freshwater bodies, such as the banks of creeks and streams, the shores of lakes and ponds, and aquifers which emerge at the surface such as springs and seeps (Bowland and Ferren 1992). A rich assemblage of wildlife series, including birds, mammals and amphibians are found in riparian habitats. In Santa Barbara County, riparian habitat occurs in and along the County's four major rivers (Santa Ynez, Santa Maria, Cuyama and Sisquoc) and in and along the County's many creeks and streams. This habitat can

also occur along arroyos and barrancas, and other types of drainages throughout the County.

- **b. Riparian Impact Assessment Guidelines,** The following types of project-related impacts may be considered significant:
 - (1) Direct removal of riparian vegetation.
 - (2) Disruption of riparian wildlife habitat, particularly animal dispersal corridors and or understory vegetation.
 - (3) Intrusion within the upland edge of the riparian canopy (generally within 50 feet in urban areas, within 100 feet in rural areas, and within 200 feet of major rivers listed in the previous section), leading to potential disruption of animal migration, breeding, etc. through increased noise, light and glare, and human or domestic animal intrusion
 - (4) Disruption of a substantial amount of adjacent upland vegetation where such vegetation plays a critical role in supporting riparian-dependent wildlife species (e. g., amphibians), or where such vegetation aids in stabilizing steep slopes adjacent to the riparian corridor, which reduces erosion and sedimentation potential.
 - (5) Construction activity which disrupts critical time periods (nesting, breeding) for fish and other wildlife species.

3. Native Grasslands.

a. Description: Native Grassland in California once occurred over 8 million acres in the Central Valley and in scattered patches along the Coast Ranges (Heady, 1977). Few stands of native grasslands remain in the state and the habitat is considered rare both in the state and within the county.

b. Native Grassland Habitat Impact Assessment Guidelines:

- (1) For purposes of resource evaluation in Santa Barbara County, a native grassland is defined as an area where native grassland species comprise 10 percent or more of the total relative cove.^{4,5}
- (2) Removal or severe disturbance to a patch or patches of native grasses less than one-quarter acre, which is clearly isolated and is not a part of a significant native grassland or an integral component of a larger ecosystem, is usually considered insignificant.

4. Oak Woodlands and Forests.

a. Description. There are three primary types of oak woodlands in Santa Barbara County: Valley Oak, Coast Live Oak, and Blue Oak woodlands. The number, type,

⁴ The California Department of Fish and Game, Natural Heritage Division uses the 10 percent relative cover figure in determining acreages of remaining native grasslands (Keeler-Wolf, Natural Diversity Data Base, personal communication May 1992). (Relative cover is the cover of a particular species as a percentage of total plant cover of a given area. [Barbour, Burk & Pitts 1980].)

⁵ Native grasslands which are dominated by perennial bunch grasses such as purple needlegrass (*Stipa pulchra*) tend to be patchy (the individual plants and groups of plants tend to be distributed in patches). Therefore, for example, where a high density of small patches occur in an area of one acre, the whole acre should be delineated if native grassland species comprise 10 percent or more of the total relative cover, rather than merely delineating the patches that would sum to less than one acre.

and density of oak trees, and the relationship between trees and understory are principal characteristics which define the various types of woodlands. Oak habitats support a diverse wildlife population, and offer abundant resources to wildlife including food sources, shade in summer, shelter in winter, perching, roosting, nesting, and food storage sites.

- **b.** Impact Assessment Guidelines for Woodlands and Forest Habitat Areas.⁶ Projectcreated impacts may be considered significant due to changes in habitat value and species composition such as the following:
 - (1) Habitat fragmentation.
 - (2) Removal of understory.
 - (3) Alteration to drainage patterns.
 - (4) Disruption of the canopy
 - (5) Removal of a significant number of trees that would cause a break in the canopy or disruption in animal movement in and through the woodland

5. Impact Assessment for Individual Native Trees.⁶

- **a. Description.** Native specimen trees, regardless of size, are potentially significant, and rare native trees, which are very low in number or isolated in distribution (such as Island Oak) may be particularly significant. This significance evaluation is done on a case-by-case basis and considers tree size, numbers, location, relationship to habitat, etc.
- **b. Definition.** Specimen trees are defined, for biological assessment purposes, as mature trees that are healthy and structurally sound and have grown into the natural stature particular to the species.
- **c.** Native Tree Impact Assessment. In general, the loss of 10 percent or more of the trees of biological value on a project site is considered potentially significant.⁷

E. General Mitigation Guidelines for Biological Impacts.

1. Mitigation Hierarchy. The following general approaches to reducing biological impacts are presented in the order of their effectiveness.

a. Avoidance.

Avoid direct or indirect impacts to significant biological resources through project design.

Focus on maintaining large, contiguous habitat areas and animal movement corridors. A project design which clusters development on a relatively limited portion of the project site may reduce the habitat area disturbed by the project.

b. Onsite Mitigation.

⁶ The impact assessment guidelines for oak trees, woodlands and forest habitat do not apply to non-discretionary level oak tree removal of protected and unprotected size under the Grading Ordinance Guidelines for Native Oak Tree Removal that are incorporated as Appendix A in County Code, Chapter 14. Non-discretionary-level oak tree removal of protected and unprotected size that is subject to and in compliance with these Guidelines has been previously analyzed in the program EIR, 00-EIR-07 RV1.

⁷ The number of trees present onsite form which the 10 percent is measured may be calculated either by counting individual trees or by measuring the area of the tree canopy with a planimeter.

Minimize or reduce impacts through on-site design and resource protection measures.

Measures may include vegetative spatial buffer between project and habitat areas; revegetation; habitat enhancement; erosion and water quality protection; on-site replacement/compensation; maintenance and management measures such as fencing, weed control, use of building envelopes, and dedication of areas through open space or conservation easements or grant deed of development rights; short-term measures to protect against construction impacts (e.g., fencing, timing of construction to avoid nesting season).

c. Off-Site Mitigation.

Compensate for on-site impacts through off-site measures.

When avoidance or on-site mitigation is infeasible or inadequate to reduce impacts, measures such as those listed under on-site mitigation can be considered in off-site locations, or may be accomplished through in-lieu fees. Off-site approaches may be appropriate at times if a greater ecological value may be clearly gained than with on-site mitigation. (i.e., where on-site habitat is of low quality or highly fragmented).

2. Habitat Replacement/Compensation Guidelines. The mitigation approach of replacing habitat either on-site or off-site, to compensate for habitat loss, is generally not a preferred approach because it always results in some habitat loss (either short-term or long-term), and because prospects for successful habitat replacement are problematic.

Replacement mitigation should involve the same habitat type, location(s) within the same watershed and as close as possible to the site of impact, and should result in comparable and compensating size and habitat value.

Beneficial ecological restoration projects, where the purpose of the project is to enhance or restore biological or habitat resources, compensate replacement at a minimum ratio of 1:1. Refer to the County *Guidelines for the Implementation of the California Environmental Quality Act of 1970, As Amended*, revised January 8, 2008, for the definition and requirements for beneficial ecological restoration projects.

3. Consultation on Mitigation and Project Design.

- **a. Biological Information.** County biological information available to project applicants, consulting biologists and the public by appointment includes resource and wetland maps, historical aerial photographs, and a library of previous biological surveys and reports. More specific mitigation guidance is provided in a separate technical document augmenting these Guidelines.
- **b. Consultants.** County staff is available through consultations and pre-application meetings to advise project applicants on project design measures to minimize biological impacts. Project sponsors may consult informally with California Department of Fish and Game and/or area consulting biologists at the preliminary review or initial study stage to determine what wildlife and vegetation resource information is available or needed and how the necessary information can be obtained.

F. Technical Background Document.

A separate technical document (Appendix A) contains the following additional information:

A. Summary of Biological Resources Statutes

- B. Biological Survey Guidelines
- C. Detailed Biological Habitat Descriptions
- D. Biological Mitigations
- E. References

7. COASTAL RESOURCES (SEAWALL/COASTAL PROTECTION POLICY)

INTRODUCTION

On April 10, 1990 the Board of Supervisors unanimously approved a new policy which requires that EIRs be prepared for seawalls and other coastal protection structures. These documents would include extensive analysis of cumulative effects and regional issues for which a given project would be involved. Concern over a potential proliferation of seawalls along the south coast led to the adoption of this policy. Note that infill structures would not be subject to the EIR requirement unless warranted by site specific impacts.

A. Administrative Policy

1. Coastal Units. For purposes of seawall review, it is proposed that the unincorporated portion of the South Coast be divided into 10 units as shown on the attached map and listed below:

Coastal Unit	Location
Point Conception	VAFB to Gaviota
Gaviota	Gaviota to Eagle Canyon
Ellwood	Eagle Canyon to Coal Oil Point
Isla Vista	Coal Oil Point to UCSB
Goleta	UCSB to More Mesa
Hope Ranch	More Mesa to the City of Santa Barbara
Montecito	City of Santa Barbara to Sheffield Drive
Summerland	Sheffield Drive to Loon Point
Sandyland	Loon Point to the City of Carpinteria
Rincon Point	City of Carpinteria to the Ventura County line

<u>Note</u>: No coastal units were defined north of the southern boundary of Vandenberg Air Force Base (VAFB) because the presence of VAFB, the State Park at Point Sal and the Guadalupe Dunes will preclude private coastal development under County jurisdiction for the foreseeable future. Additionally, no coastal unit was defined for UCSB because they are a separate state jurisdiction.

Each unit was chosen primarily on the basis of similar geologic/geomorphic character.

- 2. Infill Structures. The administrative policy requiring extensive analysis of cumulative effects and regional coastal issues would not apply to infill coastal protection structures. A limited infill seawall or coastal protection structure is one which is limited in length and would be connected to an existing similar structure on each end. Infill protective structures, due to the potential for environmental impacts, would still require preparation of a site specific environmental document.
- **3. Scope of Review.** Cumulative impact analysis for the identified stretches of beach would address geologically similar areas, would contain consistent design criteria, and would analyze the full range of alternatives to the construction of seawalls and other coastal protection structures to address coastal process/bluff retreat issues. These options could include sand replenishment, coastal protection structures, phased relocation or abandonment of bluff top homes, etc. The goal of requiring extensive cumulative analysis would be to address the potential for regional impacts, insure the implementation of a
consistent approach to coastal processes for each section of coast, and to implement standard mitigation measures. An additional goal would be to integrate the policies and findings of all seawall EIR's in order to provide the most consistent approach possible for the County as a whole. In the ideal situation, an EIR addressing a given stretch of beach could be used as a base environmental document for the processing of future coastal process/bluff retreat measures required along that stretch of coast. Each seawall EIR should address the potential impacts for the full range of alternatives (sand replenishment, seawalls, home relocation/abandonment, etc.), cumulative impacts, and specifically discuss the following:

- a. Geology of the rocks which underlie a 500 foot wide strip along the coast.
- b. Sea bluff retreat rates.
- c. Potential for large-scale landslides.
- d. Effects of coastal protection structures on littoral sand supply.
- e. Effects of sea level rise due to global warming.
- f. Impacts on beach access.
- g. Aesthetic impacts.
- h. Biological Impacts (offshore, coastal strand and bluff, etc.).
- i. Coastal protection alternatives.
- j. General design criteria and standard mitigation measures for seawalls.
- k. Available on and offshore sand sources.

Procedurally, seawall EIRs would provide general guidelines for implementation of the particular coastal process/bluff retreat program for a given section of coast. The findings of each seawall EIR would provide guidance to County decision-makers and coastal homeowners on the acceptable methods of addressing coastal process issues within a given coastal unit. Actions taken by homeowners or the County to address coastal process issues that are consistent with the findings of the EIR for a previously reviewed coastal unit would not require major additional environmental review. Alternatively, should an application for the alteration of coastal processes contain design features which are inconsistent with those provided in a seawall EIR previously prepared for that coastal unit, the application would be subject to additional environmental review through an Addendum or a Supplement to the previous EIR.

This process will allow the decision-makers to adequately evaluate the regional issue of coastal processes/bluff retreat from a long term and regional perspective.

B. Evaluation Criteria for Temporary Foundation Improvements on Seacliff Parcels in Isla Vista. (*Prepared by Brian R. Baca, Registered Geologist, December 1, 1992*)

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These "Evaluation Criteria" (formerly named "Design Guidelines") have developed over the past several months during the review of several proposed projects located on Del Playa Drive in Isla Vista. Each of these projects involved the installation of underground foundation improvements with the primary feature being 35 - 40 foot long vertical caissons (a caisson is a cylindrical, steel-reinforced concrete piling). These criteria identify design parameters and mitigation measures which, if incorporated into the project description by the applicant, may allow for the preparation of a Negative Declaration for the project (i.e., the potential for significant impacts and the need

for an EIR would be avoided). These criteria follow the intent of State CEQA Guidelines section 15070(b) which describes the Mitigated Negative Declaration process. Numerous applications similar to the cases now under review are expected to be filed with the County within the next several years. The Evaluation Criteria are intended to be a standard under which each is to be reviewed. The permitting process would involve a discretionary Special Use Permit which would authorize installation and subsequent removal followed by implementing ministerial Coastal Development Permits at the time of construction and at the time of removal.

- **1. Introduction.** These evaluation criteria address two distinct areas of County review of proposed temporary foundation improvements including:
 - **a. Review of environmental impacts.** The assessment (and avoidance) of environmental impacts on the bluff face and the beach upon the exposure of the improvements due to continuing retreat of the sea cliff.
 - **b.** Safety hazards. The removal of elements of the proposed improvements which are undermined by ongoing erosional processes such that they become unstable and hazards to public safety. The criteria (or guidelines) listed below are intended to allow an applicant to design a project such that significant environmental impacts could be avoided for the following issue areas in the absence of evidence of unique circumstances indicating a potential for project-specific or cumulative significant impacts:
 - (1) Aesthetics
 - (2) Increased erosion of adjacent properties
 - (3) Long-term loss of beach width (i.e. lateral access impacts)
 - (4) Erosion of the bluff face during construction and removal activities

The principles underlying these criteria is that the proposed foundation improvements (caissons and related structures) would be temporary and that they would not substantially alter the rate of seacliff retreat (i.e., at no time would they protect the cliff from erosion). These criteria also specify the regulatory process which would be followed in the event that the improvements are found to create a safety hazard after exposure on the seacliff. This process is considered to adequately address potential impacts on public safety.

2. Evaluation criteria.

a. Caisson spacing along the bluff face. The proposed caissons shall be at least five feet apart, measured edge to edge (e.g., caissons which are two feet in diameter would be seven feet apart measured from the center of the caissons).

<u>Monitoring</u>: The Planning and Development Department Geologist shall review and approve the final construction plans prior to the issuance of the Coastal Development Permit.

b. Caisson spacing perpendicular to the bluff face. Caissons or other foundation support structures constructed on or along a line approximately perpendicular to the general trend of the seacliff (e.g., at Isla Vista Beach this would be approximately perpendicular to Del Playa Drive) shall be constructed a minimum distance of five feet apart (seven feet on center for 24 inch diameter caissons) with the following exception: they may be constructed as close as three feet apart (five feet on center for 24 inch diameter caissons) if designed and approved by a Registered Engineer or Certified Engineering Geologist. In no case shall they be closer than three feet apart

(five feet on center for 24 inch diameter caissons). This criteria applies, in general, to caissons located along the side property lines on coastal parcels. This criteria is intended to prevent undermining or weakening of support of a caisson during removal of an adjacent caisson.

Monitoring: The Planning and Development Department Geologist shall review and approve the final construction plans prior to the issuance of the Coastal Development Permit.

c. Maximum coverage of the bluff face. The caisson support system shall be designed such that upon exposure due to continuing erosion, the bluff face shall at a minimum be composed 70 percent of native material (e.g., two foot diameter caissons constructed seven feet apart on center would cover a maximum of 30 percent of the area of the bluff face if the system were fully exposed).

Monitoring: The Planning and Development Department Geologist shall review and approve the final construction plans prior to the issuance of the Coastal Development Permit.

d. Setback from adjacent property. Foundation support structures shall be located at least three feet from a property boundary except as follows: the support structures may be located as close as one foot from a property boundary if designed and approved by a Registered Engineer or Certified Engineering Geologist. In no case shall any portion of a foundation support structure be closer than one foot from a property boundary. This setback provision is considered adequate to assure that an adjacent property is not encroached upon or subject to erosion during the installation of a caisson. Removal of caissons due to environmental impacts or safety hazards would occur only after they were no longer in contact with the bluff face. Thus, the bluff face on the adjacent property would not be affected by caisson removal activities. This criteria does not pertain to boundaries between two properties which are both part of the proposed project.

Monitoring: Prior to the issuance of the Coastal Development Permit, the following shall occur: 1) the Planning and Development Department Geologist shall review and approve the final construction plans and 2) the applicant shall submit a letter from a Registered Engineer or Certified Engineering Geologist that states that the location of the subject caisson meets the above setback and that the adjacent property will not be encroached upon or subject to erosion during the installation of the caisson(s).

e. Caisson setback from the bluff face. Caissons shall be constructed a minimum of 10 feet landward of all parts of the bluff face in order to avoid potential erosion of the bluff face during construction. This setback was established by the Planning and Development Department Geologist based on observations of the character of the weak rocks exposed on the bluff face at Isla Vista Beach. A lesser setback distance for one or more caissons may be used if the Planning and Development Department Geologist determines that substantial construction-related impacts are not reasonably foreseeable based on site-specific conditions. In no case shall any construction occur within five feet of the bluff face (ordinance required setback).

Monitoring: The Planning and Development Department Geologist shall review and approve the final construction plans prior to the issuance of the Coastal Development Permit. The applicant shall clearly mark the locations of the proposed caissons and Permit Compliance shall conduct a site inspection during the pre-construction meeting

required under the Coastal Development Permit to assure that the locations of the caissons meet the setback requirement.

f. Tieback design. Angled tiebacks may be incorporated into the design of the foundation improvements if the proposed tieback design allows for removal in a manner which is safe for workers and unlikely to result in bluff face erosion or a public safety hazard in the opinion of the County Building Official and the Planning and Development Department Geologist. Tiebacks shall be removed at the time of caisson removal to the extent feasible without causing substantial erosion of the bluff face. (Note: DYWIDAG Systems International Threadbar Rock Anchors have been reviewed by the Planning and Development Department Geologist and County Building Official and are considered at this time acceptable for use as tiebacks.)

Angled tiebacks which do not meet the above criteria shall not be incorporated into the design. Lateral support for the caissons may be obtained through structures at the top of the bluff (e.g., caissons may be tied to patios and building foundations located on the elevated marine terrace landward of the top edge of the bluff face).

Monitoring: The Planning and Development Department Geologist and County Building Official shall review and approve the proposed tieback design and the proposed removal method prior to issuance of the Coastal Development Permit.

- **g.** Notification and removal to avoid environmental impacts. The project description shall incorporate the following procedures regarding the removal of the caissons in order to prevent the occurrence of significant environmental impacts on beach width (lateral access) and increased (or accelerated) erosion of adjacent properties.
 - (1) Advisory letter to property owner. The property owner may receive an advisory letter from the Planning and Development Department or the County Building Official upon exposure of one or more caissons on the bluff face. This letter would inform the current owner of the apparent condition of the caissons (i.e., the level of caisson exposure on the bluff face) and the procedures outlined in the Evaluation Criteria (this document) which will be followed by the Planning and Development Department and the County Building Official as erosion of the bluff face continues. "Exposure" of a caisson is defined as the full width of the caisson(s) being visible over the lowermost three feet of the bluff face or the full width of the caisson(s) visible for a total of 10 feet (measured vertically) on the bluff face. This letter would not require any action but would provide early notification to the property owner of upcoming removal requirements.
 - (2) Notice to remove to avoid environmental impacts. A "Notice to Remove" letter may be provided by the Planning and Development Department to the property owner which calls for removal of one or more caissons to avoid impacts on beach width (lateral access) or increased erosion of adjacent properties. Removal shall be accomplished by the property owner within one year of the date of the Notice to Remove letter using the procedures specified in the Removal Plan prepared in accordance with the parameters listed in paragraph (3) below. The physical parameters which would result in the preparation of a Notice to Remove letter are listed below.
 - (a) Beach width and lateral access impacts: Significant impacts on beach width and lateral access will be considered to begin when seacliff retreat

has proceeded to the point that the caisson(s) are located more than three feet seaward from the base of the bluff. At this point the caissons would not be in contact with the bluff face. According to studies incorporated into the environmental impact report for the Del Playa Seawall, certified by the Santa Barbara County Board of Supervisors on July 28, 1992, the emplacement of seawall (i.e., a fixed structure similar to an exposed caisson) three to four feet seaward of the base of the bluff would result in an estimated loss of up to 24 percent of the remaining average daily lateral access time. The property owner shall receive a Notice to Remove letter from the Planning and Development Department that states that the caisson(s) are three feet or more from the bluff face and calls for removal. The caisson(s) shall be removed by the property owner within one year of the date of this notification.

- Erosion of adjacent properties impacts: Erosion of adjacent properties **(b)** due the presence of caissons would occur if the caissons served to reduce the rate of seacliff retreat such that a promontory was formed. Wave reflection off a promontory could cause increased erosion of an adjacent property. This effect is not anticipated to occur due to the spacing between caissons specified in criteria a. and b., above. These criteria (if followed) result in at least 70 percent of the bluff face being exposed to wave energy. When a majority of the bluff face is protected from wave energy, the rate of seacliff retreat is reduced, as can be observed at the existing seawalls at Isla Vista Beach. Isolated obstructions such as the support timbers for the access stairways on Isla Vista Beach which are several feet apart (similar in geometry to caissons exposed in front of the bluff face) have not discernibly reduced the retreat rate of the bluff face. However, if increased erosion of an adjacent property occurred due to a caisson-related promontory effect, it would happen after the caissons were no longer in contact with the bluff face and could be readily observed during the annual site inspection by the Planning and Development Department Geologist or County Building Official. If this effect is observed during the annual inspections, the property owner shall receive a Notice to Remove letter from the Planning and Development Department that includes a description of the evidence of increased erosion. The caisson(s) shall be removed by the applicant or current property owner within one year of the date of this notification.
- (3) **Removal plan to avoid environmental impacts.** A detailed description of the process by which the caissons would be removed shall be included in the project description submitted in the application for a Coastal Development Permit. This description should include a discussion of the following:
 - (a) The physical procedure for cutting and removing the caissons.
 - (b) Access to the property.
 - (c) Equipment to be used.
 - (d) The estimated duration of removal activities.

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(e) Transport of the removed material from the beach to a disposal site.

- (f) Worker safety.
- (g) An estimate of the future cost of caisson removal.
- (h) The project description shall include a proposed financial security adequate to assure implementation of the provisions for caisson removal. Security will be required prior to the issuance of the Coastal Development Permit for the installation of the caissons.
- (i) In addition, the removal of structures (e.g., buildings, patios) supported by the caissons or other measures to assure structural stability should be similarly discussed. The feasibility associated with the described process will be evaluated by the Planning and Development Department including the Building and Safety Division.
- (4) **Removal process.** Removal of a caisson refers to the caisson in its entirety including tiebacks and any other supported structures. The portion of a caisson which would extend below the surface of the bedrock terrace shall be removed and the resulting hole backfilled with erodible material (fragments of Sisquoc shale, if available, or gravel). A Coastal Development Permit issued by the Planning and Development Department will be required to conduct removal activities.
- (5) Monitoring: The County Building Official or the Planning and Development Department Geologist shall conduct annual inspections of the properties along the seacliff at Isla Vista Beach to monitor the level of exposure of foundation structures (i.e., the visibility of the caissons and the distance that they extend seaward of the bluff face). The Planning and Development Department Geologist shall prepare a Notice to Remove letter to the property owner which calls for removal of the exposed structure if the caissons have become exposed such that they are located three feet or more seaward of the bluff or are causing increased erosion on an adjacent property.

Funding for County staff time associated with the annual inspections and notification shall be provided from the accrued earnings from a interest-bearing account set up by the applicant to be reviewed and approved by the Planning and Development Department and County Counsel prior to issuance of the Coastal Development Permit for the construction of the caissons. Upon removal of the last foundation component associated with the current application, the principal and any remaining accrued interest shall be released to the applicant. The signature of the Director of Planning and Development Department or his designated representative will be required before release of this account.

In order to assure implementation of the removal provisions included in these evaluation criteria, the applicant shall provide a financial security to be reviewed and approved by the Planning and Development Department and County Counsel prior to issuance of the Coastal Development Permit for construction of the foundation improvements. Note that this financial security would be separate from the interest-bearing account discussed above.

h. Notification and removal for public safety hazards. The project description shall incorporate the following procedures regarding the removal of the caisson(s) and

related structures which are undermined by ongoing erosional processes such that they become hazards to public safety.

- (1) Advisory letter to property owner. The property owner may receive an advisory letter from the Planning and Development Department or the County Building Official upon exposure of one or more caissons on the bluff face. This letter will inform the current owner of the apparent condition of the caissons (i.e., the level of caisson exposure on the bluff face) and the procedures outlined in the Evaluation Criteria (this document) which will be followed by the Planning and Development Department and the County Building Official as erosion of the bluff face continues. Exposure of a caisson is defined as the full width of the caisson(s) being visible over the lowermost three feet of the bluff face or the full width of the caisson(s) visible for a total of 10 feet (measured vertically) on the bluff face. This letter would not require any action but would provide early notification to the property owner of upcoming removal requirements.
- (2) Notice to remove due to public safety hazards. Upon identification of a potential hazard, the County Building Official or the Planning and Development Department Geologist shall prepare a Notice to Remove letter to the applicant/property owner which identifies the potentially hazardous condition. Upon receipt of this notification, the applicant will have 45 days to submit a report by a Registered Engineer or a Certified Engineering Geologist which documents the condition of the structure with regards to safety. After 45 days from notification, the hazardous components of the project shall be subject to hazard abatement (e.g., removal) procedures established by the County Building Official if no report is submitted, the report indicates that a safety hazard exists or if the County Building Official determines that a hazard exists despite contrary opinion expressed in the submitted report.
- (3) **Removal process.** The timing and method of removal shall be determined by the County Building Official during the hazard abatement process. The hazard abatement procedures are independent of these evaluation criteria and are based on standard engineering practice and applicable building regulations.
- (4) **Monitoring.** The County Building Official or the Planning and Development Department Geologist shall regularly conduct annual inspections of the properties along the seacliff at Isla Vista Beach to monitor the level of exposure of foundation structures (i.e., the visibility of the caissons and related structures and the distance that they extend seaward of the bluff face). If the caissons (or other foundation improvements) are determined by the County Building Official to represent a potential safety hazard, the Planning and Development Department Geologist or the County Building Official shall prepare a Notice to Remove letter to the property owner which calls for removal of the exposed structure. The procedures discussed in Subsections h.(2) and h.(3) above would then be implemented.

Funding for County staff time associated with the annual inspections and notification shall be provided from the accrued earnings from a interest-bearing account set up by the applicant to be reviewed and approved by the Planning and Development Department and County Counsel prior to issuance of the Coastal Development Permit for the construction of the caissons. Upon removal of the last foundation component associated with the current application, the principal and any remaining accrued interest shall be released to the applicant. The signature of the Director of the Planning and Development Department or his designated representative will be required before release of this account. Note that this account would be the same one as discussed in Subsection g.(5) of these evaluation criteria.

Note that the financial security to be provided by the applicant to assure implementation of removal for environmental effects (see Subsections g.(3) and g.(5)) is not intended to cover hazard abatement costs and would be available only to the Planning and Development Department. Funding of required hazard abatement work not performed by the property owner would be obtained by the County Building Official from the property owner through established legal procedures.

3. Impact analysis summary.

- **a.** Aesthetics. Criteria a. and c., above would assure that no more than 30 percent of the bluff face would be covered with concrete. This design parameter would avoid significant visual impacts. The white vertical lines which would be formed by the caissons would, however, still be visually dominant when exposed. For the following reasons the aesthetic impact of the caissons (upon exposure) would be considered less than significant:
 - (1) Maximum 30 percent concrete coverage of the bluff face (as stated above).
 - (2) The temporary nature of the caissons and the variability in the time of exposure due to the non-linear trend of the bluff edge would generally preclude all of the caissons on a particular parcel from being exposed at the same time.
 - (3) The sea bluff at Isla Vista is not an undeveloped, pristine area. The caissons would only incrementally degrade the visual character of the area. Because of the existing densely-developed nature of the bluff top on the particular properties, exposure of the caissons, as designed pursuant to these evaluation criteria, would not constitute a significant visual effect.
- **b.** Erosion of the adjacent unprotected properties. Evaluation Criteria a., c., g. and h., above, would be considered to avoid significant erosion impacts based on the following reasons:
 - (1) The caissons are not anticipated to substantially reduce the rate of landward erosion of the seacliff. Thus, a promontory would not develop with the exception of the caissons themselves. If a promontory did develop behind the caissons, the caissons would be removed pursuant to Criteria 7.
 - (2) Each caisson would be become separated from the bluff face within a short time after its initial exposure. Waves would wash behind the caissons and not be reflected onto the adjacent properties. Wave reflection and wave refraction effects which would occur with a free-standing caisson would not substantially change the wave energy impinging on the adjacent property.
 - (3) The setback from property lines (Criteria d.) would allow for the installation of the caissons without substantial erosion impacts to the adjacent property.

- **c.** Long-term loss of beach width (lateral access impacts). Impacts would be less than significant due to the implementation of the procedures included in Criteria g. Removal of the caissons within a year of the time that potentially significant impacts could begin to occur would prevent a substantial long-term effect on beach width and lateral access.
- **d.** Erosion of the bluff face during caisson removal activities. Erosion of the bluff face is not anticipated to occur during the removal of the caissons to avoid environmental impacts as specified in Criteria g. because removal would not be required until after the caissons had been separated by natural processes from the bluff face. Removal of caissons due to public safety hazards as specified in Criteria h. would also be anticipated to occur after separation from the bluff face. Loss of bluff material by accidental contact with the bluff face during the process of caisson removal would constitute a short-term impact and would not alter the long-term rate of seacliff retreat.
- e. Erosion of the bluff during removal of the tiebacks. Criteria f. would prevent the potential of an ongoing erosion problem either by requiring a design which would not result in such impacts during tieback removal. Tieback components remaining after initial caisson removal would be periodically cut back as they became safety hazards (Criteria h.).
- **f.** Near-term erosion due to caisson construction. Criteria e. would minimize the potential of erosion of the bluff during construction of foundation improvements. With this provision, substantial erosion due to construction activities is not anticipated.

8. CULTURAL RESOURCES GUIDELINES, ARCHAEOLOGICAL, HISTORICAL, AND ETHNIC ELEMENTS

INTRODUCTION

This document discusses in general the cultural resource review process used by the Planning and Development Department. A technical document, <u>Regulations Governing Cultural Resource Projects</u> <u>Undertaken in Conformance with Federal and State Environmental Protection Acts</u>, provides procedures for cultural resource consultants to follow in preparing their investigations. These Regulations are available at the Planning and Development Department.

- A. Phase 1: Literature Search and Preliminary Assessment. As part of the environmental review process, the Planning and Development Department reviews archaeological site maps to determine if a recorded cultural resource is located within the project site or whether there is a high potential for its presence onsite based on recorded site distribution patterns or historical accounts. If this determination is positive and the project site is not developed, a Phase I archaeological investigation including a systematic inspection of the ground surface is carried out by the Planning and Development Department staff or a County approved professional archaeologist (depending on the size of the parcel) and sub-surface testing to define the presence of archaeological artifacts or site boundaries when vegetation obscures ground visibility. If historical remains are suspected, a professional historian will be retained to evaluate more fully the resource. The Phase I investigation and report will follow the specifications defined in the Cultural Resource Regulations defined above.
- **B.** Phase 2: Cultural Resource Significance Determination. If an archaeological or historical site is observed, the Planning and Development Department will work with the applicant to modify project plan descriptions such that direct impacts on cultural resources are avoided. Avoiding damage may be accomplished by many approaches, including the following:
 - 1. Planning construction to miss cultural resource sites;
 - 2. Planning parks, greenspace or other open space to incorporate archaeological or historical sites;
 - 3. "Capping" or covering prehistoric or historic archaeological sites with a layer of fill soil before building tennis courts, parking lots, or similar facilities. Capping may be used in the following cases:
 - a. The soils to be covered will not suffer serious compaction.
 - b. The covering materials are not chemically active.
 - c. The site is one in which the natural processes of deterioration have been effectively arrested; and
 - d. The site has been recorded.

Although the placement of fill on top of an archaeological site may reduce direct impacts of construction, indirect impacts will possibly result from the loss of access to the site for research purposes and scarification and compaction of soils. To mitigate this impact, a sample of the cultural resource shall be excavated and appropriately curated for research purposes.

4. Deeding archaeological or historical sites into permanent conservation easements.

If the above avoidance measures cannot be used, a Phase 2 excavation program is funded by the applicant and performed by a County approved archaeologist and/or historian if necessary to determine if the cultural resource is "important" as defined in Appendix K of CEQA. If the project would cause damage to an important cultural resource, the project is considered to have a significant effect on the environment. For the purposes of CEQA, an "important archaeological resource" can be defined by one of several criteria listed below. Such a resource may have the following characteristics:

- 1. Is associated with an event or person of:
 - a. Recognized significance in California or American history; or
 - b. Recognized scientific importance in prehistory.
- 2. Can provide information which is of both demonstrable public interest and useful in addressing scientifically consequential and reasonable or archaeological research questions,
- 3. Has a special or particular quality such as oldest, best example, largest, or last surviving example of its kind.
- 4. Is at least 100 years old and possesses substantial stratigraphic integrity; or
- 5. Involves important research questions that historical research has shown can be answered only with archaeological methods.

The Archaeological Element of the County Guidelines provides a variety of relevant research questions for use in addressing significance criterion 4.e.

The Phase 2 investigation and report must follow the specifications defined in the Cultural Resource Guidelines defined above. The report must include significance assessments and propose ways to avoid impacting the important resource. The report shall also include a suggested excavation plan for mitigating the effect of the project on the qualities which make the resource important if avoidance is considered infeasible.

The excavation plan shall include the following:

- 1. A brief summary of the excavation proposed as part of a mitigation plan.
- 2. Be available for review only on a need-to-know basis;
- 3. Shall not include the specific location of any archaeological resources if the plan would be made known to the general public.

An excavation plan shall also mention the following:

- 1. List and briefly discuss the important information the archaeological or historical resources contain or are likely to contain;
- 2. Explain how the information should be recovered to be useful in addressing scientifically valid research questions and other concerns identified in subdivision (a);
- 3. Explain the estimated cost of time required to complete all activities undertaken under the plan.

A list of significance criteria for evaluation of historical resources is found in the Historic Element of the County Guidelines and is summarized below. Any structure 50 years or older is considered potentially significant and shall be subjected to the following criteria:

A significant resource a) possesses integrity of location, design, workmanship, material, and/or

setting; b) is at least fifty years old¹; and c) demonstrates one or more of the following:

- 1. Is associated with an event, movement, organization, or person that/who has made an important contribution to the community², state, or nation;
- 2. Was designed or built by an architect, engineer, builder, artists, or other designer who has made an important contribution to the community, state, or nation;
- 3. Is associated with a particular architectural style or building type important to the community, state, or nation;
- 4. Embodies elements demonstrating a) outstanding attention to design, detail, craftsmanship, or b) outstanding use of a particular structural material, surface material, or method of construction or technology;
- 5. Is associated with a traditional way of life important to an ethnic, national, racial, or social group, or to the community-at-large;
- 6. Illustrates broad patterns of cultural, social, political, economic, or industrial history;
- 7. Is a feature³ or a cluster of features which convey a sense of time and place that is important to the community, state, or nation;
- 8. Is able to yield information important to the community or is relevant to the scholarly study of history, historical archaeology, ethnography, folklore, or cultural geography.

The level of significance for these criteria are established by rating each significance attribute of the resource (detailed below) according to the following scale:

E = exceptional 3 = high; very good 2 = good 1 = little

A rating of E for any significance attribute marks a resource as possessing extraordinary or exceptional importance and indicates that it should receive special consideration in the planning process regardless of the numeric rating for other significance attributes. For instance, a resource may be of extreme antiquity,

And therefore be rated E in the aspect of age, but achieve an average numeric rating of, say, 1.7 in all other attributes of significance.

The following guidelines shall govern the assignment of significance level ratings for each aspect:

1. Integrity.

- E = pristine integrity in all five categories
- 3 = good integrity in at least three categories
- 2 = good integrity in at least one category
- 1 =fair to poor integrity in all categories

Integrity means that the resource retains the essential qualities of its historic character. These guidelines recognize five components of integrity: location, design, setting,

¹ A historic resource less than fifty years old may be considered significant if it is unique or possesses extraordinary elements of integrity, design, construction, or association.

² Community is defined as a neighborhood, town, city or district.

³ A feature may be defined as a structure, building, structural element, object, tree, garden, etc.

materials, and workmanship.

Integrity of location means that the resource remains at its original location.

<u>Integrity of design</u>, strictly applied, means that the resource accurately reflects its original plan. However, it is rare to find intact structures that have never undergone change. Thus, design integrity often infers that the components of the structure as a whole reflect design compatibility. For example, building additions that accurately incorporate design elements found in the original structure (e.g., roof pitch and covering, window placement and form, or exterior wall treatment) would not compromise integrity of design.

<u>Integrity of setting</u> means that buildings, structures, or features associated with a later development period have not intruded upon the surrounding area to the extent that the original context is lost. For instance, an old barn now in the midst of suburban residential development might retain integrity of setting if the immediately surrounding area still reflects a rural setting (e.g., open space, fencing, water troughs, etc.).

<u>Integrity of materials</u> means that the physical elements present during the historic period are still present or, if materials have been replaced, the replacement(s) have been based on the original. For instance, a Victorian style wood-frame dwelling that has been covered with stucco has lost its integrity of materials. Conversely, an adobe wall that has been reconstructed with similar adobe mud, as opposed to adobe-simulate concrete, would retain its integrity of materials.

<u>Integrity of workmanship</u> means that the original character of construction details is still present. These elements cannot have deteriorated or been disturbed to the extent that their value as examples of craftsmanship has been lost. For example, if the surface of a carved sandstone gate post has been seriously eroded, the feature will have lost much of its integrity of workmanship because its ability to provide information concerning older designs and techniques of stone carving has been lost. Conversely, a steel superstructure may hide un-reinforced brick walls of an old commercial building which can provide a valuable record of 19th century solid-wall brick construction techniques.

2. Age.

E = 125 years old or older 3 = 100 years old or older 2 = 75 years old or older 1 = 50 years old or older

Comment: An E designation is based on the premise that any manmade feature which survives for 125 years or more is intrinsically exceptional and therefore subject to special consideration by virtue of its age, irrespective of other ratings.

3. Association.

- a. Association with an event, movement, organization, or person important to the community, state or nation.
 - E = resource has a central or continuous association with an event...

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- 3 = resource has a direct association with...
- 2 = resource has an indirect association with...
- 1 = resource has a distant association with...

Comment: The significance of the event, movement, organization, or person must be established before this criterion is applied.

- b. Designer.
 - E = a designer who has made important contributions to the community <u>and</u> to the state or nation
 - 3 = a designer who has made important contributions to the community
 - 2 = an "attributed to" designer who has made important contributions to the community
 - 1 = the designer is unknown.

Comment: This significance attribute focuses on overall designer contributions rather than on the aesthetic merits of the design itself.

- c. Architectural Style or Building Type.
 - E = retains all the attributes associated with its style or type <u>or</u> is a good example of its style or type if few survive
 - 3 = retains most of the attributes associated with its style or type <u>or</u> is remodeled in a recognizable style that does not destroy the original style or type
 - 2 = retains few, but sufficient attributes associated with its style or type
 - 1 = undecipherable as a style or type <u>or</u> is one of many examples of its style or type

Comment: Vernacular building types and industrial architecture are equal in resource value to well-defined and studied architectural styles.

- d. Construction materials.
 - E = outstanding or very early example if few survive
 - 3 = outstanding or very early example if many survive; good example if few survive
 - 2 = good example if there are many examples of any material(s) and/or method(s) not generally in current use
 - 1 = common example of any method(s) and/or material(s)

Comment: Examples of outstanding construction methods or structural materials include those which successfully address challenging structural problems, or which are treated as visible elements that contribute significantly to the resource's overall design quality, or which exhibit fine craftsmanship.

- e. Traditional Lifeways.
 - E = resource has a central association with a tradition spanning three or more generations
 - 3 = resource has a direct association with a tradition spanning three or more generations
 - 2 = resource has a direct association with a tradition spanning two generations <u>or</u> an indirect association with a tradition spanning two or more generations
 - 1 = resource has a distant association with a tradition spanning two or more generations

Comment: Traditional lifeways, as used here, pertain to cultural patterns which have attained antiquity commensurate with the age requirement to which tangible resources are held. A central association ("E" rating) implies a quality of uniqueness between the resource and the tradition.

- f. Association with Broad Themes of Local, State, or National History.
 - E = resource has a central association with theme(s)

- 3 = resource has a direct association with theme(s)
- 2 = resource has an indirect association with theme(s)
- 1 = resource has a distant association with theme(s)

Comment: The theme and its significance must be established before this criterion is applied. A helpful measure of this criterion is to consider how useful the resource would be for teaching or writing about cultural history.

- g. Conveys Important Sense of Time and Place.
 - E = an individual resource or a unified urban or rural landscape which defines a period of 100 or more years ago
 - 3 = an individual resource or a unified urban or rural landscape which defines a period of 75 or more years ago
 - 2 = an individual resource or a unified urban or rural landscape which defines a period of 50 or more years ago
 - 1 = a unified urban or rural landscape which is less than 50 years old

Comment: A useful measure of this criterion is to consider whether the resource(s) has/have a prominence which contributes to a historic, visual, or environmental continuity. Would a typical resident of the area notice the resource(s) and remember it/them?

h. Ability to Yield Important Information.

This attribute of significance is not quantifiable. Generally, when this criterion is invoked, it is an indication that the resource under study requires further examination by a professional from a related discipline. Nevertheless, it is incumbent upon the historical specialist to consider what qualities of the resource or the project area might enable it to yield information that is important to another scholarly discipline.

For instance, the presence of building foundations or of a well, privy, trash pit, drain, sump, or cistern indicates that the project area may possess historic archaeological research potential. Similarly, is there archival evidence (maps, written documents, etc.) that the project area was occupied before or during some transitional period, either naturally occurring (e.g., fire, flood, drought, or earthquake) or culturally induced (e.g., highway or city street construction, the laying of water or sewer mains, or new building construction)? As a corollary, is there evidence that these earlier features may have survived to the present as subsurface resources?

In a different vein, is there evidence, gained through archival research, site inspection, or consultation with community groups or individuals, that the project area has a tangible or intangible quality of tradition that is important to an identifiable cultural group? For instance, there might be evidence that Italian immigrant stonemasons had cut stone from a sandstone outcropping occurring in the project area or that the area might be the site of a legendary event. If so, even if the data are sufficient, to determine a significance level under C-5, it would be appropriate to discuss additional research potential here.

If a cultural resource is determined not to be "important", both the resource and the effect on it shall be noted in the project file Initial Study or EIR but need not be considered further in the CEQA process. The project applicant is responsible for the complete funding of Phase 2 investigations. Phase 2 investigations are not limited by cost; however, costs are limited to providing services defined in scopes of work which

are developed by the Planning and Development Department.

C. Phase 3: Mitigation.

- 1. Introduction. Once it is determined that an important archaeological or historical site may be significantly impacted by a project, the County may require preparation of an EIR. The EIR discussion must include the following work: (1) document the justification for the "importance" determination; (2) determine what type of information is necessary to evaluate the "scientifically consequential information from and about the resource," and if this information has already been gathered during previous investigation phases. The consultant developing the mitigation program consider that excavation as part of a mitigation plan shall be restricted to areas of direct and indirect impact unless special circumstances require limited excavation or an immediately adjacent area in order to develop important information about the part of the resource that would be destroyed.
- 2. Mitigation of Important Archaeological or Historical Sites and Timing. There are special timing and deadline issues on mitigation programs required in CEQA Appendix K. Important timing issues state that unless special or unusual circumstances warrant an exception, the field excavation phase of an approved mitigation plan shall be completed within 90 days after final approval necessary to implement the physical development of the project, or, if a phased project, the excavation should take place in connection with the phased portion to which the specified mitigation measures are applicable, provided that the project applicant may extend that period if he/she so elects. A mitigation plan shall not authorize violations of any law protecting Native American cemeteries. This means that the County must apply a standard condition to insure that the applicant performs all applicable archaeological mitigation within 90 days after receiving approval on final development plans, or after subdivision map records (Final Map or Parcel Map) unless phasing or special circumstances change this "deadline." The County has the responsibility to wait at least 60 days after the EIR is completed before making a final decision on the project. This time is required in order that persons interested in providing funding agree to do so before the decision is made which would implement any specific mitigation measure.
- **3. Information Regarding Project Costs and Mitigation.** CEQA Appendix K designates limits on an applicant's responsibility to fund mitigation programs. These limits follow:
 - a. An amount equal to one-half of one percent of the projected cost of the project for mitigation measures undertaken within the site boundaries of a commercial or industrial project.
 - b. An amount equal to three-fourths of one percent of the projected cost of the project for mitigation measures undertaken within the site boundaries of a housing project.
 - c. If a housing project consists of more than a single unit, an amount equal to threefourths of one percent of the project cost of the project for mitigation measures undertaken within the site boundaries of the project for the first unit plus the sum of the following:
 - (1) \$200.00 per unit for any of the next 99 units.
 - (2) \$150.00 per unit for any of the next 400 units.
 - (3) \$100.00 per unit in excess of 500.

Where an important archaeological site is involved, the applicant must provide the County with documented, itemized, and projected total project costs, and if applicable, any project

phasing information which could more adequately accommodate the timing and implementation of the field excavation portion of the work beyond the 90 day deadline.

The applicant must also provide an itemized cost estimate of all project design expenditures necessary to preserve portions of all or any archaeological site from disturbance. The County may give credit for these costs in computing the applicant's mitigation costs.

The archaeological consultant must provide several sets of mitigation programs. One will be the estimate of the excavation costs and timing along with the laboratory analysis and report preparation costs and time necessary to fulfill the requirements of the research design. In addition, the consultant should present an alternative mitigation program in case funds guaranteed by the applicant and voluntarily guaranteed by any other persons or persons are less than the original mitigation estimate.

- 4. Land Use Element and Local Coastal Plan Policies and Mitigation. Historical and Archaeological sites policies in the County Land Use Element and Local Coastal Plan specify that if "sufficient planning flexibility does not permit avoiding construction on ... cultural sites, adequate mitigation shall be required. Mitigation shall be designed in accord with guidelines of the State Office of Historical Preservation and The Native American Heritage Commission." It is possible that adequate mitigation costs based on this policy may exceed limits imposed by CEQA Appendix K defined above. In these cases, use of the Appendix K funding limit would cause an inconsistency with these County Land Use Element and Local Coastal Plan policies.
- 5. Sites Discovered During Construction. CEQA Appendix K provides for an archaeological evaluation of the "surprise" find during construction. Construction shall cease in the area of the find but may continue on other parts of the building site while evaluation and necessary mitigation takes place. The applicant would be responsible for funding an immediate evaluation of the find's potential importance. If the find is determined to be an important archaeological resource under CEQA Appendix K, contingency funding and a time allotment sufficient to allow recovering a data recovery sample or to employ one of the avoidance measures shall be implemented.

These provisions shall be included as project conditions where there is some likelihood of an archaeological impact during construction. For example, this would apply to an area near an adjacent recorded site or where no cultural resources were discovered during a field survey, or within a site area previously tested and mitigated by a sample excavation.

D. Curation of Collections.

All non-burial related artifacts collected during Phase 1, 2, and 3 investigations must be curated at an institution within Santa Barbara County. Qualified institutions are those with proper facilities and staffing for insuring research access to the collections. The University of California at Santa Barbara Department of Anthropology is currently the only qualified local institution providing this service to the public and scientific community. In addition to artifacts, all supporting archaeological documentation must be submitted with the artifact collection. Curation arrangements with a qualified institution must be established prior to archaeological proposal preparation. Artifacts curated at the institution may be borrowed by qualified individuals and groups for educational use, display, ceremonies, etc.

The disposition of burial-related artifacts is covered by state law concerning burial remains (see Ethnic Impacts, Discovery of Human Remains).

E. Ethnic Impacts.

1. Ethnic Impact Assessment. Appendix G, Significant Effects, of CEQA defines the need for evaluating the impacts a project may have on a community, ethnic, or social group.

A project will normally have a significant effect on the environment if it will cause one of the following:

- j. Disrupt or adversely affect a prehistoric or historical archaeological site or a property or historical or cultural significance to a community or ethnic or social group.
- w. Conflict with established recreational, educational, religious, or scientific uses of the area.

In order to evaluate these potential impacts, the County requires that appropriate representatives of affected community groups be contacted to assess their concerns and viewpoints concerning measures to mitigate those impacts. Ethnologists approved by the Planning and Development Department are to carry out this research in accordance with requirements and procedures for assessing ethnic cultural resources and concerns in compliance with the California Environmental Quality Act (Susan Brown n.d.) adopted by the Planning and Development Department, and the Native American Heritage Commission's Guidelines for the Protection of the Native American Heritage Resources. Contact should be made early in the evaluation process during the Phase I investigation as well as subsequent phases of work.

If the affected community does not consider to mitigation measures proposed by consulting archaeologists and incorporated in the project description by the applicant, the project may be considered to result in a significant impact and an EIR (or EIR section) may be prepared.

There are currently four recognized Native American groups in Santa Barbara County representing local Native American individuals of Chumash descent. The United Chumash Council represents various Chumash groups of the South Coast. The Santa Ynez Federally Recognized Elders Council represents Chumash living on the Santa Ynez Reservation. The Santa Ynez Kit Wo' N' Unio represents particular families on the Reservation, and the Candelaria American Indian Council represents South Coast documented Chumash. The Planning and Development Department will contact all groups if prehistoric archaeological sites are to be impacted to evaluate this effect on their ethnic values.

- 2. Discovery of Human Remains. The County policy regarding disposition of human remains disturbed during project construction is defined in CEQA Appendix K, Section VIII. If remains are encountered at any time, the County Coroner shall be contacted to determine the age and the origin of the bones. A qualified physical anthropologist will assist the coroner to make the determination whether human remains are prehistoric or not. If human remains are considered Native American, the individuals most likely to have descended from the individuals represented by the remains will then be contacted who will make recommendations regarding the treatment and re-internment of the remains and associated grave goods. If no descendants can be identified, the Native American Heritage Commission shall select the representative responsible for the disposition of the remains. These arrangements will be made with the landowner and will include an appropriate period of time for a Planning and Development Department approved physical anthropologist to analyze the associated grave goods.
- 3. Native American Consulting. Native Americans are retained during all sub-surface

investigations and disturbances of archaeological sites to insure compliance with Appendix K, Section VIII. They may be involved in Phase I fieldwork investigation as well.

F. Sequential Steps for Implementation of CEQA Appendix K.

- 1. Determination by the Planning and Development Department staff during Initial Study process that a project site may have a potential archaeological, or historical, or Native American culturally significant resource.
- 2. Professional fieldwork and documentation that a project will or will not have a direct or indirect physical impact on such a resource (Phase 1 investigation).
- 3. If the project does not have such potential, a finding of "significant impact" is not made and EIR is not prepared (specifically for "cultural resource reasons"). The project may also be redesigned or "self conditioned" at this stage to avoid the resource or to guarantee its protection.
- 4. If the project does have the potential to impact significantly a resource and the project cannot be revised to avoid the resource, the site must be evaluated in order to determine whether it meets the criteria to be defined as important (Phase 2 investigation). Evaluations are performed by a Planning and Development Department approved archaeologists, historians, and/or ethnographers and may or may not require field excavation as well as laboratory analysis but such reports do require, at a minimum, a historical records search when the site has been previously disturbed.
- 5. If the resource is found to be unimportant, no further professional work is required and a negative declaration may be issued if the only issue is cultural resource impacts.
- 6. If a determination is made that the resource is important, the applicant will be requested to work closely with the County and the cultural resource consultant to provide for appropriate mitigation either by avoidance of the deposit, adoption of development restrictions to preserve them, or special construction techniques (e.g., covering, etc.) to protect them. To the extent that direct impacts cannot be avoided, mitigation measures shall be required. The development of such measures will be the task of the consultant working in conjunction with the county and the applicant, which would require additional archaeological excavation of a sample of the area to be impacted (Phase 3 investigation).
- 7. The consultant will need to be provided the cost-estimates of each project if the analysis reaches this stage. According to CEQA the amount paid by a project applicant for mitigation depends upon the kind of project and the number of units. The mitigation cost formulas are the following:
 - a. Commercial or industrial projects:

Mitigation Costs (MC) = Total project cost (TPC) x 0.005

- b. Residential Projects:
 - (1) One unit: $MC = TPC \ge 0.0075$
 - (2) One 99 units: MC = Project costs for one unit (PC1) x 0.0075 + \$200 x (total number of units less one (TNU-1))
 - (3) 99 499 units: MC =PC1 x 0.0075 + \$200 x TNU-1 (up to 99) + 150 x (number of units from 99 up to 499)
 - (4) Over 500 units: MC = formula (3) above + \$100 x (number of units in excess of

500)

This total may be determined to be inadequate to fully mitigate cultural resource impacts and be inconsistent with the County Land Use Element and Local Coastal Plan policies.

8. After the consultant prepares a report substantiating the importance of the resource together with an appropriate mitigation program(s) detailing full mitigation costs and maximum applicable costs to the applicant (using (7) above), the County will enter the data into an EIR to allow for full public and applicant comment, and certify the document.

The consultant must state and the County must decide whether previous studies of the resource have "... adequately recovered the scientifically consequential information from and about the resource." The County and the consultant are required to present the evidence for such a finding in the EIR. In such a case, no further mitigation would be required. In some cases, previous information concerning a site may provide only partial information and more research may be needed.

9. If necessary, the County must seek out private donations for the unpaid one-half of the proposed mitigation program within 60 days of the certification of the EIR and before the discretionary decision on the project application.

REFERENCES

These references are available through the County of Santa Barbara Planning and Development Department.

Conservation Element of the Comprehensive Plan, April 1979. pp. 13 - 14, 224 - 256.

Land Use Element of the Comprehensive Plan, August 1982. pp. 89 - 90, 109.

Santa Barbara County Coastal Land Use Plan, Section 3.10, Archaeological and Historical Resources, pp. 140-143, March 1981

County Land Use and Development Code, Section 35.60.040

9. ELECTROMAGNETIC FIELDS THRESHOLD

A. Introduction.

Due to the proliferation of sources of electrical energy with their associated electromagnetic fields (EMFs) and increasing public awareness over the potential health affects associated with these sources, the need to address these potential health effects through disclosure of potential environmental impacts has arisen. Although scientific evidence is inconclusive, this document briefly summarizes the information known regarding EMFs, identifies guidelines for evaluating impacts, sets a threshold to trigger project-level environmental review, and suggests mitigation approaches where possible to reduce exposure to electromagnetic fields.

B. Background.

Electromagnetic fields are composed of both electric fields and magnetic fields. Both types of fields occur in nature and in all living things. Electromagnetic energy occurs over a broad range of frequencies known as the electromagnetic energy spectrum (see figure 1). The frequency, or Hertz (Hz), that we are concerned with in this County, ranges from extremely low frequency (60 Hz) associated with power transmission facilities to 3×10^{10} Hz associated with microwaves. In between these frequencies are EMFs generated by radio, television, and radar transmissions. EMFs generated by these sources have similar properties in that they all contain electric and magnetic fields. However, the types of EMFs generated by higher frequency sources associated with communication facilities. These differences are discussed in more detail below.

Electric and magnetic fields are present wherever there is an electric current and voltage. Electric fields come from the amount of the charge, or voltage. They represent the forces that electric charges, which are either positive or negative, exert on each other. Electric fields are measured in volts per meter (V/m), or kilovolts per meter (kV/m). As electric charges move, they create additional forces on each other. These forces are carried through space by magnetic fields. Magnetic fields, therefore, result from the motion of an electric charge, or current. Magnetic fields are measured in milligauss (mG). When most people think of EMFs, they probably think of power transmission and distribution lines, however, they are present in household wiring and appliances and are propagated by communications facilities.

The physical characteristics of radiofrequency radiation (RFR) and extremely low frequency (ELF) EMFs from electric power differ in their function, frequency, wavelength, power levels and EMF characteristics. The function of communication facilities is to radiate energy away from an antenna outward over long distances, providing a broadcast signal for reception at another point. This is in direct contrast to electric power transmission, where the goal is to minimize any radiation away from the power cable itself (minimize power loss), while maximizing efficient energy movement along the power line. Thus, communications systems broadcast energy out through space, while power transmission attempts to minimize energy loss in space by sending energy along a cable (Wong, 1991).

Regarding the characteristics of frequency, wavelength, and power levels, ELFs differ from radio waves in that they are much lower in frequency, have extremely long wavelengths compared to very short wavelengths of radio waves, and the power levels are generally much higher in power transmission facilities than in communication facilities.



Uses Frequency Spectral Regions Wavelengths

Source: EFRI, Undated

Figure 1. The electromagnetic spectrum shown by frequency and wavelength. At a frequency of 60 Hz and a wavelength of 5,000,000 meters power transmission is at the top of the figure. Frequencies less than 300 Hz are designated as the ELF (extremely-low-frequency) range.

In the case of EMF from communication facilities, the electric and magnetic fields travel, or propagate long distances from their sources. The electric and magnetic fields are linked and are considered together as a radiating electromagnetic field, thus creating what is known as radiofrequency radiation. In contrast, low frequency EMFs found in power lines project fields around the power line itself and do not propagate. In the case of electric power, the electric and magnetic portions are considered to be independent, and are not linked. Thus, when studying power-frequency fields, the separate electric and magnetic fields must be considered, not just the radiating electromagnetic fields or RFR which is typically studied in the case of radio waves (Tenforde and Kaune, 1987).

Radiation associated with EMFs is considered non-ionizing radiation. That is, the energy associated with these types of electromagnetic fields do not have the ability to ionize electrons and molecules. Ionization refers to the breakdown of chemical bonds between molecules, which results in tissue damage (Wong, 1991).

Common sources of EMFs (both low and higher frequency sources) and their field strength characteristics are discussed in Appendix A.

C. Health and Safety Issues.

In recent years, involuntary exposure of the general public to elevated EMFs has become a growing concern. This attention centers on a growing body of evidence, some of which suggests that 60-Hertz (Hz) magnetic fields at low intensities have been shown to produce adverse biological effects, in addition to factual proof that thermal heating of body tissue associated with RFR can have harmful effects.

Studies regarding ELFs to date have primarily been focused in three categories. These include cellular level studies, whole animal and human studies, and epidemiological studies. Cellular level studies have been focused on calcium efflux, cancer promotion, endocrine secretion and immune response. Animal and human studies have been focused on the nervous system, behavior patterns, reproduction and development; and cancer progression. Epidemiological studies have looked at the hypothetical relationship between human exposure to EMFs produced by power systems and human cancers occurring in children, adults and workers in occupations where extensive exposure to EMFs is an issue. Studies in each of these three categories indicates that there is evidence that 60-Hz magnetic fields can produce biological effects. A summary of these effects is included in Appendix A. What is not clear, however, is whether and how those biological effects can cause public health problems (Wong, 1991).

Effects of RFR have been primarily linked to thermal responses as a result of exposure to RF sources of energy. In general, exposure of humans and animals have the potential to interact with body tissue such that water molecules become excited, causing friction and concomitant rises in body temperature, albeit slight in most instances. This effect is similar to that which is experienced within a microwave oven, where the water molecules within the food substance are excited to create heat, thus resulting in the warming of food. Other effects, include RF burns, in which in the very near field, especially in the microwave frequencies, a person has the potential to receive a burn similar to a sunburn. The standards for RFR discussed below deal primarily with thermal effects, as many of the athermal effects are still unknown and are similar to those discussed above for ELF sources. Some of the potential ill-effects include behavior changes, abnormal hormone production, and ocular changes.

D. Thresholds.

1. ELFs. While some evidence supports the fact that there may be some biological effects which may result from low frequency EMFs, there are no standards or guidelines to govern the public's involuntary exposure to ELFs. Some jurisdictions throughout the nation and internationally have tried to address the problem by establishing setbacks based upon field strengths from high voltage power lines. However, none of the setbacks established are based on any causal relationship between field strengths and adverse health effects.

Standards for ELFs are based upon the measurements of Kv/m for electric fields, and mG for magnetic fields. At the present time, most attempts at establishing standards or dosimetric relationships have focused on the limitation of magnetic fields since it is generally impossible

to shield individuals from these fields. In general, it is relatively easy to shield individuals from electric fields as they do not readily penetrate buildings, structures, fencing, trees, etc.

At this time, given the current information regarding potential health impacts and the uncertainty surrounding these impacts, the Board of Supervisors did not adopt a specific threshold for ELF exposure. Instead, the Board of Supervisors directed staff to evaluate ELF exposure on a case by case basis, using the most current scientific data.

- 2. **RFR.** For RFR, standards have been established for effects resulting from thermal heating of body tissue. The most widely used conservative standards are the IEEE-ANSI C95.1-1992 Standards, which are based on power densities, as shown in Figures 2 and 3. Power density is the rate at which electromagnetic energy radiates through space in terms of watts per square meter (W/m²) or milliwatts (1/1,000th of a watt) per square centimeter (mW/cm²) and is customarily used in addition to the specification of the strengths of electric and magnetic fields by kV/m and mG when defining standards. It is important to note that the IEEE-ANSI standards are frequency dependent. That means that for sources of RF below and above the 30-300 MHz range, the standard is relaxed in accordance with the graph in Figure 2 and 3. The most stringent standard is for the 30-300 MHz range, and is represented by the power density level of 0.2 mW/cm² for general population exposure and 1.0 mW/cm² for occupational exposure. These standards do not address the athermal effects which are also associated with ELFs.
- **3. RFR threshold.** "If humans would be exposed to radiofrequency radiation (RFR) in excess of the IEEE-ANSI C95.1-1992 standard, through the siting of new projects next to RFR sources or through the siting of new RFR sources adjacent to sensitive receptors , then a potentially significant impact would occur. (If the FCC rulemaking committee adopts a revised standard, said standard shall apply).

E. Mitigation Strategies.

In order to mitigate potential impacts from electromagnetic fields, mitigation should be designed to prevent exposure of individuals to elevated electromagnetic fields. For ELFs, this means that projects should be designed such that no living spaces are exposed to elevated magnetic fields. For RFR, individuals should not be exposed to levels exceeding the IEEE-ANSI Standards. Mitigation may take the form of setbacks, prohibitive/restrictive fencing, warning signs, disclosure statements, reconfiguration of power lines, reduction of power inputs to transmitting facilities, etc.





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APPENDIX A - SOURCES OF EMF AND THEIR FIELD STRENGTH CHARACTERISTICS HEALTH EFFECTS SUMMARY SOURCES OF ELECTROMAGNETIC FIELDS

Sources of ELFs are found throughout our daily lives, in and around our homes. It is virtually impossible to live in modern society without exposing one's self to some of these sources of EMFs. Higher frequency EMF sources which generate potentially harmful effects are not as common in our day-to-day lives, and in general expose fewer people. The reason for this is that transmitting communications facilities, such as radio and microwave broadcast facilities, are generally sited in sparsely populated areas. It is also important to note, that in the case of both low and high frequency EMFs, the energy/fields or power density radiated (both electric and magnetic) will generally decrease sharply with distance from any radiating source in keeping with the inverse square law. That is, each time distance from the source is doubled, the power density will decrease by a factor of four (S.B. County Planning and Development Department, 1992). Figures 1 and 2 illustrate the decreasing electric and magnetic fields associated with transmission, distribution, and household appliances.

As mentioned previously, there are two types of EMFs that are of primary concern: 1) the non-linked electric and magnetic fields associated with extremely low frequencies (ELFs), and 2) the linked electric and magnetic fields constituting radiofrequency radiation (RFR) that is associated with the higher frequencies used for communications, radar, and microwave equipment.

Common sources of Extremely Low Frequency fields include the following:

Power lines Motors & generators Transformers, electrical distribution panels, switchgear Electrical appliances Electric blankets, heating pads, water bed heaters Electric resistance heating Florescent lighting Electric (Analog) clocks Home and commercial building wiring Metal water pipes, gas line, cable TV, telephone cables (grounds)

Common sources of Radio Frequency emissions include the following:

Radio and television transmission facilities Microwave and cellular facilities Radios, TV's, computers & computer monitors, etc. Microwave ovens, induction cook tops

HEALTH EFFECTS SUMMARY

Sykes and Li, 1990, have briefly summarized the four effects that are currently under discussion based upon scientific research currently available. These include:

Changes in cell activity. Exposure to ELF fields can cause changes in calcium flow through the cell membrane, changes in the immune response by cells, and changes in RNA transcription.

Interactions with the nervous system. Animal studies have shown a consistent effect of electric fields on the secretion of certain neurohormones which administer the circadian rhythms, but the effect is demonstrated only at certain field frequencies and intensities. Some studies have reported altered sensory response and stress response.

Variations in reproduction and development. ELF field exposure may be associated with abnormal embryo development for some specific circumstances and may affect brain development.

Effects on cancer promotion. No evidence of initiating cancer by exposure to ELF fields has been found. Laboratory studies on immune response, RNA transcription and circadian rhythms, and epidemiological surveys have suggested that ELF fields might play some role in promoting cancer, but the kind of cancer promotion is still inconclusive.

10. GEOLOGIC CONSTRAINTS GUIDELINES (Approved by the Board of Supervisors August 1993)

The purpose of these guidelines is to provide preliminary criteria for determining whether a particular activity could have a potentially significant impact on the environment as described in Section 15064 of the State CEQA Guidelines. Because geologic conditions are highly variable within Santa Barbara County, these guidelines are not fixed thresholds upon which a determination of significant impact would be made. They serve to point out when further study of site-specific conditions is required in order to assess geologic impacts. The level of project geologic impacts (i.e. potentially significant, potentially significant but subject to effective mitigation or not significant) is made by the Planning and Development Department staff (in consultation with licensed geologists and engineers as necessary) upon review of project plans, proposed mitigation measures and site-specific geologic information.

Impacts are considered potentially significant if the proposed development activity, including all proposed mitigation measures, could result in substantially increased erosion, landslides, soil creep, mudslides and unstable slopes (Appendix G(q), CEQA Guidelines). In addition, impacts are considered significant when people or structures would be exposed to major geologic hazards upon implementation of the project (Appendix G(r), CEQA Guidelines).

Impacts related to geology have the potential to be significant if the proposed project involves any of the following characteristics:

- 1. The project site or any part of the project is located on land having substantial geologic constraints, as determined by the Planning and Development Department or the Public Works Department. Areas constrained by geology include parcels located near active or potentially active faults and property underlain by rock types associated with compressible/collapsible soils or susceptible to landslides or severe erosion. Special Problem Areas designated by the Board of Supervisors have been established based on geologic constraints, flood hazards and other physical limitations to development.
- 2. The project results in potentially hazardous geologic conditions such as the construction of cut slopes exceeding a grade of 1.5 horizontal to one vertical.
- 3. The project proposes construction of a cut slope over 15 feet in height as measured from the lowest finished grade.
- 4. The project is located on slopes exceeding 20 percent grade.

Mitigation measures may reduce impacts to a less than significant level. These measures would include minor project redesign and engineering steps recommended by licensed geologists and engineers subsequent to detailed investigation of the site.

11. GREENHOUSE GAS EMISSIONS (Approved by the Board of Supervisors May, 2015)

Introduction

This chapter provides CEQA lead agencies with a quantitative criterion by which to determine if greenhouse gas (GHG) emissions from applicable industrial stationary sources that are subject to discretionary approval will have a significant cumulative effect on climate change. Among statewide actions to reduce greenhouse gas emissions, the California Natural Resources Agency amended the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines) in 2009. The amendment requires CEQA lead agencies to "...make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of greenhouse gas emissions resulting from a project" unless the lead agency determines that the project is exempt from CEQA (CEQA Guidelines §15064.4). The amendment further obligates lead agencies to consider if the estimated amount of greenhouse gas emissions from a proposed project exceeds a threshold of significance, and to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Climate change under CEQA differs from most other types of impacts in that, by definition, it is only examined as a cumulative impact that results not from any one project's GHG emissions, but rather from GHG emissions "... generated globally over many decades by a vast number of different sources."¹ Therefore, analysis of a project's GHG emissions under CEQA focuses solely on the incremental contribution of estimated project emissions to climate change. A CEQA lead agency may determine that a project's incremental contribution to an existing cumulatively significant issue, such as climate change, is not significant based on supporting facts and analysis (§15130(a)(2)). CEQA Guidelines direct that a project is required to implement or fund its fair share of a mitigation measure designed to alleviate the cumulative impact (§15130(a)(3)). Such determinations must be based on analysis in the environmental document with substantial evidence to demonstrate that mitigation required of a project represents the project's "fair-share" contribution towards alleviating the cumulative impact.

Threshold for Industrial Stationary Sources

<u>Applicability</u>

• The threshold applies to the following greenhouse gases, per the California Health and Safety Code §38505(g), and any other gas that the California Air Resources Board recognizes as a greenhouse gas in the future: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulfur hexafluoride (SF6), nitrogen trifluoride (NF3). The County recognizes that environmental documents will primarily focus on

¹ Kostka, Stephen I. and Michael H. Ziechke, Practice Under California Environmental Quality Act, Second Edition, Volume 2, (Oakland, CA: 2013, Continuing Education of the BAR, §20.83; California Natural Resources Agency, Notice of Public Hearings and Notice of {Proposed Amendment of Regulation Implementing the California Environmental Quality Act, 2009; Hegerl, GC. et. al, "Chapter 9: Understanding and Attributing Climate Change," Climate Change 2007: The Physical Basis, Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel of Climate Change (Cambridge: Cambridge: Cambridge University Press, 2007.

the first three chemicals, because the latter four are unlikely candidates to be associated with projects subject to this threshold.

- The threshold applies to industrial stationary sources subject to discretionary approvals by the County, where the County is the CEQA lead agency. The County encourages other CEQA lead agencies and NEPA lead agencies to use this threshold, where the County is a CEQA responsible agency for a project.
- The threshold applies to both direct and indirect emissions of greenhouse gases, where protocols to support calculation of such emissions are available.
 - Direct emissions encompass the project's complete operations, including greenhouse gases emitted from a location within California from all stationary and mobile sources, involved in the operation, including off-road equipment, as well as removal of trees and other vegetation.
 - Indirect emissions encompass greenhouse gases that are emitted:
 - To provide the project with electricity, including generation and transmission;
 - To supply the project with water, including water treatment;
 - To transport and treat solid and liquid waste produced from the project's operations and water to the project's operations and the emissions to transport and process solid.
- Construction-related emissions are to be accounted for in the year that they occur.
- The threshold does not apply to greenhouse gases that are emitted throughout the life cycle of products that a project may produce or consume, except as identified above as a project's indirect emissions.
- The threshold does not apply to residential or commercial development.

Quantification of Greenhouse Gas Emissions

- The environmental document shall first quantify and disclose a project's greenhouse gas emissions by individual greenhouse gas and then convert the project's emissions to metric tonnes of carbon dioxide equivalent per year (MTCO2e/year), based on the global warming potential of each gas.
- Renewable energy projects, such as solar and wind projects, may be credited for greenhouse gas emissions that would otherwise be emitted by natural gas-fueled electrical generation, based on consistency with California greenhouse gas reduction strategies to increase statewide reliance on renewable energy.

Numeric Bright-Line Threshold

All industrial stationary-source projects shall be subject to a numeric, bright-line threshold of 1,000 MTCO₂e/year to determine if greenhouse gas emissions constitute a significant cumulative impact. Annual GHG emissions that are equivalent to or exceed the threshold are determined to have a significant cumulative impact on global climate change unless mitigated. For the purpose of addressing the potential for unmitigated incremental growth, the combined GHG emissions from one or more previous discretionary permit project approvals after adoption of this threshold will be considered in the environmental review of all subsequent discretionary permit applications that, as determined by the County, constitute separate parts or phases of the previously approved projects, including but not limited to:

- Any series of oil and gas production projects under common ownership or control, including related processing and transport operations that are located within the same State-designated oil field, or represent an expansion of any State-designated oil field.
- Any series of surface mining projects under common ownership or control, including related processing and transport operations, that are located within the same individually designated Surface Mining and Reclamation Act (SMARA) operation, or represent an expansion of any individually designated SMARA operation.

<u>Mitigation</u>

Projects found to result in a significant cumulative impact would be required to reduce their greenhouse gas emissions to the applicable threshold, where feasible, through onsite reductions and/or offsite reduction programs approved by the County.

Periodic Revisions

The Director of Planning and Development shall re-examine this threshold at least every five years to ensure its consistency with evolving GHG reduction progress, plans, targets and regulations. As necessary, the Director will recommend amendments and updates to the Board for consideration.

Relation to County Energy and Climate Action Plan

This threshold represents one of several cohesive efforts undertaken by Santa Barbara County to reduce GHG emissions. Those efforts include the Energy and Climate Action Plan (ECAP), which seeks to reduce countywide emissions by 15 percent below the 2007 baseline emissions inventory by the year 2020. The ECAP constitutes a local GHG reduction plan that, pursuant to CEQA Guidelines §15183.5(b), allows a CEQA lead agency to determine whether a future project's incremental contribution to the cumulative effect of climate is significant or not, based upon compliance with requirements of the reduction plan.

This threshold and the ECAP are intended to complement one another during implementation. Permit approval of future industrial stationary source projects would need to demonstrate compliance with the reduction measures of the ECAP that may be applicable to the project, as well as mitigation measures to achieve reductions of emissions to a level below the recommended threshold of significance where feasible. Quantifiable measures to reduce a project's GHG emissions in compliance with the ECAP may also count towards GHG reductions under this threshold.

12. GROUNDWATER THRESHOLDS MANUAL FOR ENVIRONMENTAL REVIEW OF WATER RESOURCES IN SANTA BARBARA COUNTY (Prepared by Brian Baca, Registered Geologist, revised and

updated August 20, 1992)

A. Introduction.

1. Threshold of Significance. The Threshold of Significance is the point at which a project's estimated contribution to the overuse of groundwater in an alluvial basin or other aquifer is considered significantly adverse. This manual documents the methods used to establish the threshold values for groundwater extractions from the various alluvial basins and consolidated rock aquifers in Santa Barbara County. Note that the California Supreme Court has ruled that an EIR must be prepared whenever it can be fairly argued on the basis of substantial evidence that a project may have a significant environmental impact. Implementation of CEQA requires that a lead agency (such as the county) determine what constitutes a potentially significant effect.

In the past, thresholds for the alluvial basins have been determined based on a fixed number of acre-feet per year (AFY), a percentage of existing overdraft, or a percentage of safe yield. In the most recent editions of this manual, the threshold has been calculated from a standard formula which included factors of available storage and overdraft. In this update of the manual, a new methodology developed by the Planning and Development Department is used. A threshold was chosen for an idealized "Standard Reference Basin" based on a percentage loss of the remaining life of the available storage. Thresholds for the other basins are proportional to this value based on relative size and remaining life. This method was developed to simplify the calculations and more clearly link the various threshold levels to the environmental circumstances specific to each basin.

The Threshold of Significance for consolidated rock ("bedrock") aquifers is considered the amount of new pumpage by a proposed project which would place the aquifer in a state of overdraft. This criteria has remained the same since adoption of the first thresholds manual in 1983.

The groundwater Thresholds of Significance apply to all projects subject to discretionary review by the County of Santa Barbara.

- 2. Water resources in Santa Barbara County. Water supplies in Santa Barbara County come from two sources:
 - a. Surface water impounded behind dams on the Santa Ynez River augmented by infiltration into delivery tunnels drilled through the Santa Ynez Mountains.
 - b. Groundwater pumped primarily from the fourteen alluvial basins. Additional water is produced from bedrock aquifers in the hills which surround the alluvial basins.

These supplies are limited. Long-term average annual yields of the surface reservoirs, as currently constructed, are fixed values subject only to downward adjustment due to siltation or the occurrence of a new worst-case drought. Groundwater supplies are limited in terms of the annual amount of water which can be withdrawn without causing a long term drop in water levels ("Safe Yield") and in the amount of total storage of a basin which can be removed without significant environmental effects ("Available Storage"). These limits make conservative use of water a necessary policy in Santa Barbara County in order to avoid or minimize significant and lasting adverse environmental effects.

Figures 1a and 1b illustrate the location of the major alluvial basins in Santa Barbara County. Also shown are the Ellwood/Gaviota and Gaviota/Point Conception areas dominated by bedrock pumpage.

- **3.** Environmental concerns in alluvial basins. Adverse environmental effects which can be caused by overdraft of an alluvial groundwater basin include:
 - a. Degradation of water quality. Water quality varies considerably from one basin to another. In general, water quality in the groundwater basins of Santa Barbara County is declining with continued use of the resource, particularly in areas where the water table has been significantly lowered. Factors attributable to man which contribute to continuing degradation include pollution by agricultural runoff waters laden with fertilizers and pesticides, percolation of water from public and private sewage treatment systems, use of imported water which increases the salt load on a basin, percolation of polluted urban runoff, the reduction of the natural "flushing" effect of water through-flow caused by lowered water levels and the upward or lateral influx of connate brines by over-pumping of the freshwater aquifers. Preventive measures are the best way to address the ongoing deterioration. In general, the amount of pollutants placed in the ground, and the level of overdraft in the basins, should be minimized.
 - **b.** Saltwater intrusion. Intrusion of marine salt water is a problem which could affect all of the coastal basins of Santa Barbara County. Unfortunately, few data are available on its occurrence in the past. Recent USGS studies have shown that salt water has intruded a few hundred feet onshore in Storage Unit No. 1 of the "Santa Barbara City Basin." Computer modeling conducted as part of this work indicated that the rate of salt water advance was four times greater than the rate at which the salt water could be flushed out by natural processes. Prevention of salt water intrusion is thus a key concern of projects supported by coastal pumpage.
 - c. Land subsidence. Land subsidence can occur in alluvial basins where water levels have dropped due to pumpage. Substantial evidence has not been reported in Santa Barbara County. Subsidence in the overdrafted Goleta Basin has undoubtedly occurred but most of it probably took place many decades ago when the lower aquifers were first penetrated (according to the County Water Agency). Land subsidence can be a significant problem which can damage structures erected above a local cone-of-depression caused by extensive pumping.
 - **d.** Loss of well yield. Dropping water levels in a basin due to overdraft will reduce the rate at which individual wells will be able to produce water. Drilling more wells or deeper wells are the two methods of maintaining groundwater production to service a particular municipal or agricultural demand. There are, however, technical, legal and economic limitations on the ability of individuals or public or private purveyors to use these methods. With these limitations, it is likely that continued drop in water levels due to overdraft will cause loss of agriculture and a reduction in the ability of water districts to serve existing demand.
 - e. Well interference. New pumpage as part of a proposed project may cause a loss of well yield in nearby wells due to 1) a drop in water level as a cone-of-depression develops, or 2) a drop in water level due to storage depletion in a small isolated area. This could result in the current use on adjacent parcels being no longer supportable by

the existing well(s).

f. Reduction of surface water available to support biological resources. Pumpage of groundwater causes fluctuations over time in the elevation of the groundwater table. Lowering of the water table can effect biological resources on the land surface by reducing access to water by deep-rooted native vegetation or by reducing discharge of groundwater (baseflow) in streambeds. Even if a basin were pumped at a hydrologic "safe yield" rate (long-term water levels remain stable) a drop in water levels during a drought could adversely affect biologic resources.

In nearly all cases, an individual project's effect on biological resources would not have a discernable local effect as the new pumpage would add incrementally to the regional change in water levels. Thus, the thresholds of significance included herein would adequately address this impact. Under certain conditions, however, a local pumping depression could adversely affect a specific habitat area. In this case, the effects would need to be analyzed in the biologic resources section of the project environmental document.

Environmental concerns in consolidated rock aquifers. Consolidated rock aquifers are 4. generally less extensive and have much smaller annual safe yield values than the alluvial basins. Environmental concerns associated with these aquifers include degradation of water quality, long-term loss of well yield, well interference and effects on biological resources. The discussion of these concerns presented above for alluvial basins applies to consolidated rock aquifers except for biological resources. Pumpage of consolidated rock aquifers has a direct effect on average annual flows downstream of the well site. This is because a pumpage-related drop in water levels (from native conditions) will lessen or eliminate baseflow out of the aquifer and induce groundwater recharge by stream flows. The reduction in flows represented by typical safe yield (potential average annual recharge) values estimated for hardrock aquifers is usually only a small proportion of the total average annual streamflows and would not likely result in substantial impacts on downstream riparian habitat. In certain cases where the proposed pumpage would cause a substantial reduction (as determined by the Planning and Development Department geologist) in streamflow and an environmentally sensitive habitat were present downstream, the effects on that habitat should be addressed in the biological resources section of the environmental document. The existence of a local critical habitat supported by aquifer baseflow and occupied by a rare or endangered species would also need to be addressed in the biologic resources section.

The basis for the assessment of impacts on groundwater resources due to pumpage of consolidated rock aquifers is the avoidance of overdraft (see discussion on Thresholds, this document).




TABLE 1 – SUMMARY OF GROUNDWATER BASIN CONDITIONS

Data from County Water Agency and Division of Environmental Review as of March 1992 By Brian R. Baca, 6/92 (file thresh4.wk3) Revised 8/92

			G	ross Pumpage (AFY	<u>(</u>)]	Net Pumpage (AFY)	
Basin	Return Flow	Available	Current Use	Estimated Safe	Surplus	Current Use	Estimated Safe	Surplus
	Factor	Storage		Yield	(Overdraft*)		Yield	Overdraft
	(Gross-To-Net)							
Carpinteria	.90	50,000	4238	4294	56	3814	3865	51
Montecito	.90	16,000	1823	1350	473*	1641	1215	426 *
Toro Canyon	.90	650	242	300	58	218	270	52
Foothill	.95	5000	1095	953	142*	1040	905	135*
City of Santa Barbara	.95	10,000	619	847	228	588	805	217
Goleta North/Central	.95	18,000	5167	3600	1567*	4908	3420	1488*
Goleta West	.95	10,000		See note below				
More Ranch	.90	600	24	84	60	22	76	54
Buellton Uplands	.74	153,800	2898	1766	1132*	2133	1300	833*
Santa Inez Uplands	.78	900,000	14,100	11,500	2600*	10,998	8970	2028*
Lompoc	.67	170,000	31,087	28,537	2550*	23,386	21,468	1918*
San Antonio	.75	800,000	19,441	8667	10,774*	15,431	6500	8931*
Santa Maria	.70	1,100,000	149,300	118,500	30,800*	103,800	83,800	20,000*
Cuyama	.75	1,500,000	48,700	10,667	38,033*	36,525	8000	28,525*
S. Y. River Riparian	N/A	90,000	Not s	subject to overdraft*				

Note on the Goleta North/Central Basin: The overdraft status of the Goleta North/Central Basin is based on pumpage by various private and public entities over the last decade. Overdraft of this basin is not projected to continue as a result of the court judgment in the Wright vs. Goleta Water District lawsuit and the efforts of the GWD to comply with the judgment. The judgment requires that the GWD return the basin to a state of hydrologic balance by 1998. GWD actions to meet this mandate include:

- 1. Adoption of the Water Supply Management Plan.
- 2. Adoption of ordinance 91-2 ("WET" Initiative: Desalination Supply).
- 3. Voter approval of revenue bonds for the State Water Project.
- 4. construction of the GWD/GSD waste water reclamation plant.
- 5. permanent water conservation programs.

On July 14, 1992 the Board of Supervisors determined that water service to Wright litigants and other holders of can-and-will-serve letters from the Goleta Water District does not have the potential to cause overdraft. Projects fitting in this description are therefore exempt from environmental review as it pertains to questions of groundwater overdraft.

Note on the Goleta West Basin: The status of the Goleta West Basin (or Subbasin) has not yet been resolved. This is because of uncertainty associated with several well exchange/service agreements between Planning and Development Department and Goleta Water District staff and landowners in the West Basin. The issue is the subject of ongoing discussions between the Planning and Development Department and Goleta Water District staff and is anticipated to be resolved by late 1992.

TABLE 2 - GROUNDWATER THRESHOLDS 1992 UPDATE

Revised Methodology for Determining Threshold of Significance By Brian R. Baca, 6/92 (File "thresh2b.wk3") Revised 8/20/92

METHODOLOGY

An idealized reference basin having overdraft and storage characteristics similar to the overdraft basin with the greatest remaining life (Santa Ynez uplands) was chosen as a standard. The Threshold of Significance for this reference basin was set at an amount (61.9 AFY) that if added to the assumed overdraft would result in the loss of three percent of the remaining life of the Available Storage. The Threshold values for the actual basins are proportional to the Threshold for the reference basin based on the relative length of remaining life and the relative size of the basin. Remaining life is weighted at 75 percent; size at 25 percent. Threshold values are rounded to the nearest 1 AFY for use in project environmental review.

STANDARD REFERENCE BASIN

Formula for Calculation of

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OVERDRAFTED/OVERCOMMITTTED BASINS

				Ratio	o to Standard			
				Refe	erence Basin		Calculated	
				(1)	(2)		Threshold	
							of Significance	Applied
		Available	Remaining Life			Combined Ratio	(Combined	Threshold of
	Net Overdraft	Storage	of Av. Strg.	Remaining Life	Available Storage	(1) @ 75%	Ratio x	Significance
Basin	(AFY)	(AF)	(Years)	(R.L./c)	(A.S./b)	(2) @ 25%	61.856)	(AFY)
Santa Ynez Uplands	2028.00	900000.000	443.787	0.986	1.000	0.990	61.215	61
Buellton Uplands	833.000	153,800.000	184.634	0.410	0.171	0.350	21.677	22
San Antonio	8931.000	800,000.000	89.576	0.199	0.889	0.372	22.980	23
Lompoc	1918.000	170,000.000	88.634	0.197	0.189	0.195	12.058	12
Santa Maria	20,000.000	1,100,000.000	55.000	0.122	1.222	0.397	24.570	25
Cuyama	28,525.000	1,500,000.000	52.585	0.117	1.667	0.504	31.194	31
Montecito	426.000	16,000.000	37.559	0.083	0.018	0.067	4.147	4
Foothill	135.000	5000.000	37.037	0.082	0.006	0.063	3.904	4
Goleta North/Central	1488.000	18,000.000	12.097	0.027	0.020	0.025	1.556	2

BASINS IN SURPLUS (No Threshold of Significance Applies)

Basin	Net Overdraft (AFY)	Available Storage (AF)
Carpinteria	0.000	50,000.000
City of Santa Barbara	0.000	10,000.000
Toro Canyon	0.000	650.000
More Ranch	0.000	1200.000

B. Environmental Review of Water Resources.

1. Alluvial basins. The relative significance of proposed new withdrawals from a groundwater basin must be assessed in the preparation of an environmental document (ND, EIR) pursuant to the California Environmental Quality Act. This is done through calculation of specific "Thresholds of Significance" for each of the overdrafted basins in Santa Barbara County. No threshold is established for a basin in a state of surplus. A project in such a basin would be subject to a threshold only if it would use more than the remaining surplus. In an overdrafted basin, projected net new consumptive water use of a project which exceeds the calculated threshold for that particular basin is deemed a significantly adverse environmental impact. This determination during the initial study would require the preparation of an Environmental Impact Report. If the estimated water use remains above the Threshold of Significance in the final analysis, the impact of the project on water resources, would, as stated above, be considered significant (Class I) and the project would require a finding of Overriding Considerations by the decisionmakers for approval.

Thresholds of Significance are calculated from hydrologic parameters for each of the basins in a state of overdraft. The size of the basin and the level of net annual overdraft are the key factors upon which the threshold is based. Current status of the basins is summarized in Table 1. The method used to establish the appropriate values for each basin involves setting a threshold for an idealized "Reference Basin" having overdraft and storage characteristics similar to the overdrafted basin with the greatest remaining life (Santa Ynez Uplands) based on a percentage loss of the estimated remaining life of the available storage. Thresholds for the other basins are proportional to this value based on the relative size and remaining life. A detailed explanation and a worksheet illustrating all the figures used in the calculation and the results are included on Table 2. Threshold values of 2 AFY to 61 AFY are herein established for the eight overdrafted/overcommitted basins in Santa Barbara County.

Definitions of the key parameters are as follows:

<u>Safe Yield</u> - The maximum amount of water which can be withdrawn from a basin (or aquifer) on an average annual basis without inducing a long-term progressive drop in water level.

<u>Available Storage</u> - Available storage is the volume of water in a particular basin which can be withdrawn without substantial environmental effects. This storage reflects the amount of water in the basin on a long-term basis (a point on a long-term trend line) not the current storage level in the basin. The number will be periodically updated by the Planning and Development Department and the County Water Agency as new information becomes available.

<u>Net Annual Overdraft</u> - The amount by which average long term demand on a basin exceeds the safe yield of the basin after allowances have been made for return flows. The "demand" figure will generally include commitments of supply such as approved projects not yet constructed with the estimated current level of pumpage.

Portions of Santa Barbara County, especially the South Coast, are served by water districts which distribute both surface water from the Santa Ynez River watershed and groundwater pumped from local basins. For environmental review purposes, the surface supplies are considered to be the first element of supply committed to existing demand. Thus, the water use of a new development is assumed to come entirely from the groundwater basin.

New supplemental supplies of water in the process of development in Santa Barbara

County include desalination of sea water, wastewater reclamation and importation of water through the State Water Project. Upon determination that a new source is available over the long term, a project supported by that source would not be subject to the groundwater thresholds of significance. If water from a new source were to offset current pumpage on a long-term basis, the Threshold of Significance would be revised to reflect the lowered pumpage.

- 2. Consolidated rock aquifers. The methodology for determining the threshold of significance for water use in consolidated rock (bedrock) aquifers is based on whether the proposed usage would place the aquifer in a state of overdraft. In order to make this determination it is necessary to define the boundaries of the aquifer and to estimate the potential average annual recharge (i.e. Safe Yield) available within the defined boundary.
 - Aquifer boundaries. Bedrock aquifers in Santa Barbara County generally extend for a. long distances along bedding strike. On the south flank of the Santa Ynez Mountains, the Miocene and Eocene bedrock formations crop out in a continuous band crossing the intermontane watersheds from the Santa Barbara area to near Point Conception. The sandstone (and sometimes fractured shale) aquifers in these formations are variable in their hydrologic characteristics but are generally far less permeable and productive than unconsolidated alluvial sediments. They are also interbedded with relatively impermeable marine and non-marine shales and mudstones. Clearly, a well pumping at any one point cannot access the water in storage and the potential recharge (i.e. safe yield) over the entire trend. Pumping effects extending further than a few thousand feet cannot be assumed. For purposes of analysis it is necessary to divide these aquifers into units in which the storage and potential recharge attributable to that unit can be presumed to be accessed from a single location. The watershed divides (ridgelines) are designated as aquifer boundaries for purposes of environmental review. Using watershed areas to define and analyze the bedrock aquifers have several advantages: 1) the boundaries are clearly delineated, 2) most wells are drilled in canyon bottoms and, thus, the topographic divide would occur at the approximate midpoint between pumping centers and 3) the watershed area is directly related to a major source of potential recharge, stream seepage. It must be recognized, however, that the watershed boundaries, a surface feature, do not represent barriers to subsurface groundwater flow. For this reason a well located near a watershed boundary could draw water from an adjacent watershed and access the yield attributable to that watershed. Based on observed well drawdown effects in the Vagueros Formation at two locations in the Ellwood/Gaviota area, it will be assumed in the analysis of Vaqueros aquifers that a well located within 800 feet of a watershed boundary will access the yield attributable to the adjacent watershed. The combined safe yield of the affected watersheds (and the combined existing demands) will be used to assess a project's impact on groundwater resources. A "radius of influence" greater or less than 800 feet may be used if justified based on site-specific geologic or hydrologic data. In other formations, the ridgeline boundary criteria will be used unless site-specific data is available which better defines the aquifer limits.

The boundary of the "aquifer" in the stratigraphic sense is also necessary to define. In a geologic formation or subunit predominated by sandstone (presumably fractured) a well in any part of that unit is assumed capable of accessing all of the potential recharge to that unit. Specific examples on the South Coast would be the Vaqueros and Coldwater Formations. Note that site specific geologic information could require

that these formations be divided into subunits (as determined by the Planning and Development Department Geologist). In a unit comprised of interbedded permeable and non-permeable units the aquifer is defined as the stratigraphic interval to which the well is hydrologically connected (i.e. the screened or gravel packed interval). The Sespe Formation is an example of the type of geologic unit which would be subject to this definition.

As a reasonable worst case, faults are considered to be barriers to groundwater flow. The aquifer boundaries used in environmental review would reflect this assumption.

- b. Safe Yield.
 - Introduction. In past Thresholds manuals, potential average annual recharge to (1) an aquifer, or "safe yield", was estimated based on a percentage of total average annual precipitation in the watershed above the aquifer under study. A figure of 4.75 percent of the total precipitation was assigned to the aquifer as safe yield based on values obtained from the USGS study of the Ellwood to Gaviota area by Miller and Rapp (1968). The 4.75 percent figure was, however, taken out of context and used incorrectly. This figure is an estimate of field recharge (direct percolation of rainwater) over an entire watershed area and does not reflect the field recharge attributable to the outcrop area of a single aquifer (or group of aquifers) within the watershed. The field recharge of any single aquifer is generally far less than that for the entire watershed. This method also did not account for induced recharge (stream seepage and subsurface underflow) due to the drop in aquifer water level with pumpage. A new methodology which accounts for sources of direct recharge (field recharge and stream seepage) and indirect recharge (subsurface underflow) is described below. This methodology was jointly developed by the Division of Environmental Review and the County Water Agency. (A program diskette including instructions is available from the Planning and Development Department.)
 - (2) **Direct recharge.** Direct recharge refers to the infiltration of surface water into the aquifer. This can occur as either field recharge (the direct penetration of rainfall) or as seepage from flowing streams.
 - Field recharge. Field recharge has been estimated by a variety of methods. (3) Miller and Rapp (1968) made their estimate of 4.75 percent of total average annual rainfall based on groundwater discharge or baseflow out of the watersheds from Ellwood to Gaviota. Blaney (1933) measured actual recharge in an alluvial setting in Ventura County for several years and developed graphic curves ("Blaney curves") which relate annual rainfall to infiltration. Another method developed by the Soil Conservation Service (SCS) involves modeling of a "soil reservoir." When the inputs to the reservoir (rainfall) exceed output (evapo-transpiration of vegetation and runoff) and soil reservoir storage capacity deep penetration to groundwater is assumed to occur. This "Soil Moisture Balance" methodology involves the use of monthly rainfall data and allows for input of site specific parameters such as vegetation type, soil type and the amount of irrigation water applied to the surface outcrop. The Blaney Curve method uses only annual rainfall data and does not allow for input of site specific data. Miller and Rapp's figure is very general and averages together aquifers and non-aquifers with different vegetation, soil types and average

rainfall. Given these comparisons, Soil Moisture Balance analysis is considered the best method for estimating field recharge and will be applied to aquifer outcrop area when adequate (as determined by the Planning and Development Department) monthly rainfall data is available. In the absence of such data one of the other two methods (Blaney Curves, Miller and Rapp) will be used.

Estimates of field recharge using the soil moisture balance method involve preparation of a computer spreadsheet which applies monthly values of rainfall, applied water (if any), runoff and potential vegetation evapotranspiration to a model of the "soil reservoir" based on rooting depth and soil moisture holding capacity. An example of this spreadsheet is presented as Table 3. Key parameters used in this analysis are described below:

- (a) Applied water. Monthly irrigation amount applied to crop planted on top of aquifer outcrop. Monthly amounts based on 1) total annual use divided proportional to the monthly values for plant potential evapotranspiration or 2) crop irrigation schedule according to Cooperative Extension or California Dept. of Water Resources.
- (b) **Rainfall.** Values from an appropriate nearby rain gauge(s) monitoring by the Santa Barbara County Flood Control District. (Refer to Precipitation Data Report, 1990).
- (c) **Runoff factor.** The portion of precipitation which goes to runoff is not available for deep percolation. Until detailed studies are completed an average figure of 20 percent (80 percent effective rainfall) will be used. This figure is rounded from the 19 percent cited by Miller and Rapp (1968).
- (d) Moisture capacity. This figure refers to the ability of a particular soil type to hold water by capillary force. It is measured in inches of water per inch of soil. The figure used in the analysis will be that listed for the aquifer outcrop area in the SCS soil survey for Santa Barbara County. If an SCS value is unavailable, a value determined by the Planning and Development Department geologist will be used.
- (e) **Rooting depth.** Vegetation rooting depth equals the thickness of the soil reservoir. The values used are based on USGS reports, information provided by the farm advisor and other studies.
- (f) Soil reservoir capacity. This figure is the product of the moisture capacity times the rooting depth. It represents the total amount of water (in inches) that can be held in the soil reservoir. If additional water is added beyond this amount it is presumed to percolate to groundwater.
- (g) **Potential evapotranspiration.** The potential evapotranspiration annual curve used in the analysis will be based on USGS reports, evapotranspiration measurements at CIMIS stations, vegetation water use studies by the State Department of Water Resources or other related studies.

Water yield shown in the last column on Table 3 represents the amount of water available to the soil reservoir in excess of the moisture holding capacity of the

soil reservoir and the potential evapotranspiration of the vegetation. The monthly values are averaged over a long period of time (decades) to obtain a figure for average annual recharge in AFY per acre of aquifer outcrop. This figure is multiplied times the aquifer acreage and rounded to the nearest one AFY to obtain average annual field recharge.

(4) **Stream seepage.** Under native conditions (no pumping) bedrock aquifers in mountain areas (e.g. the Santa Ynez Mountains) have water levels at or near the elevation of the streambed. During and after the rainy season, water which has infiltrated into the aquifer as field recharge, discharges into the creek (baseflow). Seepage from streams does not occur because the aquifer is full and, at times, spilling. A drop in aquifer water level due to well pumpage will induce recharge from stream flows as well as reducing (or eliminating) baseflow out of the aquifer.

Magnitude of potential stream seepage depends on stream flow rates, streambed geometry, a seepage rate and the length of stream which crosses the aquifer outcrop. The County Water Agency (CWA) has developed a model which relates all of these factors and provides an estimate of long-term average annual recharge attributable to stream seepage. This model is based on 39 years of daily flows recorded at the USGS gauging station in San Jose Creek. It contains a function which calculates daily stream width (wetted surface width) at various flow rates over the 39 year period for a given channel geometry. Using this function and a stream seepage rate in gallons per day per square foot of wetted surface area a potential annual average seepage figure (in AFY) can be obtained. The information needed to perform this analysis on any particular aquifer is listed below:

TABLE 3 Example Soil Moisture Balance Analysis Spreadsheet

VAQUEROS FORMATION, ELLWOOD CANYON SOIL MOISTURE BALANCE ANALYSIS Rainfall data 1941-1979 (modified from Dos Pueblos Ranch) Oaks and brush veg. cover (Rooting depth = 14') Sandy soil (Hoisture Capacity = .07 in./in. from SCS) Soil reservoir capacity = 11.76 inches (14' x 12"/ft x .07"/in.) Runoff as % of precipitation = 20

	Month	Applio Water	ed r	Rainfall	Runoff factor (.9 = 10%	Effective rainfall	Initial Soil Moisture	Total Available Hoisture	Potential ET	Final Soil Moisture	Water Yield
				(1110105)		(Inches)	(Incnes)	(Inches)	(Inches)	(Inches)	
1940	Aug Sept Oct Nov Dec Jan Feb Mar Apr May June		000000000000000000000000000000000000000	0 0.95 0.54 11.26 12.22 10.37 14.79 6.94 0.01	0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8	0 0.76 0.432 9.008 9.776 8.296 11.832 5.552 0.008 0	0 0 0 7.798 11.76 11.76 11.76 11.72 11.142 2.82	0 0.76 0.432 9.008 17.574 20.056 23.592 17.312 11.15 2.82	8.71 5.25 2.07 1.21 1.21 1.64 2.87 4.54 6.17 8.33 7 79	0 0 7.798 15.934 17.186 19.052 11.142 2.82	0 0 0 4.174 5.426 7.292 0 0
1941	Jul Aug Sept Oct Nov Dec Jan Feb Mar Apr May June	1 2	000000000000000000000000000000000000000	0.04 0.01 0.56 6.31 1.01 0.95 2.22 4.03 0 0	0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8	0.032 0.008 0.896 0.448 5.048 0.76 1.776 3.224 0 0	2.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.032 0.008 0.896 0.448 5.048 4.646 3.765 2.672 3.224 0 0	8.54 8.54 8.71 5.25 2.07 1.21 1.21 1.64 2.87 4.54 6.17 8.33 7 79	0 0 0 3.838 3.006 0.896 0 0 0 0	000000000000000000000000000000000000000
1942	Jul Aug Sept Oct Nov Dec Jan Feb Mar Apr May June Jul		000000000000000000000000000000000000000	0 0.04 1.82 0.78 1.72 16.21 5.32 3.69 1.16 0.04 0 0	0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8	0 0 0.032 1.456 0.624 1.376 12.968 4.256 2.952 0.928 0.032 0 0 0 0	0 0 0 0.166 11.494 11.76 10.172 4.93 0 0	0 0 0.032 1.456 0.624 1.376 13.134 15.75 14.712 11.1 4.962 0 0	7.79 8.64 8.71 5.25 2.07 1.21 1.64 2.87 4.54 6.17 8.33 7.79 8.64	0 0 0 0.166 11.494 12.88 10.172 4.93 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
1977	Aug Sept Oct Nov Dec Jan Feb Mar Apr May June Jul		000000000000000000000000000000000000000	0 0 0 11.39 14.81 14.77 2.83 0 0 0	0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8	0 0 4.88 9.112 11.846 11.816 2.264 0 0	0 0 0 3.67 11.142 11.76 11.76 7.854 0	0 4.88 12.782 22.99 23.576 14.024 7.854 0	8.71 5.25 2.07 1.21 1.21 1.21 4.54 6.17 8.33 7.79	0 0 3.67 11.142 20.12 19.036 7.854 0 0	0 0 0 8.36 7.276 0 0
1978	Aug Sept Oct Nov Dec Jan Feb Mar Apr May June Jul		000000000000000000000000000000000000000	0 1.12 0 3.55 1.58 6.16 6.81 5.95 0 0 0 0	0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8	0 0.896 0 2.84 1.264 4.928 5.448 4.76 0 0 0 0 0	0 0 0 1.63 1.684 4.972 7.55 7.77 1.6 0 0	0 0.896 0 2.84 2.894 6.612 10.42 12.31 7.77 1.6 0 0	8.64 8.71 5.25 2.07 1.21 1.64 2.87 4.54 6.17 8.33 7.79 8.64	0 0 0 1.63 1.684 4.972 7.55 7.77 1.6 0 0 0 0	000000000000000000000000000000000000000
	ŧ	TOTAL ANN.AVG	.= 2	918.21 3.5438462	inches/yr			5. · · · · ·	ANN. AVG. RECHARGE	TOTAL= in./year AFY/acre	62.674 1.60702564 0.1339188

Worksheet
Water
Recoverable
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1
48
TABLE

SAN JOSE CREEK WATERSHED RECOVERABLE WATER WORKSHEET (FOLLOWS PROCEDURE DEVELOPED IN USGS PROFESSIONAL PAPER 417–E)

21.96	5.34	4.11			54.79	27.30			Weighted Avgs.
							100.0%	3526	TOTALS
18.89	3.11	2.39	0.047	0.43	51.00	22.00	8.4%	297	150 - 400
20.30	3.70	2.84	0.053	0.45	53.50	24.00	11.5%	404	400 - 800
21.31	4.19	3.22	0.058	0.46	55.20	25.50	8.4%	297	800 - 1200
22.14	4.86	3.73	0.067	0.48	56.00	27.00	10.2%	361	1200 - 1600
22.57	5.43	4.18	0.075	0.50	56.00	28.00	18.1%	637	1600 - 2000
22.84	6.16	4.74	0.085	0.52	55.50	29.00	28.9%	1020	2000 - 2500
22.80	7.20	5.54	0.103	0.56	54.00	30.00	14.5%	510	2500 - 3000
vvatersned Loss (L)	R (= K*R)	Water (R)	RVE	P/E	ET (E, in.)	(in inches)	of Wtrshd	(Acres)	(It, MSL)

ADJUSTED RECOVERABLE WATER = 5.34 inches (weighted average over watershed). WATERSHED AREA = 3526 acres. 1569 Acre Feet / Year.

GEOLOGIC INDEX:			
Category % of wtrshd	Index		
A (* 10) 7%	20	The TOTAL GEO INDEX Indicates a K value of	•
B (* 100) 0%	0	(see CHART on page E21 of 417-E).	
C (* 0) 92%	0		
D (* 100) 1%	100		
E (* 10) 0%	0		
F (* 20) 0%	0		
G (* 40) 0%	0		
TOTAL GEO INDEX =	170		

Worksheet
Water
Recoverable
of
Example
I
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TABLE

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SAN ONOFRE CREEK WATERSHED RECOVERABLE WATER WORKSHEET (FOLLOWS PROCEDURE DEVELOPED IN USGS PROFESSIONAL PAPER 417-E)

-	unoff depth).	jhted mean r Year.	rshed weiç cre Feet / '	nches (Wate 205 A	1.93 Acres. F IS	ATER = 1271 HED RUNOF	'ERABLE W.) AREA = () WATERSI	ADJ. RECOV WATERSHEI CALCULATE	
18.05	1.93	1.49			55.17	19.98			Weighted Avgs.
-	~						100.0%	1271	TOTALS
14.90	1.10	0.85	0.017	0.31	51.00	16.00	0.0%	0	0 - 150
15.66	1.34	1.03	0.020	0.33	51.00	17.00	4.0%	51	150 - 400
16.55	1.45	1.12	0.021	0.34	53.50	18.00	12.4%	158	400 - 800
17.39	1.61	1.24	0.022	0.34	55.20	19.00	24.0%	305	800 - 1200
18.15	1.85	1.42	0.025	0.36	56.00	20.00	21.3%	271	1200 1600
18.83	2.17	1.67	0.030	0.38	56.00	21.00	17.5%	222	1600 - 2000
19.41	2.59	1.99	0.036	0.40	55.40	22.00	20.8%	264	2000 - 2600
Watershec Loss (L)	Adjusted R (= K*R)	Recovrable Water (R)	R/E	P/E	Potential ET (E, In.)	Rainfall (P) (in Inches)	Area % of Wtrshd	WtrshdArea (Acres)	Altitude Range (ft, MSL)
					.wk3")	(File "onofre2		>> ıl	

1.3

The TOTAL GEO INDEX indicates a K value of

(see CHART on page E21 of 417-E).

Index

GEOLOGIC INDEX: Category % of wtrshd SAN JOSE CREEK MULTIPLIER =

215 Acre Feet / Year.

WATERSHED RUNOFF IS ESTIMATED @

. . . .

Vaqueros 300 600

11.80314

(Up to 300' added to (L) for subsurface underflow) POTENTIAL STREAM RECHARGE = 11

(see Stream Seepage Curves)

Effective aguiter length along stream

Aquifer length along stream (L) =

00000000

A (* 10) 7% B (* 100) 0% C (* 0) 93% D (* 100) 0% F (* 10) 0% F (* 20) 0% G (* 40) 0% TOTAL GEO INDEX =

Aquifer name

0.136243

Groundwater Thresholds

Stream flows. Average annual runoff in the watershed above the aquifer (a) under analysis is estimated using the procedure developed by Crippen in USGS Professional Paper 417-E (1965). This method accounts for elevation, watershed area, potential evapotranspiration, the isohyetal distribution of rainfall and rock type. The average annual runoff ("recoverable water") estimated by this method for San Jose Creek in Goleta was compared to the actual average runoff measured by the USGS daily flow gauge on that creek over a 39-year period (1940-79). The "Crippen estimate" of 1569 AFY (Table 4a) was very close to the 1576.8 AFY measured by the gauge. However, the gauged values are approximately five percent lower that they would be under native conditions because of stream diversions and minor percolation losses to the Goleta Groundwater Basin upstream of the gauging station. Thus, the average annual flows used for the seepage analysis will be the Crippen calculated value increased by five percent. Table 4b is an example recoverable water worksheet for San Onofre Creek. The estimated average annual flows for a watershed are distributed on a daily basis over the 39year modeling period using the daily gauged flows at San Jose Creek. The runoff at a watershed under study (Crippen plus five percent) is divided by the 1576.8 AFY measured at the San Jose gauge to obtain a "San Jose Creek Multiplier". This multiplier is applied to the gauged daily flows at San Jose Creek to obtain a model of daily flows at the aquifer under analysis.

The point along the stream where flows are estimated (the downstream limit of the "watershed") will be placed near the downstream contact or limit of the aquifer 20 percent of the distance from that point to the upstream contact of the aquifer. This location is incorporated into the seepage modeling discussed below.

- (b) Streambed geometry. The streambed geometry incorporated into the model is based on field measurements of the creek in Ellwood Canyon at the northern outcrop of the Vaqueros Formation. This channel geometry is considered representative of creeks on the South Coast. Narrower channels occur in some areas which would allow for less seepage per unit of flow. Ellwood Canyon geometry will, however, be used unless site specific data is available.
- (c) Seepage factor. A seepage factor of 10 gallons per day per square foot of wetted surface area is used in the analysis. This factor is based on measurements of seepage made during controlled releases down Mission Creek in the City of Santa Barbara (Martin, 1984). This factor is used as the best available information but may be higher than the actual rate for consolidated rock aquifers. A figure of 15 gpd/ft² was measured in river gravels by the County Water Agency. Such gravels are far more permeable (orders of magnitude) then bedrock aquifers or the alluvial sediments in Mission Creek.
- (d) **Streambed length.** This length is measured from the upper to the lower geologic contacts of the aquifer along the streambed as delineated on the USGS topographic map.

A table of monthly flow values calculated with the stream flow model for San Onofre Creek is presented in Table 5 based on the multiplier determined with the recoverable water worksheet. A table of seepage values is presented in Table 6. The seepage figures are generated from the estimated flows, the stream length and the seepage factor and streambed geometry parameters discussed above. The relationship between average annual potential stream seepage and the San Jose Creek multiplier is presented graphically on Figure 2. The stream seepage curves shown on this graph plot the multiplier versus the average annual potential seepage per 100 feet of aquifer exposed along the stream for various total effective exposure lengths. The different curves required for each value of effective aquifer exposure length reflects the fact that the stream flows in the downstream parts of an aquifer are reduced by percolation into the upstream parts the aquifer. As aquifer exposure length increases the average percolation per 100 feet of that exposure length progressively declines. The curves shown on Figure 2 are based on estimated flows at a point located 20 percent of the distance from the downstream contact or limit of the aquifer to the upstream contact of the aquifer. All analyses will incorporate this parameter.

In summary, once the appropriate multiplier and stream length are known, the potential seepage is readily estimated from the curves on Figure 2. For purposes of environmental review all values are rounded to the nearest 1 AFY.

A geologic circumstance which occurs in some canyons is where a thin body of alluvium partially fills the valley over the bedrock aquifer under study. It can be reasonably argued that clay layers within the alluvium prevents seepage of stream water into an underlying aquifer. It can also be reasonably argued that the alluvium enhances the potential recharge by increasing the area of hydrologic connection through which stream flow or underflow in the alluvium could recharge a bedrock aquifer. It would require detailed long term records of stream flows, water levels and pumpage along with several monitoring wells to document either effect. This data is rarely, if ever, available. For purposes of environmental review, the model-derived value will be used as the estimate of potential seepage from stream flow and underflow.

Indirect Recharge. A drop in aquifer water level due to pumpage can **(f)** induce underflow from adjacent consolidate rock units. Given that most of the sandstone aquifers in the county are either bounded by or interbedded with generally impermeable shales and mudstones, underflow cannot be counted on to provide substantial amounts of recharge. The stratified nature of the bedrock formations requires that water would have to flow across the bedding planes and through the least permeable stratigraphic layers. Increments of safe yield would be added by dropping water levels over an area of the adjacent formation such that additional direct recharge from rainfall or stream seepage be accessed. To account for potential recharge due to subsurface underflow, the area accessed by a well will be considered to extend 300 feet (measured horizontally) into the formation up-gradient of the aquifer, as defined using the guidelines in this manual, if that formation contains water-producing horizons (e.g. fractured sandstones). The estimation of field recharge and potential stream seepage will be adjusted to allow for larger aquifer surface area and greater

effective aquifer stream length.

Table 5 - Estimated Monthly Flows @ San Onofre Creek Based Upon SBCWA San Jose Creek Flow Model

Estimated monthly STREAM FLOW at San Onofre Creek, Vaqueros Formation: San Jose multiplier = .13624 Formation exposure length (feet) = 600; Channel Geometry = Ellwood Creek

WtrYear	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Totals
1940-41	0	0	52	159	255	306	201	22	11	7	5	4	1022
1941-42	3	4	31	11	4	6	34	7	2	1	0	1	104
1942-43	2	3	3	246	49	76	13	6	2	2	1	1	404
1943-44	2	2	8	3	71	43	6	6	2	1	1	1	146
1944-45	2	30	4	4	56	15	6	3	1	1	0	0	121
1945-46	0	1	29	2	4	24	5	3	0	0	0	0	69
1946-47	0	41	30	1	1	3	1	1	0	0	0	0	79
1947-48	0	0	0	0	0	3	2	0	0	0	0	0	4
1948-49	0	0	2	1	1	24	1	9	1	0	0	0	38
1949-50	0	2	6	7	16	3	2	1	0	0	0	0	37
1950-51	0	1	1	2	1	2	1	1	0	0	0	0	9
1951-52	0	0	13	298	8	125	20	8	3	1	3	2	483
1952-53	3	10	33	21	3	4	4	4	2	0	0	1	84
1953-54	0	3	3	20	10	13	6	5	1	0	0	0	62
1954-55	0	2	7	16	6	5	8	11	2	0	0	0	58
1955-56	0	1	99	128	18	7	21	23	3	1	1	0	303
1956-57	0	0	1	22	36	12	19	14	2	1	0	0	107
1957-58	1	2	44	31	167	158	235	12	4	3	2	1	659
1958-59	1	1	2	15	37	4	2	2	2	1	0	0	65
1959-60	0	0	1	8	10	5	8	2	0	0	0	0	35
1960-61	0	11	4	6	2	2	1	0	1	1	1	0	28
1961-62	0	3	8	5	404	25	5	3	2	1	1	0	458
1962-63	2	2	2	3	35	12	10	5	4	1	1	1	77
1963-64	1	10	3	7	3	4	9	2	1	1	0	0	42
1964-65	1	4	30	11	2	6	79	4	3	1	1	1	143
1965-66	1	172	114	27	11	5	3	2	1	1	1	0	337
1966-67	1	11	196	192	25	32	72	15	5	2	3	2	556
1967-68	2	7	6	4	4	17	11	2	1	1	0	0	54
1968-69	1	2	3	273	203	65	42	12	10	3	3	3	620
1969-70	2	5	4	13	33	60	3	1	2	1	0	0	125
1970-71	1	16	21	8	4	5	3	4	3	1	0	0	66
1971-72	1	2	51	7	3	2	1	1	1	0	0	0	71
1972-73	1	26	2	88	180	84	12	11	5	2	1	1	413
1973-74	1	4	7	62	5	26	8	3	3	2	1	1	123
1974-75	1	2	44	3	94	97	9	5	3	2	0	0	261
1975-76	1	1	2	1	32	14	3	3	1	0	0	4	63
1976-77	4	3	2	18	2	3	1	10	1	0	0	0	46
1977-78	0	0	20	205	213	312	62	17	7	4	5	10	855
1978-79	7	8	8	16	31	54	13	5	4	3	1	1	149
Average	1	10	23	50	52	43	24	6	2	1	1	1	215

Table 6 - Estimated Monthly Stream Seepage (Percolation) Based Upon SBCWA San Jose Creek Flow Model

Estimated monthly STREAM PERCOLATION, San Onofre Creek Vaqueros Formation: San Jose multiplier = .13624 Formation exposure length (feet) = 600; Channel Geometry = Ellwood Creek

WtrYear	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Totals
1940-41	0.0	0.0	1.1	2.7	3.5	3.9	3.4	2.0	1.6	1.4	1.2	1.1	22.0
1941-42	1.1	1.1	1.7	1.6	.9	1.1	1.9	1.4	.8	.7	.4	.7	13.3
1942-43	.7	1.0	1.1	2.3	2.0	2.7	1.7	1.3	.9	.9	.5	.6	15.6
1943-44	.9	.8	1.2	1.0	2.0	1.9	1.2	1.3	.9	.6	.5	.4	12.8
1944-45	.8	1.4	1.2	1.2	1.3	1.4	1.3	1.1	.4	.6	0.0	.1	10.9
1945-46	.1	.7	1.4	.8	.8	1.1	1.1	1.0	0.0	0.0	0.0	0.0	7.0
1946-47	0.0	1.2	1.5	.6	.4	1.0	.7	.7	0.0	0.0	0.0	0.0	6.1
1947-48	0.0	0.0	0.0	0.0	.1	.4	.6	0.0	0.0	0.0	0.0	0.0	1.1
1948-49	0.0	0.0	.3	.7	.4	1.3	.5	.7	.5	0.0	0.0	0.0	4.4
1949-50	0.0	.1	.8	1.1	1.1	1.1	.9	.4	.2	0.0	0.0	0.0	5.7
1950-51	0.0	.4	.8	.9	.7	.8	.3	.6	0.0	0.0	0.0	0.0	4.6
1951-52	0.0	0.0	.8	3.1	1.4	2.7	1.9	1.5	1.0	.5	1.1	.9	14.7
1952-53	1.0	1.4	1.9	1.8	.8	1.2	1.1	1.1	.8	.1	.3	.6	12.1
1953-54	.1	.9	1.1	1.1	1.0	1.2	1.3	1.3	.3	.1	0.0	0.0	8.5
1954-55	0.0	.8	1.3	1.4	1.1	1.2	1.1	1.5	.7	.1	0.0	0.0	9.3
1955-56	0.0	.7	1.9	2.1	1.7	1.4	1.8	1.8	1.0	.8	.6	.2	14.1
1956-57	0.0	.3	.6	1.5	1.4	1.3	1.4	1.6	.7	.5	0.0	0.0	9.4
1957-58	.4	.9	1.4	1.5	2.8	3.2	3.3	1.6	1.1	1.1	.9	.7	18.8
1958-59	.7	.7	.8	1.4	1.8	1.1	.9	.8	.8	.5	0.0	.3	9.8
1959-60	.2	.4	.6	1.3	1.3	1.2	1.0	.9	.2	.1	.2	.1	7.5
1960-61	0.0	1.3	1.1	1.2	.8	.8	.5	.4	.5	.5	.4	0.0	7.4
1961-62	.1	.7	1.2	1.1	3.5	2.1	1.3	1.0	.9	.7	.6	.3	13.7
1962-63	.9	.8	.8	1.0	1.5	1.5	1.4	1.3	1.1	.8	.7	.6	12.4
1963-64	.8	1.2	1.1	1.2	1.0	1.1	1.2	.8	.7	.6	.1	0.0	9.8
1964-65	.6	1.0	1.5	1.5	.9	1.1	2.3	1.1	1.0	.7	.6	.6	12.9
1965-66	.4	2.1	1.9	1.9	1.5	1.2	1.1	1.0	.7	.6	.6	.4	13.5
1966-67	.7	1.1	2.5	2.4	1.9	2.0	2.8	1.7	1.2	.9	1.0	.9	19.2
1967-68	.9	1.2	1.3	1.1	1.0	1.5	1.5	.9	.7	.5	.2	.3	11.1
1968-69	.7	.9	1.1	2.8	3.2	2.7	2.2	1.7	1.5	1.1	1.0	1.0	19.9
1969-70	.8	1.2	1.2	1.6	1.7	1.9	1.0	.8	.9	.6	.2	.3	12.1
1970-71	.5	1.0	1.5	1.4	1.1	1.2	1.0	1.2	1.0	.6	.3	.2	10.9
1971-72	.6	.9	1.8	1.4	1.0	1.0	.7	.7	.6	.2	.2	.3	9.2
1972-73	.6	1.4	1.0	2.0	3.0	2.9	1.6	1.6	1.2	1.0	.7	.8	17.7
1973-74	.4	.8	1.0	2.1	1.2	2.0	1.4	1.0	1.1	.9	.7	.7	13.4
1974-75	.5	.8	1.5	1.1	2.3	2.4	1.4	1.3	1.0	.9	.3	.1	13.6
1975-76	.5	.7	.9	.8	1.4	1.5	1.0	1.0	.5	.2	.2	.8	9.6
1976-77	1.1	1.0	.9	1.4	.8	1.1	.7	1.2	.7	.3	.1	.1	9.5
1977-78	0.0	.1	.5	2.8	3.1	3.8	2.6	1.9	1.4	1.2	1.3	1.6	20.3
1978-79	1.4	1.4	1.5	1.7	1.9	2.1	1.6	1.3	1.1	1.0	.8	.4	16.2
Average	.5	.8	1.2	1.5	1.5	1.7	1.4	1.1	.8	.5	.4	.4	11.80



Curve Formulas

Symbols:

Y = Average stream percolation per 100 feet of stream channel.
 X = San Jose Creek Multiplier
 L = Effective length of stream channel

$$A = aL^{2} + bL + c \quad (a = -6.27 \times 10^{-9}; b = -9.54131 \times 10^{-5}; c = 3.7822)$$

B = aL + b
$$(a = 3.896525 \times 10^{-5}; b = .296611)$$



 $Y = A(X^B)$

- (5) **Summary and Discussion.** The safe yield value assigned to a consolidated rock aquifer will be the sum of the estimated field recharge and potential stream seepage as calculated by the above methods. An alternative to the above "inventory" analysis is the Pumpage versus Change-in-Storage method. This method involves observing change in the amount of water stored in an aquifer over a long-term base period representing average hydrologic conditions. The change in storage is compared to the amount pumped and the difference is attributed to recharge. If sufficient site-specific, long-term water level and pumpage data is available for the aquifer under study (as determined by the Planning and Development Department geologist) the Pumpage versus the Change-in-Storage method will be used. Desired data for a Pumpage versus Change-in-Storage analysis would include detailed records of pumpage volumes and water levels at several points in the watershed for a period of at least ten years. This data is rarely available. Meaningful information on yield can be obtained, however, with detailed records over a shorter period. Three years of such records could allow for analysis of one or more of the three elements of recharge (field recharge, stream seepage and underflow). As an example, three years of data during a drought may only provide information on subsurface underflow. The estimated underflow would be added to the field recharge and stream seepage values calculated by the standard methods to obtain a safe yield figure. Available information on recharge obtained from site-specific geologic or well data will be considered in all analyses.
- **3.** Well interference threshold. The impact of a net increase in pumpage, either from an existing well or a new well is potentially significant if:
 - a. The production rate of a pre-existing nearby well as presently constructed would drop as a result of interference (cone of depression) to a level which would not support the existing use on that parcel or would not support a planned use for which a discretionary or ministerial permit has been granted.
 - b. The proposed new pumpage would result in a substantial degradation of water quality such that an existing use on a nearby parcel or a planned use for which a discretionary or ministerial permit has been granted could no longer be supported.

This impact will be analyzed by the Planning and Development Department geologist during case review using standard hydrogeologic methods (e.g. Theis Equation).

- 4. Water demand estimations.
 - **a. Introduction.** A proposed project's future water use can be estimated using either of two methods. The first involves water duty factors. These factors, listed in Table 7 are averages of water demand for particular categories of users based on historical records or land use surveys. The categories are defined by lot size, type of use, zoning, and rarely, soil type. A project with a proposed land use which falls within the listed categories will have its demand estimated by this method. A second method is to estimate the future water use of a project based on a summation of each specific indoor and outdoor use. This method is used if an appropriate water duty factor is not in Table 7 or can not be feasibly generated during project review. Table 8a lists estimated indoor uses per person per year. Table 8b present estimates of water demand for various outdoor and unusual uses. If specific use factors are used to estimate both the interior and exterior demand of a project, the calculated demand

must be increased by 10 percent to account for emergency and unusual uses. The factors are to be used without the 10 percent contingency if a portion of the project's demand is based on a water duty factor. For example, in the case of an unusual lot size, a standard water duty factor for a smaller lot can be used. An amount of demand calculated for the additional lot area with a specific use factor would be added to the duty factor for the smaller lot. Another example would be in estimating the proportion of interior use included in a water duty factor.

In some cases, the water demand of certain agricultural crops is needed in the analysis of the net increase in water demand due to a proposed project. Table 9 lists water duty factors published by the U.C. Cooperative Extension (Farm Advisor) in 1991 for various crops grown in Santa Barbara County.

- **b. Demand calculations.** A project's net new consumptive use is the figure which is compared to the Threshold of Significance to determine level of impact on groundwater resources. This figure represents the gross demand (i.e. water duty factor demand) adjusted for return flows to the groundwater basin, loss of natural recharge due to construction of impervious surfaces, increased recharge due to irrigated area or recharge basins and historic use on the site. "Historic use" is defined as the demonstrated average water use on the project site during the most recent ten years, excluding years prior to availability of water to the site. Both high and low water use years would be counted in the average. A "Project Water Demand Worksheet" is included as Figure 3. This worksheet accounts for all of the adjustments listed above and is designed for use in all areas of the County. Each of the factors used are explained on the attached instructions.
- **3. Mitigation measures.** Measures that can be applied to projects in order to minimize withdrawals from a groundwater basin (i.e. conserve water resources) or reduce impacts in an overdrafted basin are listed below. These measures are modified from the *A Planners Guide to Conditions of Approval and Mitigation Measures* manual available from the Planning and Development Department.
 - a. Outdoor water use shall be limited through the measures listed below.

[Planner: This is a menu; select only those conditions that apply. You may also use some of these measures as water conservation conditions without requiring a landscape and irrigation plan.]

- (1) Landscaping shall be with native and/or [planner specify] drought tolerant species.
- (2) Drip irrigation or other water saving irrigation shall be installed.
- (3) Plant material shall be grouped by water needs.
- (4) Turf shall constitute less than 20 percent of the total landscaped area.
- (5) No turf shall be allowed on slopes of over four percent
- (6) Extensive mulching (two inch minimum) shall be used in all landscaped areas to improve the water holding capacity of the soil by reducing evaporation and soil compaction.
- (7) Soil moisture sensing devices shall be installed to prevent unnecessary irrigation.

- (8) Permeable surfaces such as turf block or intermittent permeable surfaces such as french drains shall be used for all parking areas and driveways.
- (9) The applicant shall plumb each lot for a grey water system. Each dwelling shall contain a grey water system plumbed to front and rear yard irrigation systems.
- (10) The applicant shall contract with an agency that sells reclaimed water to provide water for all exterior landscaping. Non-reclaimed water shall not be used to water exterior landscape. Prior to ______ the applicant shall deliver the above contract to County Counsel for review and approval. The applicant shall renew the contract annually and send copies of the contract and all receipts for reclaimed water received to permit compliance staff. These documents shall be due on _ of every year commencing ____.
- (11) Separate landscape meters shall be installed.

Plan requirements: Prior to _____, a landscape and irrigation plan shall be submitted to P&D for review and approval. The applicant/owner shall enter into an agreement with the County to install required landscaping/irrigation and maintain required landscaping for the life of the project.

Timing: The applicant shall implement all aspects of the landscape and irrigation plan prior to occupancy clearance.

Monitoring: P&D shall conduct site visits to ensure installation prior to occupancy.

- b. Indoor water use shall be limited through the following measures [*Planner: This is a menu; select only those conditions that apply*]:
 - (1) All hot water lines shall be insulated.
 - (2) Water pressure shall not exceed 50 pounds per square inch (psi). Water pressure greater than 50 pounds per square inch shall be reduced to 50 psi or less by means of a pressure-reducing valve.
 - (3) Recirculating, point-of-use, or on-demand water heaters shall be installed.
 - (4) Water efficient clothes washers and dishwashers shall be installed.
 - (5) Self regenerating water softening shall be prohibited in all structures. [Required in Laguna Sanitation District.]
 - (6) Lavatories and drinking fountains shall be equipped with self-closing valves. [Commercial only]
 - (7) Pool(s) shall have electronic pool cover(s).

Plan Requirements: Prior to _____, indoor water-conserving measures shall be graphically depicted on building and/or grading plans, subject to P&D review and approval.

Timing: Indoor water-conserving measures shall be implemented prior to

Monitoring: P&D shall inspect for all requirements prior to occupancy clearance.

c. The existing facility shall be retrofitted with water conserving showerheads (2 gpm) and toilets (1.6 gallons per flush).

Timing: Prior to land use clearance the retrofitting shall be completed by the applicant.

d. High water consumption businesses (defined by P&D), including: ______, shall be prohibited from operating on the subject property.

Plan Requirements and Timing: Prior to ______, the applicant shall record an covenant agreeing to the prohibition with P&D for County Counsel approval to be included as a note on building plans, on lease agreements and in CC&Rs.

Monitoring: P&D shall ensure no such businesses occupy building prior to issuing land use clearance

e. Reclaimed water shall be used for all dust suppression activities during grading and construction.

Plan Requirements and Timing: This measure shall be filed as a note with the final map and included as a note on the grading plan. Prior to the commencement of earth movement, the applicant shall submit to P&D an agreement/contract with a company providing reclaimed water stating that reclaimed water shall be supplied to the project site during all ground disturbances when dust suppression is required. *[Planner: see RECLAIMED WATER section]*

Monitoring: P&D staff shall inspect activities in the field to ensure non-potable water is being used in water trucks.

f. All new development shall provide for on-site recharge basin(s) or shall contribute fees to an area wide program to provide for a Specific Plan Area Recharge System *[planner specify]*. On-site recharge vs. contribution of the area wide system shall be based upon on-site recharge conditions and shall be determined by P&D. Basin(s) shall be maintained for the life of the project by a Homeowners' Association. Recharge systems shall be developed in conjunction with the FCD.

Plan Requirements: Installation and maintenance for two years shall be ensured through a performance security provided by the applicant.

Timing: Recharge basins shall be installed (landscaped and irrigated subject to P&D and FCD approval) prior to __.

Monitoring: Permit Compliance shall site inspect for installation and maintenance of landscape. FCD sign off is required on final grading plans, and Permit Compliance sign off is required to release security.

g. Water wells used on-site shall be monitored by the use of a flow meter or by analysis of electric meter records and recorded semi-annually (May 15 - June 1 and November 15 - December 1). Static water level shall be recorded for each well at the same time as the water production is recorded. *[Planners: Use only for salt water intrusion or when requested by the County hydrologist/geologist.]*

Plan Requirements and Timing: Prior to __the applicant shall record an agreement subject to P&D and County Counsel approval which agrees to the above condition and describes any future mitigation necessary should water quality degrade. The applicant shall maintain a record of meter readings and water levels, available to P&D upon request, for the life of the project.

Monitoring: P&D shall review reports and determine if future mitigation is necessary.

h. A water quality test shall be completed by the applicant.

Plan Requirements: The applicant shall submit test to EHS and P&D for review and approval.

Timing: Test shall be completed and submitted and approved prior to well permit issuance.

i. A pump test for the water well shall be completed by the applicant.

Plan Requirements: The applicant shall submit test to EHS and P&D for review and approval.

Timing: Test shall be completed and submitted and approved prior to well permit issuance.

j. The owner shall complete a water quality analysis on a semiannual basis to avoid the possibility of salt water intrusion into groundwater. Pumping shall cease if the following conditions occur [P&D specify].

Plan Requirements: A copy of the report shall be furnished to EHS and to P&D semiannually.

Timing: Prior to _____, the first water quality analysis shall commence.

k. All drilling effluent shall be collected in an earthen sump (approx. 300 s.f. area, 1.5 to two feet deep) and disposed of at a location acceptable to P&D and EHS.

Plan Requirements: Prior to _____, plans for the sump and disposal areas shall be submitted to P&D and EHS for review and approval. Sump and disposal areas shall be depicted on _____ plans.

Timing: Sump and disposal areas shall be constructed prior to _____.

- 1. Water well shall be solely exploratory. Any development, except for the exploration and testing thereof, is NOT approved under this Coastal Development Permit.
- m. A water meter shall be installed for the non-exploratory well(s).

Timing: Prior to the use of the well for any non-exploratory purpose, the applicant shall install a water meter.

Monitoring: The applicant shall provide proof of meter installation to P&D.

- n. Water well use shall be used solely for parcel ______. Water use on a separate parcel shall require further review and a Special Use Permit and Coastal Development Permit.
- o. The well head including all accessory equipment, shall be screened from all viewsheds and neighboring properties within 45 days of well installation.

Plan Requirements: A landscape plan indicating same shall be submitted prior to issuance of land use clearance for P&D approval. *[Planner: use landscape bond condition]*.

Timing: Landscape plan shall be implemented prior to _____

Monitoring: P&D shall inspect site prior to ______.

p. The applicant shall install a coastal water quality monitoring well and monitor water quality per measure #10 above.

Monitoring: P&D shall review the completion report of the well.

(to be included with reporting under measure 10. above)

Measures suggested to mitigate the potential of certain projects to degrade water quality include the following:

- q. Preparation of a fertilizer/pesticide application plan which minimizes deep percolation of chemical-laden water to be reviewed and approved by the Planning and Development Department and the Public Health Department, Environmental Health Services Division.
- r. Installation of subsurface percolation basins and traps which would allow for detection and removal of fertilizers, pesticides and other chemicals.
- s. Biannual or annual water quality analysis for the detection of organic or inorganic contaminants in production or monitoring wells.

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- Crippen, J.R., 1965: Natural water loss and recoverable water in mountain basins of Southern California; U.S. Geological Survey Professional Paper 417-E.
- Gibbs, D.R. and Holland, P.R., 1990: County of Santa Barbara, Flood Control and Water Conservation District, Precipitation Data Report.

.*	Environmental Thres County of Santa Bar Resource Management By Brian R. Baca, 4 (File "threshl.wk3"	holds and Guidelines / bara Department, Division /92)	Manual (1992 Edition) of Environmental Revi	ew
Project Name:		-		
Case Number: _			•	
	APN(s):	Parcel size (Ac)	Zone District	
	<u> </u>			
		· <u> </u>		
Project Descr	iption:	· .		
CALCULATIONS (I	Refer to instructions Water Duty Factor # (AFY/Unit) Units	on pages 3 and 4) Gross Consum. Demand Use Fac.	Net Consum. Use (AFY)	
CALCULATIONS (F	Refer to instructions Water Duty Factor # (AFY/Unit) Units	on pages 3 and 4) Gross Consum. Demand Use Fac.	Net Consum. Use (AFY)	
CALCULATIONS (F ntial Combined	Refer to instructions Water Duty Factor # (AFY/Unit) Units	on pages 3 and 4) Gross Consum. Demand Use Fac.	Net Consum. Use (AFY)	
CALCULATIONS (F tial Combined Interior	Refer to instructions Water Duty Factor # (AFY/Unit) Units	on pages 3 and 4) Gross Consum. Demand Use Fac.	Net Consum. Use (AFY)	
CALCULATIONS (F ntial Combined Interior Exterior	Refer to instructions Water Duty Factor # (AFY/Unit) Units	on pages 3 and 4) Gross Consum. Demand Use Fac.	Net Consum. Use (AFY)	
CALCULATIONS (F	Refer to instructions Water Duty Factor # (AFY/Unit) Units	on pages 3 and 4) Gross Consum. Demand Use Fac.	Net Consum. Use (AFY) 	
CALCULATIONS (F tial Combined Interior Exterior tion (Refers to addition to AFY/parcel	Refer to instructions Water Duty Factor # (AFY/Unit) Units 	on pages 3 and 4) Gross Consum. Demand Use Fac.	Net Consum. Use (AFY) is lots in comesites)	
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CALCULATIONS (F	Refer to instructions Water Duty Factor # (AFY/Unit) Units 	on pages 3 and 4) Gross Consum. Demand Use Fac.	Net Consum. Use (AFY) e lots in comesites)	
CALCULATIONS (F ntia) Combined Interior Exterior tion (Refers to addition : AFY/parce) AFY/parce tia) Combined	Pefer to instructions Water Duty Factor # (AFY/Unit) Units	on pages 3 and 4) Gross Consum. Demand Use Fac.	Net Consum. Use (AFY) : lots in icomesites)	
CALCULATIONS (F ntial Combined Interior Exterior tion (Refers to addition to AFY/parcel AFY/acre tial Combined Interior	Refer to instructions Water Duty Factor # (AFY/Unit) Units	on pages 3 and 4) Gross Consum. Demand Use Fac.	Net Consum. Use (AFY)	
CALCULATIONS (F inia) Combined Interior Exterior tion (Refers to addition s AFY/parce) AFY/parce AFY/acre tia) Combined Interior Exterior	Refer to instructions Water Duty Factor # (AFY/Unit) Units	on pages 3 and 4) Gross Consum. Demand Use Fac.	Net Consum. Use (AFY) 	
CALCULATIONS (F ntial Combined Interior Exterior tion (Refers to addition to AFY/parcel AFY/parcel AFY/acre tial Combined Interior Exterior	Refer to instructions Water Duty Factor # (AFY/Unit) Units	on pages 3 and 4) Gross Consum. Demand Use Fac.	Net Consum. Use (AFY)	

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	AFY acres AFY/acre - () acres AFY/acre - () acres impervious infiltration rate Total adjustments AFY Total adjustments AFY STORIC USE CREDIT Water demand of historic land Use Fac. Historic Use AFY	acres AFY/acre - () impervious infiltration surfaces - () Total adjustments - () AFY - () Water demand of historic land Consum. Use Water demand of historic land Use Fac. Use Water demand of historic land Use Fac. Use SUMMARY - (Debits			
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AFY Total demand Recharge Historic Net new Adjustment Use Consumptive Use Use AFY Groundwater Basin T.O.S.	AFY Total demand Recharge Wistoric Net new Adjustment Use Consumptive Use Use Threshold of Significance AFY Groundwater Basin T.O.S.	AFY Total demand Recharge Historic Net new Adjustment Use Use Use AFY Groundwater Basin T.O.S. Notes:					*********
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10 C C Z .			lotes:				

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	PROJECT WATER DEM	AND WORKSHEET	(Page 3 of 4)
Worksheet Inst	ctions (calculation parame	ters)	
Demand			•
1. Water Duty I of land use by the DER refer to par acres.	ctors: Included in the DER In some cases appropriat alogist during case review els, dwelling units, 1000'	Thresholds manual(Tabl e water duty factors ma . Note that the term " s of sq.ft. of building	e 3) for a variety y be generated Units" can y coverage or
 Number of U be added as which would demand. 	ts: Only the residential u result of the project are continue after project appr	nits or other land uses evaluated. Existing l oval are not included t	which will land uses in project
3. Gross deman	(Water Duty Factor * # of	Units)	· · · · ·
4. Consumptive for return 40 % return	lse Factor: This factor adj ows to the groundwater bas lows). Listed below are C	usts the gross water de in (A C.U. Factor of . .U. Factors to be used	emand to account 5 equals :
Basin	CUF Explanatio	n,	··
Hontecito Foothill Goleta	1.00 Gross water de 1.00 use. This is 1.00 of the basins conveyed to the of supply avai	mand in the South Coast because the recharge at aquifers are confined) e ocean. (Wastewater t lable to the purveyor.)	t Basins is considered equal to consumpti- rea is a small portion of the area of the and interior effluent is ultimately reclamation is considered a new source
Santa Ynez Buellton Lompoc San Antonio Cuyama Santa Maria	0.75 Average consum 0.75 County Water # 0.75 0.75 0.75 0.75	ptive use factor estim gency Senior Hydrologi: -	ated by RMD Registered Geologist and st.
Exceptions:	0.60 Areas with sat 0.70 Orcutt area of 0.75 Vandenberg Vi 0.50 Wastewater dis Long-term pum counted as a i satisfaction	dy soils (Orcutt, Care the Orcutt Fm. (Clay lage (area of sandy so irrigation water by riparian vege posed in the Santa Yme age offsets due to acc ifrect return to the ba of the DER Geologist)	aga or equivalent formation) layers impede infiltration) il but some of infiltrated landscape discharges into creek and is consumed tation) z River riparian basin. eptance of treated wastewater will be sin. (Must be demonstrated to the
	1.00 Projects serve	d by consolidated rock	aquifers.
5. Net Consump	ive Use: (Gross demand * C	.U.Factor)	
 Residential when the co will be bas times the p contingency 	Demand: Separate factors for sumptive use factors for e d on average occupancy fig r person use for the type will be added to this figu	or interior and exterio ach are different. Gen ures from the most rece of plumbing fixtures in re.	r use are only used werally, interior use nt census (3.01 people/SFD) volved. A 10 ≹
 Irrigation similar lar likely uses by the appl prepared er 	emand: Estimated by develo uses in the vicinity (AFY of the onsite soil types. cant and reviewed for adeq irely by the DER Geologist	ping a water duty facto (parcel) or by an asses This analysis can be p This dealysis can be p the DER Geologi	or from sment of erformed st or may be

 Commercial Demand: Based on water duty factors (AFY/1000 sq.ft.) from the Thresholds Manual or as developed during case review.

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echarge Adjustments	والمتعمين وسياب والالالا والمتعادي	en la materia (
⁷ These adjustments are made only for p Santa Ynez Mountains (i.e. the North basin area on the South Coast is in C Note that there is not universal agre of the recharge area of each basin. overlying a confined basin. Any rech credit which might be due an individu recharge area of a South Coast basin increase of the Threshold of Signific	projects which are located north o County). This is because most of confined conditions. eement as to the location and size All projects will be treated as i harge ual project located in an identifi is considered accounted for in th cance from previous manuals.	f the the of f ed e
 Loss of Natural Recharge: The infi Geologist using the Soil Moisture E (See listing of infiltration rates 	iltration rate will be calculated Balance method or Blaney Curve met in 10. below)	by the DER hod.
 Field recharge increase: Irrigated are calculated by the DER Geologist site plan, the proportion of imperv remaining area to be irrigated will 	and non-irrigated infiltration ra t (listed below). Absent a detail vious area and the percentage of t l be estimated as follows:	ed the
Lot size	* of yard area irrig.	
	75	
7000 - 21780 35 21781 - 43560 30	60	

Area	Irrigated	Non- Irrigated	Analysis Method
Orcutt Buellton Santa Ynez Los Alamos Lompoc	.19 .26 .30 .25 .21	.05 .09 .11 .08 .07	Blaney Blaney Blaney Blaney Blaney Blaney

11. Recharge Basin: System efficiency is set at a maximum of .80 to account for system losses due to evaporation, leaks, loss of permeability of recharge basin over time and spills during peak flow events. A lower figure may be will be used if analysis by the DER Geologist, or other technical information, indicates that 80% efficiency cannot be achieved in the long term. Figure for annual average rainfall to be obtained from the Precipitation Data Report (Gibbs and Holland, 1990). To obtain this credit, the runoff from the impervious surfaces of the project must be conveyed to the recharge basin through impervious drains(not an unlined drainage channel).

Historic Use Credit

12. Historic use credit is only given for existing land uses that will be discontinued upon approval of the proposed project. (Examples: Removal of orchard for a new dwelling, elimination of landscaped area through enlargement of a structure, retrofitting a older onsite structure with low flow fixtures)

13. Consumptive Use Factor: Same as figure used for the demand calculation.

Summary

14. Total consumptive demand adjusted for recharge less discontinued historic use equals net new consumptive use. This figure is compared to the Threshold of Significance established for the groundwater basin to assign the impact level disclosed in the environmental document.

Santa Barbara County Environmental Thresholds and Guidelines Manual

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		Explanation	Data from the Carpinteria Mater District, 7/88. (Refer to 89-EIR-12)			Data from the Montecito Mater District, 1989. (81-88 average water use)	Data from SCMD. (79-B8 average water use)			·
	Factors	AFY/. 1000sf			•					
	· Water Duty	AFY/Acre	0.55 0.65 1.08 1.32 1.56	0.95 8.70 2.30 2.30 2.64	3.00	1.02 1.48 0.56 3.18				
LE 7	olds Manual -	AFY/Unit	1.64 0.60 0.34 0.25 0.25 0.16			1.02 0.68 0.45 0.26				
1/18	roundwater Thresh	Minimum Acres or Sq.Ft./Unit	3.00 1.00 13200.00 13200.00 9470.00			43560.00 20000.00 3 acres 7000.00 3500.00	0.20 0.21 0.27 0.33 0.33 0.71 1.10	•	1.10	
	9 2661	Land Use Designation	1 DU/3 acre 1 DU/3 acre 1.8 DU/acre 3.3 DU/acre 4.6 DU/acre Condoniniums Apartments Hobile Homes	Office/Retall Motel Motel Restaurant Industrian Schools Parks, Irrigated Open Space	. Greenhouses Open nurseries, field crops	1-E-1 20-R-1 3-E-1 7-R-1 7-R-2	Less than 2500 2501-500 5001-8500 8501-15000 15001-15000 30001-50000 50001-105000	Restaurant Other	Public Schools [rrigation	
		Area	CARPINTERIA VALLEY			MONTECITO	SUMMERLAND			

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-	AFY/ 1000sf Explanation	Data from City of Santa Barbara Water Denand Factor and Conservation Study "USER'S GUIDE" Document No. 2	0.11 0.17 0.18 0.18 0.11 factor in AFV/bed 0.29 0.10 0.10	0.32 0.13 15 factor in AFY/room 0.09 0.15 0.15 0.23	0.04 factor in AFY/seat 1.26 0.02 0.07 0.11 0.10 factor in AFY/room	0.02 factor in AFY/student 0.03 factor in AFY/student 0.0047 factor in AFY/seat 0.07	0.05 0.03 0.04
÷	AFY/Acre	f 5 7 8 7 8 7 8 7 8 7 8 8 7 8		. -	•	.*	2.40 2.10 1.35
LE 7 (Cont'	AFY/Unit	0.32	0.28	2		21.0	
TAB	Minimum Acres or Sq.Ft./Unit	Up to 9999 sf/lot 10000-22000 22000-1 Acre More than 1 Acre	2	ıfacturing	s.f.	ą	
	Land Use Designation	SFD "Small" SFD "Hedium" SFD "Large" SFD "over 1 acre lot" Muiti-family Apartment	Auto Repair/Auto Body Sho Bank Church V/School Church W/School Convalescent Nospital Gas Station/Mini Market General Office Grocery Store	Health Club Hotel/Motel Hotel/Hotel/Restaurant Industrial Assembly & Man Industrial Assembly & Man Hodsal Office Mixed Medical/Dental	Hult-amily Aparument Restaurant, 74 hour Restaurant, 754 food Restaurant, 514 Down Retail, Large-over 20,000 Retail, Small-under 20,000 Ret Frement Facility	Sen for Apartment School-Elementary School-Junior High Theater Marehouse/Industrial Stor	Turf-grass Cool-Season Marm-Season Orchards Citrus Citrus
	Area	CITY OF SANTA BARBARA					

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	Explanation		Data from the Goleta Water District, 1989. (1973-86 average use)	•	· · · •	
	AFY/ 1000sf	0.04 0.03 0.03 0.03 0.03 0.03		les hces	,	0.00 .23 .34 .53 .00 .53 .00 .53 .00 .00 .00 .00 .00 .00 .00 .00 .00 .0
(P	AFY/Acre	1.50 1.50 1.50 1.50	0.86 0.70 1.09 1.1.28 1.1.28 1.1.28 1.1.28 1.1.28 1.1.28 1.1.28 1.1.28 2.74	use all examp clency ordinar	3-1.31-1.46 5-1.44 0-1.38-1.80 0-3.00 2-3.2-4.16 0-5.75 00-5.75	
BLE 7 (Cont'	AFY/Unit		1.22 0.50 0.444 0.33 0.33 0.27 0.27 0.22 0.22	.10 AFY beca to water eff!	0.73 .7 0.73 .7 0.30 1.2 0.30 2.4 0.26 3.1 0.23 4.6	
TA	Hin Imum Acres or Sq.Ft./Unit		3.00 1.00 1.00 1.00 1.000.00 12000.00 12000.00 10000.00 7000.00 3500.00 3500.00	are shown reduced by tion and not subject	1560-21780 13200-12446 13200-12446 10890-9470-7260 5415-4356 3630-3541-2723 2178-1723 1452	
	Land Use Designation	Non-Water Conserving Groundcovers Shrubs Irees Low Mater Using (1/2 of above figures) Shrubs Trees	<pre>1 DU/3+ acres (202 #)* 1 DU/1.5 acres (204)* 2004.1 Could acre (698#)* 2004.1 (208#)* 15.4.1 (128##)* 10.4.1 (1282#)* 10.4.1 (1282#)* 0.4.1 (2022#)* 10.4.2 (064)* 7.4.2 (074)*</pre>	*SFD water duty factors were pre-1980 construct currently in effect.	DR 1, 1.8, 2 0R 3, 3.5 0R 4, 4.6, 6 0R 8, 10, 5 0R 12, 12.3, 16 0R 20, 25 0R 20, 25	Highway C., Neighbrhd C., CH.CC, C3, Retail C., General C. Skopping Center-SC Biopolog Center-SC Hotel/Hotel 0700 Gas Station 2500
	Årea	CITY OF SANTA BANBARA	GOLETA VALLEY			

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		Explanation		Data from SYRWCD, Improvement District #1 1977	Data from the Buellton Community Services District. (1982-91 average use)	Data from City of Lompoc, 1977 ; Park Water, 1972
		AFY/ 1000sf	0.13 0.15 0.16 0.10 0.13 0.23 0.23			
		AFY/Acre	3	0.12 0.20 82205 2.7987	1.64 3.50 3.50 3.50	0.31
	LE 7 (Cont'	AFY/Unit		0.14 0.14 0.14	0.57	.62 .5262 .3052 .2030
	TAG	Minimum Acres or Sq.Ft./Unit	s supply srch.ådev.	10.00 5.00 1-4 10000-20000 2180-7000	8000 7000	1-3 1.ac20000 ft.2 10,000-19,999 3,500-7,000
		Land Use Designation	Retail (store) 1100 1200 Office 1700, 1800, 2400 Research Park Hulp Light Industry H-1*** Light/Heavy Industry H-1/H-2 Prof. Institutional P/1***** Chrch7100(Assrs.UsrCd) de parking lot and driveways eer/construction/food/pubilshers sional office/hospital/library/re	Residential 1 DU/10 acres 1 DU/10 acres 1 DU/1-4 acres 1 DU/10000-20000 ft2 1 DU/2180-7000 ft2	Commercial Industrial Institutional Agricuitural 8-R-1 7-R-1	Residential 1 DU/1-3 acres 1 DU/20.000-1 ac. 1 DU/10.000-19.999 1 DU/3500-7000
• • •		Årea	GOLETA VALLEY GOLETA VALLEY *** Does not inclu *** Includes engin	SANTA YKEZ VALLEY	Buellton Are	LOMPOC VALLEY

Multimu Marker (cont-d) real Land Use besignation Minimu Arr/Init Arr/Init Arr/Init Arr/Init Explanation Eff Designation Seff. Junit Arr/Init Arr/Init Arr/Init Fr/Init Arr/Init Fr/Init Explanation eff Designation Seff. Junit Arrian 0.33 0.33 0.33 0.0001 Explanation finitizitiani Seff. Junit Arrian 0.33 0.33 0.33 0.33 0.33 0.33 0.33 0.0001 0.0021 0.0022 0.0021 0.0022 <								
Teal Land Use berignation Hintum Stritt. Junt Arr/Int Arr/Acre 10005r Explanation ET Commercial Industrial policitational bolicitation bolicitational bolicitational bolicitational bolicita			TA	BLE 7 (Con	it'd)			
ET Connectial Indistitutional public Factility 0.33 0.33 0.33 Data from the Hission 0.33 as Area public Factility 0.32 0.33 0.33 0.33 0.33 0.33 0.33 0.33 0.34 0.33 as Oats Area public Factility 101/12500 12000 0.38 0.33 0.39 0.33 0.30 0.33 0.30 0.33 0.30 0.33 0.33 0.34 0.33 0.33 0.33 0.34 0.30 0.33 0.33 0.35 0.33 0.35 0.33 0.35 0.33 0.36 0.33 0.30 0.33 0.30 0.30	Irea	Land Use Designation	Minimum Acres or Sq.Ft./Unit	AFY/Unit	AFY/Acre	AFY/ 1000sf		Explanation
a Dats Area 1 UV/12500 12500 0.87 100/12500 100/1270 <th< td=""><td>ĒŶ</td><td>Commercial Industrial Institutional Public Facility</td><td></td><td></td><td>2.46 0.98 0.33</td><td></td><td></td><td></td></th<>	ĒŶ	Commercial Industrial Institutional Public Facility			2.46 0.98 0.33			
WALEY Ma. (Hon-prime sol1; Irrigation demand) 100-150 ac. 25.00 2517 Figure based on land use survey by DR1, 1999 RR-5 5 ac. 0.98 0.20 0.30 Data from the LMCSD, 199 RR-5 5 ac. 0.98 0.20 Data from the LMCSD, 199 RR-5 5 ac. 0.98 0.20 Data from the LMCSD, 199 RR-5 5 ac. 0.98 0.20 Data from the LMCSD, 199 RR-5 5 ac. 0.91 0.30 Data from the LMCSD, 199 RR-5 5 ac. 0.91 0.30 Data from the LMCSD, 199 RR-1 10,0000 0.52 2.30 Data from the LMCSD, 199 Re-1.1 10,0000 0.52 3.20 Data from the LMCSD, 199 Re-1.1 10,0000 0.52 3.20 Data from the TRN. Re-1.2 15,000 0.50 0.26 3.20 Re-1.1 10,000 0.50 0.26 3.20 Re-1.1 10,000 0.57 3.26 0.30 Re-1.1 10,000 0.57 3.26 0.30 Re-1.1 11,64 0.30 0.30 0.30 Re-1.1 11,64 0.31 0.30 0.30 Re-1.1	ia Daks Area	1 DU/12500 DR-1.8 1 DU/25000 ft.2	12500 15000 25000	0.82 0.87 1.00		· . ·	Date fr Hills (water u	rom the Mission CSD. (1982-90 use records)
RR-5 5 ac. 0.98 0.20 Data from the LACSD.199 3-E-1 1 3 ac. 0.91 0.30 and modified from other 1-E-1 1 3 ac. 0.91 0.30 ac. 0.91 1-E-1 1 3 ac. 0.91 0.30 1.31 Dottes: Refer to the LACSD.199 10-R-1.8 2,405 0.33 2.10 1.31 Loss Alanos Commuty 10-R-1 7,000 0.57 3.55 2.10 Plan EIR. 0.0-R.1 5,445 0.30 3.240 0.33 5.40 0.0-R.1 5,445 0.30 0.57 3.240 1.31 0.0-R.1 10,000 0.57 3.240 0.38 Loss Alanos Comunity 0.0-R.1 10.0 0.33 2.40 0.33 2.40 0.38 0.12.1 Residential 0.10 0.57 0.33 0.30 0.30 0.12.1 Residential 0.14 1.6 0.33 1.65 2.36 </td <td>VALLEY</td> <td>Ag. (Hon-prime soil; irrigation demand)</td> <td>100-150 ac.</td> <td>25.00</td> <td>.2517</td> <td>..</td> <td>F lgure use su</td> <td>based on land rvey by DER, 1989.</td>	VALLEY	Ag. (Hon-prime soil; irrigation demand)	100-150 ac.	25.00	.2517	. .	F lgure use su	based on land rvey by DER, 1989.
Connercial (M-1) Connercial (M-1) Connercial (Cli, C-2, C-3) Residential 4 DU/Acre 5-8 DU/Acre 9-12 DU/Acre (Includes trailers) Connercial Co		RR-5 3-E-1 1-E-1 0R-1.8 0R-1.8 7-R-1 0R-12.3 PRD PRD	5 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0.98 0.98 0.57 0.57 0.57 0.57 0.57 0.57	0.20 0.30 0.84 0.84 2.55 3.20 3.20 3.20	<u> </u>	Data fi and mo source: Los All Plan E	rom the LACSD, 1991 dified from other s. Refer to the amos Community IR.
Residential Data from So Cal. Water 4 DU/acre 0.41 1.64 Co.,1977. 5-8 DU/acre 0.33 1.65 - 2.64 Co.,1977. 9-12 DU/acre 0.33 1.65 - 2.64 Co.,1977. 13-22 DU/acre 0.55 2.25 - 3.00 10,890 13-22 DU/acre 1.64 2.13 - 3.61 10,890 Commercial 3.20 3.20 3.20		Connercial (H-1) Connercial (CII, C-2, C	(E-			0.28	•	
	_	Residential 4 DU/acre 5-B DU/acre 9-12 DU/acre 13-22 DU/acre (includes tralicrs) Commercial Industrial		0.41 0.33 0.25 1.64 1.64 3.20	:1.64 1.65 - 2.64 2.25 - 3.00 2.13 - 3.61 2.13 - 3.61	10,890	Data fi Co., 19	77.

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	;		
·	Explanation	Data from Cal. Cities Hater Co., 1-90 to 2-92 use records.	Data from the City of Santa Maria, 1982-83 records.
	AFY/ 1000sf		· · · · · · · · · · · · · · · · · · ·
(F	AFY/Acre		e 133 gcpd e 117 gcpd e 117 gcpd e 117 gcpd e 125 gcpd e 125 gcpd 0.08 0.08
BLE 7 (Cont ¹	AFY/Unit	0.86 0.94 1.08 1.40	•
TA	Minimum Acres or Sq.Ft./Unit	10000.00 13400.00 13400.00 40000.00	 3.4 pers./unit 2.0 pers./unit 1.7 pers./unit 2.1 pers./unit 2.5 pers./unit 2.0 pers./unit
	Land Use Destimation	10-R-1 20-R-1	Residential Single family Condominum Less than 4 rooms/unit A or more rooms/unit Apartment Hobile Home H.H. without children Commercial Industrial
		ORCUTT (1992 Update)	CITY OF SANTA MARIA

.

Indoor Use Dar Darson	gal/yr. w/5.5 gal. Toilet*	gal/yr. w/3.5 gal. Toilet*	gal/yr. w/1.6 gal. toilet*
	5.9 gpm snwr .	5 gpii siiwi	2 gpm snwr
1011et 4 flusnes/day - 11 - (1 - 1) - (1 - 1	0020	5110	2226
gallons/flush 5.5/3.5/1.6	8030	5110	2336
Shower .//day - $3.9 \text{ gal}/3 \text{ gal}/2$			
gpm x 10 min.	9965	7665	5110
Tub bath $.2/day$ tub $1/2$ full =			
24 gallons	1752	1752	1752
Brush teeth 1.3/day x 2.5 gal	1186	1186	1186
Shaving 1/day 25% of pop. X			
4.5 gal.	411	411	411
Washing hands 5/day wet and			
rinse @ .2 gal/wash	365	365	365
Drinking and cooking x			
1 gallon/day	365	365	365
Clothes washing			
.29 x 35 gallons/wash	3704	3704	3704
Dishwashing (calc. 1 person			
assume 2 person/household)	3285	3285	3285
auto wash 5 wash/day x 18	5205	5200	3203
gallons inc. rinse			
Garbage disposal (calc. one	100	102	102
person assume 2 person/ house	183	183	183
.5 use/day x 1 gallon			
Callons/Vear/Person	29 246	24 026	18 697
	27,270	27,020	10,077
AFY/person	0898 AFY	.0737 AFY	.0574 AFY

Table 8a - Water Demand Estimations Based on Individual Indoor Uses For Santa Barbara County Including Limitations of Ordinance 2948 (Applies to all areas of Santa Barbara County)

Pre-ordinance toilets have mostly 5.5 gal tanks, Larry Farwell GWD 4/15/88 and Pre-ordinance standard pipe output (showers and faucets) was 3.9 gpm Ed Justus, Co., Bldg. Dept. 4/15/88. Further reductions in these indoor uses can be achieved through the installation of higher efficiency plumbing fixtures, *

** for example, changing a 3.5 gallon flush toilet to a 1.6 gallon flush toilet. Table 8b - Outdoor Use Per Unit (Applies county wide but some areas have a higher landscaping use).

Sauna/swimming pool .1 AFY	
Sauna/swimming pool with evaporation inhibitor	.05 AFY
Washing cars - soap and rinse with running water	15 gals/wash
Washing cars - 3 gallon bucket and brief rinse	105 gals/wash
Washing driveways	25 gals/wash
Green lawns, ornamental gardens	1.5-2 AFY/acre
Not so green lawns, ornamental gardens	1-1.5 AFY/acre
Drought resistant trees and shrubs and ivy	1 AFY/acre
Household gardens - beans, tomatoes, carrots, strawberries	1-4 AFY/acre
Commercial type orchards - avocados, lemons, walnuts New plantings 1-3 years Mature trees by flooding Mature trees by drip system	1.5-2 AFY/acre 1.5 AFY/acre 1.2 AFY/acre
Unusual Water Llass (per unit)	1.2 AI 1/acte
<u>Onusuar water Oses</u> (per unit)	
Pets - drinking - 1 gal/day bathing33 gal/day	1.33 gal/day
Water beds	100 gal/year
Dark room	20 gal/use
Washing floors and household cleaning	10 gal/week
Aquaria	1 gal/week 5 gal/day

If individual use factors (from Table 8) are applied by themselves, a contingency factor of 10 percent of the total indoor/outdoor use calculated should be added for darkrooms, , mopping floors, leaks in the water pipes, hoses left running accidentally, washing down the house or a boat, other occasional uses or future conversion of landscaping to higher water use plants.
Table E 9 - Agricultural Water Duty Factors in Santa Barbara County. Compiled by Cooperative Extension, University of California, Santa Barbara County (9-16-91)

	South Coa	ast Area	Santa Ma	aria &	Santa Los Ala	Ynez, mos &		
			Lompoc	Valleys	Sisquoc	Valleys	Cuyama	Valley
Сгор	Range	Avg	Range	Avg	Range	Avg	Range	Avg
Field crops Beans Corn, field Grain, irrigated Sugar beets			.5-1.3 1.5-2.2 .37 2.6-3.2	1.0 1.8 0.5 3.0	.9-1.5 2.0-2.8 .6-1.0 3.0-3.6	1.3 2.2 .8 3.2	1.0-1.7 2.4-3.2 1.0-1.8 3.6-4.6	1.5 2.8 1.5 4.0
<u>Forages & Pastures</u> Alfalfa Pasture/irrigated Sudangrass			2.6-3.3 2.8-3.3 1.0-1.8	3.0 3.0 1.5	3.0-4.0 3.3-4.0 1.3-2.0	3.5 3.7 1.7	4.0-4.6 4.0-4.6 2.0-3.0	4.3 4.3 2.5
Ornamentals Cut flowers/field Flower seeds Greenhouse:	1.5-2.3	1.8	1.5-2.3 1.5-3.0	1.8 2.3	2.0-3.5	2.7		
Mums, pompom Mums, potted Turfgrass	2.0-3.0 2.0-4.5 4.5-5.5 2.5-2.8	4.0 5.5 2.7	2.5-2.8	2.7	3.0-4.0	3.5	3.5-4.5	4.0
<u>Trees and Vines</u> Avocados Deciduous fruits Grapes Lemons Walnuts	1.0-2.0 .8-1.8 1.0-2.0	1.6 1.5 1.5	1.1-2.1 1.2-2.0 .7-1.8 1.0-2.0 1.3-2.5	1.7 1.7 1.2 1.6 1.8	1.5-3.0 1.0-3.0 2.0-3.5	2.5 2.0 3.3	3.0-4.5	3.8
Vegetables Broccoli/cabbage Cauliflower Carrots Celery Lettuce Potatoes Strawberries Tomatoes	2.5-3.5 1.0-2.0	3.0 1.5	1.3-1.5 1.5-2.0 1.5-3.0 2.0-2.5 1.0-1.3 1.5-2.0 2.5-3.0 1.5-2.0	1.4^{*} 1.7^{*} 2.3 2.2^{*} 1.1^{*} 1.7 2.7 1.7	1.5-2.0 2.0-3.0 2.0-2.5 2.0-2.5 1.0-2.0 2.0-3.0	1.7 2.5 2.2 2.2 1.5 2.5	2.5-3.5	3.0

Irrigation Water Use by Crops in Santa Barbara County (AFY/acre)

*Average two crops per year in Santa Maria Valley (multiply factor shown by 2 to obtain AFY/acre)

13. NOISE THRESHOLDS (Approved by the Board of Supervisors, August 1993)

A. Noise: Properties and Measurement.

Noise is defined as unwanted or objectionable sound. Sound is a form of energy detectable by the human hearing system, and it is commonly produced when some object is set into vibration. The vibration is transmitted to any surrounding media, such as air, causing pressure variations or "sound waves" among the air particles. These waves spread outward from the source, and along their path the waves can reflect off surfaces, they can bend around obstacles, and they can be absorbed by insulative materials. If sound waves reach one's ears, the membranes at the end of the ear canal begin vibrating. The vibration is transmitted by small bones in the middle ear to the cochlea, where the inner ear's sensory organ is located. Nerve impulses originating in the cochlea are interpreted by the brain as "sound."

Measurement of sound involves determining three variables: (1) magnitude; (2) frequency; and (3) duration.

1. **Magnitude.** The magnitude of variations in air pressure associated with sound wave results in the quality commonly referred to as "loudness". Human ears respond to a very wide range of sound pressures, producing numbers of awkward size when sound pressures are related on an arithmetic (1, 2, 3, ...) scale. It has therefore become customary to express sound magnitude in decibels (dB) which are logarithmic (1, 10, 100 ...) ratios comparing measured sound pressures to a reference pressure. The reference pressure commonly used in noise measurement is 20 micro-Pascals, which is considered to be the quietest sound normal ears can hear. This sound level is assigned the value zero dB, and each increment in sound level of 20dB represents a relative change in sound pressure of ten times. A three dB increase in sound level represents a doubling of sound energy, but it will not be experienced as a doubling of loudness. Loudness refers to how people judge the volume of sound. As a rule of thumb, a one dB change in sound level requires close attention to notice a change in loudness; a three dB change is clearly noticeable; and a 10 dB change will be nearly twice (or one-half) as loud. A noise of 70 dB sound is about twice as loud as 60 dB and four times as loud as 50 dB. The 50 dB noise will be twice as loud as 40 dB, and so on. Figure 1 illustrates the relationships among sound level, relative sound pressure, and relative loudness.

Sound level diminishes as distance from the source increases. For a point source of sound in free space, the rate at which the sound attenuates is inversely proportional to the square of distance from the source. This means the sound level will drop six dB each time the distance from the source is doubled. A stream of vehicles on a busy highway represents a "line" source of sound and the rate of attenuation is different from a point source. The sound level from a busy highway will drop only about three dB for each doubling of distance. Sound attenuation from a train resembles a line source near the railroad tracks and at further distances (beyond about 0.3 the length of the train) can be considered a point source.

Because decibels are logarithmic ratios, they cannot be manipulated in the same way as arithmetic numbers. Addition of decibels produces such results as 70 dB + 70 dB = 73 dB. Thus, if a single automobile produces a sound level of 73 dB, two such automobiles would produce a total sound level of 73 dB. Twice as much acoustic energy is being generated, and this is represented in decibels as a three dB change. As a second example of decibel addition, if one automobile produces a sound level of 70 dB and the other 60 dB, the

combined sound level will be 70.4 dB. When the difference between two sound levels is greater than about 10 decibels, the lesser sound is negligible in terms of affecting the total level.

Air and ground absorption of sound waves will further attenuate sound levels. The rate at which these factors attenuate sound depends on frequency content of the sound, air temperature, relative humidity, terrain, and type of ground cover.

2. Frequency. A second characteristic of sound which must be included in the measurement is frequency. Typical community sounds consist of a wide range of frequencies, from the low roar of a diesel engine to the high-pitched whine of jet aircraft. Frequency refers to the number of times per second the object producing the sound vibrates, or oscillates. The unit of measurement of frequency is Hertz - one vibration per second being equal to one Hertz (Hz).

The human ear responds to sounds whose frequencies are in the range from 20 Hz to 20,000 Hz. Frequencies above or below this range are inaudible to humans and are referred to as ultrasound and infrasound, respectively. Within the audible range, subjective response to noise varies. People generally find higher pitched sound to be more annoying than lower pitched sounds. Sensitivity of the ear also varies. While "loudness" depends primarily on sound pressure, it is also affected by frequency; and while "pitch" is closely related to frequency, it also depends on sound pressure. Thus, a 2,000 Hz tone at 5 dB sound pressure level sounds just as loud as a 20 Hz tone at 70 dB sound pressure level; 20 Hz at 70 dB sound pressure level is quiet to the ear; 2,000 Hz at 70 dB sound pressure level is quite loud.

Because of these variations, a great deal of effort has gone into the development of systems which relate physical measurements of noise to subjective human response. Most of these depend on calculations based on sound pressure levels in various frequency bands "weighted" to correspond with human response. These procedures are cumbersome for most community noise assessment needs. Presently, the most widely used measure of "loudness: for community noise evaluation is the A-weighted sound level. The primary advantage of this descriptor is simplicity, and it has fair correlation with subjective assessments of loudness and annoyance. Sound levels in this report are A-weighted and referred to as "dB(A)".

3. Duration. The third characteristic of noise that must be accounted for to describe human noise response is duration. Noise-induced hearing loss, for example, is directly related to magnitude, frequency content, and duration of noise exposure. Annoyance due to noise is also associated with how often noise is present and how long noise persists.

Environmental noise at any location is usually fluctuating from quiet one moment to loud the next. To adequately describe a noise environment, it is necessary to quantify the variation in noise level over time. One way to do this is to use a statistical approach and specify noise levels that are observed to be exceeded a given percentage of time. Commonly used exceedance levels are:

- L_{90} That level exceeded 90 percent of the time, sometimes referred to as the Residual Noise Level.
- $L_{\rm 50}\,$ That level exceeded 50 percent of the time, the median sound level.
- L_{10} That level exceeded 10 percent of the time, representing higher level, shorter duration noise.

Another approach to quantifying time-varying noise levels is to calculate the Energy Equivalent Sound Level (L_{eq}) for the time period of interest. L_{eq} represents a sound level which, if continuous, would contain the same total acoustical energy as the actual time-varying noise which occurs during the observation period.

a. Time-weighted noise measures: CNEL, L_{DN} . Noise in a residential, or other noisesensitive setting, is often more bothersome at night than during daytime. At night, background noise levels outdoors are generally lower than during the day. Also, the activity in most households decreases at night, lowering internally generated noise levels. Individual noise events are therefore more intrusive at night, since they stand out against the background more sharply than during the daytime.

Community Noise Equivalent Level (CNEL) and Day-Night Average Level (L_{DN}) are noise indices that attempt to take into account differences in intrusiveness between daytime and nighttime noises. CNEL and L_{DN} values result from the averaging of hourly Energy-Equivalent Sound Levels for a 24-hour period, with a weighting factor applied to evening and night-time L_{eq} values.

For CNEL and L_{DN} calculations, the day is divided into time periods with the following weightings:

(1) Community Noise Equivalent Level.

Daytime: 7 a.m. - 7 p.m. - weighting factor of 1 Evening: 7 p.m. - 10 p.m. - weighting factor of 5 dB Nighttime: 10 p.m. - 7 a.m. - weighting factor of 10 dB

(2) Day-Night Average Level.

Daytime: 7 a.m. - 10 p.m. - weighting factor of 1 Nighttime: 10 p.m. - 7 a.m. - weighting factor of 10 dB

CNEL and L_{DN} have been shown to have good correlation with group responses to long-term noise exposure. In practice, CNEL and L_{DN} are virtually identical. Experience with highway, railroad, airport, and general community noise in this County has shown that the two measures consistently agree with 1.0 dB. In this report they are used interchangeably.

- **b.** Noise exposure contours. Noise exposure contours are the mapped expressions of points of equal average noise level, analogous to topographic contours which are the mapped expression of points of equal elevation. Noise contours can be drawn with respect to any noise measure; to satisfy State requirements for the Noise Element, L_{DN} and CNEL have been used in this report. Noise contours usually refer to a single source of noise such as a freeway, although they sometimes combine multiple sources.
- 4. Ambient noise. Ambient noise refers to background noise. It is the composite of noise from all sources which impact a given location. It is the normally existing noise environment at a particular place. Ambient noise levels are measured as described in the previous sections, using weighted noise measurement systems.

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Noise impacts associated with proposed projects may involve ambient noise in several ways. A project may involve a significant noise impact if it generates noise that creates a substantial increase in ambient noise levels affecting noise- sensitive uses in the project vicinity. A project may also have significant noise impacts if the project involves siting of a

noise-sensitive land use in a location with high ambient noise levels.

B. Noise Threshold Criteria.

1. Controlling noise. Significant noise impact problems in Santa Barbara County are primarily associated with transportation facilities. Noise in the vicinity of airports, railroads, and major traffic-ways exceeds health and welfare criteria for noise exposure in relation to residential use. While noise from commercial, industrial, agricultural, and "population" activities may be part of the ambient noise at any location, rarely do these generate noise of the same magnitude as transportation sources.

In the unincorporated County, it is estimated that as many as 8,000 housing units and 21,000 persons are potentially exposed to transportation noise at Day-Night Average Levels exceeding 60 dB. The exposure level of 60-65 dB(A) is considered to be the maximum outdoor noise level compatible with residential and other noise-sensitive land uses. In locations outside the immediate influence of a major transportation noise source, ambient Day-Night Average Levels typically range from 46 dB(A) to 57 dB(A). Although localized noise problems will exist in these areas, generally ambient noise levels are acceptable, based on health and welfare criteria.

Controlling the impact of transportation noise must be approached both by quieting vehicles and by protecting sensitive land uses in locations where noise impact is excessive. The first of these approaches is beyond the legal jurisdiction of the County because Federal and State legislation is preemptive in the field of noise source control. The County's primary opportunities to manage transportation noise impact lie in:

- a. Planning for compatible uses near existing transportation facilities.
- b. Imposing design standards on proposed sensitive development near existing transportation facilities.
- c. Incorporating noise control features into the design of new or expanded traffic-ways to protect existing sensitive areas.

2. Planning policies.

- a. In the planning of land use, 65 dB(A) Day-Night Average Sound Level is regarded as the maximum exterior noise exposure compatible with noise-sensitive uses unless noise mitigation features are included in project designs.
- b. Noise-sensitive land uses are considered to include:
 - 1. Residential, including single- and multi-family dwellings, mobile home parks, dormitories, and similar uses.
 - 2. Transient lodging, including hotels, motels, and similar uses.

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- 3. Hospitals, nursing homes, convalescent hospitals, and other facilities for long-term medical care.
- 4. Public or primate educational facilities, libraries, churches, and places of public assembly.
- c. Noise-sensitive uses proposed in areas where the Day-Night Average Sound Level is 65 dB(A) or more should be designed so that interior noise levels attributable to exterior sources do not exceed 45 dB(A) L_{DN} when doors and windows are closed. An analysis of the noise insulation effectiveness of proposed construction should be

required, showing that the building design and construction specifications are adequate to meet the prescribed interior noise standard.

- d. Residential uses proposed in areas where the Day-Night Average Sound Level is 65 dB(A) or more should be designed so that noise levels in exterior living spaces will be less than 65 dB(A) L_{DN}. An analysis of proposed projects should be required, indicating the feasibility of noise barriers, site design, building orientation, etc. to meet the prescribed exterior noise standard.
- e. The Planning and Development Department, including the Building and Safety Division, and Public Health Department's Environmental Health Services Division have administrative procedures for determining project compliance with the State Noise Insulation Standards related to interior noise levels.
- f. For protection of sensitive activities, as well as the airports, noise-sensitive land uses, other than hotels and motels insulated to the level prescribed in the State Noise Insulation Standards, should not be permitted within the 65 dB(A) CNEL contour of any airport.
- g. Residential use should be avoided within the 65 dB(A) CNEL contour of any airport and under airport traffic patterns.
- h. Zoning ordinance noise level provisions for the M-1 and M-2 zone districts require that noise generated by any use on the property shall not exceed 75 dB L_{10} at or beyond any point along the property boundary upon which such use is located. In no case shall the volume of sound exceed 65 dB L_{dn} at the location of any nearby noise sensitive uses. The M-RP zone district requires that the volume of sound generated or resulting from any use, other than motor vehicles, operated in any lot shall not exceed 50 decibels at any point along the boundary of or outside of the lot upon which such use is located. All of these requirements assume measurements are taken during calm air conditions.
- i. In the planning and design of major transportation routes and facilities, noise impacts on existing or planned land uses are carefully considered so that noise-related land use conflicts are minimized.
- j. The Goleta Community Plan (Policy N-GV-1) requires that interior noise-sensitive uses (e.g., residential and lodging facilities, educational facilities, public meeting places and others specified in the Noise Element) shall be protected to minimize significant noise impacts.
- k. The Montecito Community Plan requires that noise-sensitive uses, as defined in the Noise Element, shall be protected from significant noise impacts.
- 1. The Summerland Community Plan requires that interior noise sensitive uses, noisesensitive uses as defined in the Noise Element, shall be protected from significant noise impacts.
- **3.** Noise thresholds. The following are thresholds of significance for assisting in the determination of significant noise impacts. The thresholds are intended to be used with flexibility, as each project must be viewed in its specific circumstances.
 - a. A proposed development that would generate noise levels in excess of 65 dB(A) CNEL and could affect sensitive receptors would generally be presumed to have a significant impact.

- b. Outdoor living areas of noise sensitive uses that are subject to noise levels in excess of 65 dB(A) CNEL would generally be presumed to be significantly impacted by ambient noise. A significant impact would also generally occur where interior noise levels cannot be reduced to 45 dB(A) CNEL or less.
- c. A project will generally have a significant effect on the environment if it will increase substantially the ambient noise levels for noise-sensitive receptors adjoining areas. Per item a., this may generally be presumed when ambient noise levels affecting sensitive receptors are increased to 65 dB(A) CNEL or more. However, a significant effect may also occur when ambient noise levels affecting sensitive receptors increase substantially but remain less than 65 dB(A) CNEL, as determined on a case-by-case level.
- d. Noise from grading and construction activity proposed within 1,600 feet of sensitive receptors, including schools, residential development, commercial lodging facilities, hospitals or care facilities, would generally result in a potentially significant impact. According to EPA guidelines (see Figure 2) average construction noise is 95 dB(A) at a 50' distance from the source. A 6 dB drop occurs with a doubling of the distance from the source. Therefore, locations within 1,600 feet of the construction site would be affected by noise levels over 65 dB(A). To mitigate this impact, construction within 1,600 feet of sensitive receptors shall be limited to weekdays between the hours of 8 AM to 5 PM only. Noise attenuation barriers and muffling of grading equipment may also be required. Construction equipment generating noise levels above 95 dB(A) may require additional mitigation.

All noise studies evaluating ambient noise levels and changes resulting from project development should be prepared by licensed acoustical engineers.

Sound	Sound Pressure Level	Relative Sound Pressure	Relative Loudness (approximate)				
Jet Takeoff, 200 feet	120	1,000	64				
Riveting Machine	110		32				
Power Mower (at 5 feet)	100	100	16				
Motorcycle (at 50 feet)	90		8				
Inside Sports Car (50 mph)	80	10	4				
Vacuum Cleaner	70	3	2				
Ordinary Conversation (at3 feet)	60	1	1				
Private Business Office	50		1/2				
Inside Average Residence	40	0.1	1/4				
Soft Whisper (at 5 feet)	30		1/8				
Inside Recording Studio	20	0.01	1/16				
Rustle of leaves	10		1/32				
Threshold of Hearing	0	0.001	1/64				

Figure 1: Sound Level of Common Sounds

FIGURE 2

Γ			NO	ISE LEVEL	(dbA) AT 50	FEET	0 110
		6) 8			0 110
		COMPACTERS (ROLLERS)					
		FRONT LOADERS					
IGINE	ING	BACKHOES					
N EP	MOV	TRACTORS					
USTIC	ARTH	SCRAPERS, GRADERS					
COMB	E	PAVERS					
JUNE		TRUCKS					
INTER	DND	CONCRETE MIXERS					
ED BY	HAND	CONCRETE PUMPS					
WEP	SIAIS	CRANES (MOVABLE)					
NT PC	MATEI	CRANES (DERRICK)					
IPME	X	. PUMPS	1				
EOL	ONAF	GENERATORS		Incohestat			
	STATI	COMPRESSORS					
	-	PNEUMATIC WRENCHES					
IDACT	PMEN	JACK HAMMERS AND ROCK DRILLS	-				
NI	EQUI	PILE DRIVERS (PEAKS)			-		
a		VIBRATOR	-				
OTHE		SAWS					

Noise Levels for Typical Construction Equipment Referenced to 50 Feet

Note: Based on limited available data samples.

Source: EPA, 1971. "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," NTID 300-1.

REFERENCES

- 1. U.S. Department of Transportation, <u>Transportation Noise and Its Control</u> (Washington, D.C. US GPO) 1972
- 2. U.S. Environmental Protection Agency, <u>Public Health and Welfare Criteria For Noise</u> (Washington, D.C. US GPO) 1973
- 3. U.S. Environmental Protection Agency, <u>Information on Levels of Environmental Noise Requisite</u> to Protect the Public Health and Welfare with an Adequate Margin of Safety (Washington, D.C. US GPO) 1974

14. QUALITY OF LIFE GUIDELINES

Quality of life can be broadly defined as the aggregate effect of all impacts on individuals, families, communities, and other social groupings and on the way in which those groups function. The quality of life subsumes what others label as the psychological, psychosocial, well-being, or satisfactional impacts. Quality of life has implications for mental health and well-being, social structure, and community well-being:

- Mental health and well-being encompasses changes in the mental states of individuals, including their attitudes, perceptions, and beliefs as well as the associated psychological and physiological consequences of those changes.
- Social structure encompasses changes in the social organization of families and groups, their collective postures over the impacts, and how impacts affect the cohesion and viability of the group.
- Community well-being encompasses changes in community structure that relate to noneconomic factors, such as desirability, social cohesion, livability, attractiveness, and sense of place.

Quality of life issues, while hard to quantify, are often primary concerns to the community affected by a project. Examples of such issues include the following:

- Loss of privacy;
- Neighborhood incompatibility;
- Nuisance noise levels (not exceeding noise thresholds);
- Increased traffic in quiet neighborhoods (not exceeding traffic thresholds);
- Loss of sunlight/solar access.

The County interprets the CEQA mandate for maintaining a high quality environment strictly, and considers the maintenance of a high quality human environment an important responsibility. The <u>State CEQA Guidelines</u> clearly support the use of local standards in determining what constitutes a significant effect on the environment. Therefore, on a case by case basis, the elements comprising "quality of life" shall be considered. Where a substantial physical impact to the quality of the human environment is demonstrated, the project's effect on "quality of life" shall be considered significant.

15. PUBLIC SAFETY THRESHOLDS

A. Purpose.

The thresholds contained within this chapter assist the County in classifying the significance of impacts to public safety in a consistent and comprehensive manner when considering a discretionary land-use action. These thresholds focus on involuntary public exposure to acute risks that stem from certain types of activities with significant quantities of hazardous materials. Such activities include installations or modifications of facilities that handle hazardous materials (hereinafter referred to as hazardous facilities), and the transportation of hazardous materials. However, the thresholds also assist in identifying potentially significant impacts to non-hazardous land uses proposed in proximity to existing hazardous facilities.

The thresholds employ quantitative measures of societal risk during the environmental review of a proposed development to indicate whether the annual probability of expected fatalities or serious injuries is significant or not. Measuring societal risk must comply with County-approved guidelines; however, it is not necessary to complete a quantitative risk analysis in order to determine whether an environmental impact report is required or not during preparation of an initial study. Both unmitigated risk estimates and the effectiveness of options to mitigate significant risk should be tested against the threshold. If a proposed project exposes the public to significantly high risks despite all feasible measures to mitigate the impact, then approval of the project requires a statement of overriding considerations, adopted by the approving authority and supported by substantial evidence in the record. Upon project approval, the risk estimates should be adjusted and charted on the thresholds to reflect the risk accurately, based on accepted mitigation, for future land-use planning and permitting purposes.

As described below, these thresholds should not function as the sole determinants of significance for public safety impacts. Rather, they must be used in concert with applicable County policy, regulation, and guidelines to address other qualitative factors specific to the project which also help determine the significance of risk. For example, highly sensitive land uses (e.g., hospitals or schools) are generally given greater protection from hazardous situations overall. Also, long-term significant risks (e.g., natural gas production) generally are treated more conservatively than relatively short-term risks (e.g., natural gas exploration).

B. Definitions.

Acute risk - Chance of fatality or serious injury due to a single, short-term, involuntary exposure to a release of hazardous gas, liquid, or solid, or to a fire or explosion.

Fatality - Death, including exposure to an accident that produces escape-impairing symptoms and considering nearly all individuals that could be exposed (i.e., not just healthy workers, but the elderly, the young and individuals with preexisting health problems).

Feasible - Capable of being accomplished in a successful manner with a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

Occupational Safety - Applies to employees and contractors (not including construction crews) of a hazardous facility (including people who visit the hazardous facility to provide services or conduct business).

Qualitative Factors - Consideration of special characteristics of risk not generally included in its quantification but being sufficiently important to influence the identification and analysis of significant public safety effects, directly or indirectly.

Quantitative Factors - Use of relevant empirical data, in raw form or modified as necessary by expert judgment, and employed in scientifically or technically accepted methodologies, to predict the probability and consequences of an accident with regard to a potentially vulnerable individual or group of people.

Safety - A judgment of the acceptability of risk, recognizing that there is always some chance of an accident that may adversely affect someone, no matter what precautionary steps are taken to prevent the accident or protect against its consequences.

Serious Injury - Physical harm to a person that requires significant medical intervention.

Societal Risk - Risk to a group of people, expressed in terms of the distributed frequency of events that cause multiple casualties or, when appropriate, the likelihood of casualties at a specific location or area.

C. Applicability.

These thresholds apply to risks stemming from the following facilities and activities if (a) they are subject to a discretionary land-use action (or would communicate its concerns for public safety to another jurisdiction that is making a discretionary decision such as routes for shipping hazardous materials), and (b) initial analysis reveals substantial evidence to support a fair argument that the potential of a significant impact to public safety could result from approval of the project subject to such action.

- 1. Oil wells and gas wells (unless abandoned or undergoing abandonment), and associated production.
- 2. Gas and hazardous liquids pipelines, including oil if a significant risk is expected, but exempting existing natural gas pipelines owned by a Californian public utility regulated by the California Public Utilities Commission and operated for the purpose of delivering gas directly to the Goleta storage field or consumers (except activities related to liquefied natural gas), and exempting new low pressure distribution pipelines (125 psig or lower) operated by a Californian public utility and regulated by the California Public Utilities Commission.
- 3. Oil and/or gas processing and storage facilities, including facilities for removing sulfur, removing gas liquids, and compressing gas.
- 4. Oil refineries.
- 5. Handling, storage, and transport of compressed natural gas or methanol related to facilities for refueling motor vehicles with these materials.
- 6. All handling, storage, and transport of chlorine in containers with a capacity of one ton or more, or an equivalent amount of chlorine in bottles or cylinders connected through a common header.
- 7. Handling, storage, and transport of anhydrous ammonia in containers with a capacity of one ton or more, or an equivalent amount of anhydrous ammonia in bottles or cylinders connected through a common header.
- 8. Handling, storage, and transport of acutely hazardous rocket propellants such as nitrogen tetroxide (including instances where the County would communicate with other jurisdictions about discretionary actions that affect public safety in this County such as designation of routes for transporting hazardous materials).

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- 9. Handling, storage, and transport of spent radioactive fuel and other high-level, radioactive materials (including instances where the County would communicate with other jurisdictions about discretionary actions that affect public safety in this County such as the designation of route for transporting hazardous materials).
- 10. Storage of natural gas liquids, including liquefied petroleum gas, unless such storage is limited to a single container with a maximum capacity of 10,000 gallons or less and does not require refilling more than once weekly.
- 11. Facilities of a type not addressed in 1-10 above, and not exclusively dedicated to retail distribution of consumer products (such as gasoline stations, or hardware, paint, and dry-cleaning stores) that: (a) use a classified Class A or B explosive (per Title 49, Code of Federal Regulations, 171-179); or (b) use substances classified as high-level radioactive materials; or (c) use specified quantities of regulated substances (pursuant to Title 19 of the California Code of Regulations, Division 2, Chapter 4.5) and meet all of the following criteria:
 - a. The regulated substance(s) is stored as a compressed gas or liquefied compressed gas, or is expected to vaporize or evaporate quickly upon release (e.g., through failure of container, piping, or valve), or is stored as a liquid at a temperature that exceeds its boiling point;
 - b. The regulated substance(s) has the potential to cause a significant risk to public safety according to the County's environmental thresholds. (For example, the regulated substance(s) exists as a gas or vapor upon accident release, and will either release into the open atmosphere or become dangerously explosive in a confined environment.)
 - c. The regulated substance(s) is associated with a specific activity that is generally considered to be incompatible with surrounding land uses.
- 12. All development proposed in proximity to one or more existing hazardous facilities as described above, unless (a) the hazardous facility(ies) are inoperative for the purpose of abandonment, or (b) the proposed development is a single family residential unit which the County considers to be a voluntary exposure to the hazardous facility, or (c) the proposed development does not require a discretionary land-use action.

In cases 1 through 11 listed above, these thresholds apply to risks imposed on present and reasonably projected future land use, considering principally permitted uses under current zoning along with any conditional uses that are permitted or under review.

With regard to land uses with transitory populations (e.g., parks, roads, pedestrian and bike paths), these thresholds apply only when these populations are considered to be often present often or to often flow continuously (e.g., a frequently used recreational park or frequently traveled road). They do not apply when transitory populations are considered to be sporadic or often absent (e.g., hiking trails and other uses where the infrequent presence of people renders inclusion herein as overly speculative).

These thresholds do not apply to occupational safety (i.e., employees of the hazardous facility or people who visit the hazardous facility to provide services or conduct business). Occupational risk, which is governed by State and Federal OSHA, is considered to be more voluntary characteristically and, as such, is generally judged according to more lenient standards of significance than those used for involuntary exposure.

Additionally, these thresholds do not address impacts other than public safety, although accidents that involve hazardous materials potentially impact communities and the environment in other ways (e.g.,

ecological damage, ground/surface water contamination, demand on fire and police services, economic disruption, interruption to surrounding land uses). These thresholds may be used to address the probability of such impacts occurring. The determination of significance of all such impacts is left to other applicable thresholds and the judgment of specialists that address those impacts in environmental reviews.

Lastly, these thresholds do not address issues of chronic risks which adversely impact public health as a result of long-term or repeated exposure to a hazardous material or situation. Issues of chronic exposure to air toxins are covered under the thresholds for air quality, and the Air Pollution Control District advises on appropriate methodology for modeling air quality. Air quality modeling and methods of health risk assessment to address soil and water contamination differ from those applied to acute risks. Consequently, any application of this threshold to determine the significance of chronic risk should be done so cautiously, making necessary adjustments to the threshold as necessary.

D. Determining When To Do Quantitative Risk Analysis.

The thresholds of significance Subsection E, below, are designed for use during the preparation of an environmental impact report if the initial study reveals substantial evidence of a potentially significant risk to public safety due to exposure to hazardous materials. Comprehensive quantitative analysis of societal risk is necessary at this stage; however, this level of analysis is not required to prepare an initial study.

Instead, a four-step screening methodology is used during the preparation of the initial study for determining the potential of a project to have a significant effect on public safety.

- 1. Certain facilities, such as major sour gas pipelines and gas processing facilities that support offshore oil and gas facilities, would automatically be subject to quantitative risk analysis and the risk thresholds.
- 2. For facilities not included in step 1, staff first determines the hazard zone based on the threshold levels of concentration for the particular hazardous materials involved and reasonably worst-case accidents. Levels of concentration for most chemicals are identified by the state. The hazard zones for materials commonly used in the county will be determined. Any hazard zone that encompasses other potentially inhabitable land uses triggers step 3, inclusive of non-hazardous development (other than a single-family residence) proposed within the hazard zone of an existing hazardous facility. Otherwise, the proposed project is not considered to have a significant impact due to acute exposure to hazardous materials.
- 3. If the hazard zone encompasses off-site receptors, staff then calculates the Individual Risk for the hazardous material(s) involved, based on the probability of an accident occurring, and proceeds to Step 4. Calculations may be pre-determined based on existing information or will be accomplished through a qualified risk analyst.
- 4. Staff adjusts the Individual Risk to reflect conditional probabilities, called the Individual Specific Risk. Such probabilities address factors such as number of hours in the day in which someone is present in the hazard zone. A measurement of one in a million (1×10^{-6}) on an annual basis indicates sufficient evidence to trigger the risk thresholds and a comprehensive risk analysis.

E. Using These Risk Thresholds.

When an Environmental Impact Report is required, the CEQA Guidelines stipulate that it identify and focus on significant environmental effects of a proposed project. Such efforts include health and safety

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problems caused by the physical changes to the environment and any significant effects the project might cause by bringing development and people into the area affected by a significant hazard (section 15126). In so doing, the report must also identify and describe any significant environment effects which cannot be avoided if the proposed project is approved and implemented (generally referred to a unavoidable impacts). The Governor's Office of Planning and Research recommends that CEQA lead agencies establish thresholds of significance. These thresholds may be qualitative, quantitative, or both, whichever form best fits their purpose of providing an analytical method to gauge the significance of a particular environmental effect in a consistent, efficient, and predictable manner.

For identifying the significance of impacts to public safety for purposes of CEQA compliance, the County has consistently focused on quantifying societal risk. In general, risk is a compound measure of the probability and consequences of an adverse effect. Common expressions of risk include individual risk and societal risk. Individual risk is somewhat restricted in its ability to reflect actual risk; it only expresses the risk to a single individual without consideration of the total vulnerable population in a hazardous zone (e.g., a remotely located facility carries an equivalent individual risk as one located next to a hospital). Societal risk, illustrated as a risk spectrum, expresses a continuous variation in risk as a relationship of probability and consequence, the latter measuring the number of estimated fatalities and serious injuries.

The thresholds illustrated in figures 1 and 2 require quantitative risk analysis to determine the total societal risk attributable to the full set of possible accidents that can occur from the operation of a hazardous facility or undertaking of an activity that involves handling of hazardous materials. The analysis must consider both the significance of the risk and the beneficial effect of mitigation. It must also comply with County guidelines for risk assessment to ensure compatibility with the thresholds and consistency over time. When these thresholds are applied to proposed development in proximity to an existing hazardous operation, the risk measurement must be adjusted to reflect reductions in risk due to mitigation and to reflect societal risk to the newly proposed development.

These thresholds refine previous, quantitative thresholds by employing the entire risk spectra of a project and they refine the qualitative character of previous thresholds by employing qualitative factors into the determination of significance. The thresholds provide three zones -- green, amber, and red -- for guiding the determination of significance or insignificance based on the estimated probability and consequence of an accident. Risk analysis is based on best available data and modeling techniques but still requires informed assumptions to compensate for gaps in data, shortfalls in modeling, or ability to predict future outcomes with 100 percent accuracy. Given the unavoidable margin of error associated with any projection, the amber zone represents an area where caution is recommended, particularly considering the presence or absence of relevant qualitative factors; meanwhile, the overall goal should remain focused on maximizing public safety, using feasible mitigation to achieve a risk spectrum that falls solely within the green zone.

Risk spectra plotted on the thresholds should be interpreted as follows for purposes of determining the potential significance of an adverse impact to public safety.

1. Class I Impact. Class I applies to adverse impacts that, following environmental review, the County considers to be unavoidable and significant (i.e., cannot be mitigated to insignificance via feasible measures).

Regarding public safety, the County considers a societal risk spectrum that falls in the red or amber zones after application of all feasible mitigation to be an unavoidable, significant impact on public safety.

Class I impacts to public safety may constitute an unreasonable risk, considering how far the risk spectrum penetrates into the red zone, the feasibility of alternative locations with lesser risk, other qualitative factors, and applicable law and guidelines. Unreasonable risk shall be determined for each project individually, based on policies provided in the Safety Element and other relevant policies and codes. Lacking any such determination, project approval requires a statement of overriding considerations by the applicable land-use authority, showing that the benefits of the proposed development exceed its adverse impacts to public safety.

2. Class II Impact. Class II applies to adverse impacts that, following environmental review, the County considers to be significant but avoidable through application of feasible mitigation (i.e., mitigation can render the impact to be insignificant).

Regarding public safety, the County considers a societal risk spectrum that falls in either the red or amber zones to be a significant impact to public safety. Such risk shall be considered a Class II impact for purposes of compliance with CEQA if application of feasible mitigation is sufficient to lower the risk spectrum so that it falls fully within the green zone.

3. Class III Impact. Class III applies to adverse impacts that, following environmental review, the County considers to be insignificant for purposes of complying with CEQA.

Regarding public safety, the County considers a societal risk spectrum that falls completely in the green zone to be a Class III, insignificant impact to public safety and no mitigation (or additional mitigation) is required for purposes of compliance with CEQA.



Figure 1 - Santa Barbara Fatality Risk Thresholds



Figure 2 - Santa Barbara Injury Risk Thresholds

16. SCHOOLS THRESHOLDS (INTERIM) (Approved by the Board of Supervisors, August 1993)

A. Issue Summary.

The issue of existing and potential overcrowding of school facilities is of concern both locally and State-wide given the overall fiscal situation throughout the State of California and given the legal constraints regarding collection of funds and other mitigation on a project specific level. Several of the school districts in the County are currently experiencing overcrowding, including the Orcutt Union School District, Santa Maria Joint Union High School, and Hope School District, among others. Increased enrollment is difficult for the districts to deal with for a number of reasons which vary by district, including lack of existing facilities, lack of funding to construct new facilities and fund additional teachers, and lack of land to accommodate expanding campuses.

Under existing state law, a local jurisdiction cannot require mitigations or apply conditions which exceed the fees as allowed by state law for a development project which is consistent with its General Plan Designation. In many instances, this creates a situation where overcrowding may result from a project without the opportunity for mitigation through project conditions attached to a County permit. However, there are other measures, beyond the authority of the County, which may be used by the State and the school districts to address school facility impacts. These may include the use of temporary/portable classrooms, intra- or inter-district student transfers to less crowded schools, double session or year-round school schedules, and combination of classes of students on several grade levels. In the situation where the County is not able to recommend project specific mitigation which may reduce impacts to school facilities, the focus of CEQA is to disclose the impacts and to discuss the options which the school districts may use to address the overcrowding issue.

B. Determination of Significant Impact.

A significant level of school impacts is generally considered to occur when a project would generate sufficient students to require an additional classroom. This assumes 29 students per classroom for elementary/junior high students, and 28 students per classroom for high school students, based on the lowest student per classroom loading standards of the State school building program. This threshold is to be applied in those school districts which are currently approaching, at, or exceeding their current capacity.

A project's contribution to cumulative schools impacts will be considered significant if the project specific impact as described above is considered significant.

C. Methodology for Determining Significance.

At the present time, the Planning and Development Department has very little countywide information regarding school capacity status. Until we have compiled information on the various school districts in the County, the project planner should individually contact districts which may be affected by their project. A form has been developed which includes relevant questions to ask the affected districts regarding capacity, enrollment projections, and facility information. This form should be used to ensure that adequate information is received from the districts to determine if a significant impact would occur from the project.

D. Context of Analysis.

Based upon <u>Corona-Norco USD v. City of Corona</u>, an ND rather than an EIR may be prepared for development projects having Class I impacts only on schools (schools impacts are the only cause for preparation of an EIR) for which mitigation is limited by law to payment of standard fees.

E. Mitigation Measures.

The following mitigation measures may be used to address impacts to affected schools. However, mitigation is limited by state law. For projects which do not involve a legislative act, payment of standard fees, as specified in the second mitigation measure, is the maximum mitigation allowed. *Staff is currently reviewing mitigation options for projects which do involve a legislative act based upon the outcome of the recent election and other possible changes in applicable law. Staff will provide mitigation language for the Planning Commission's review during the hearing process on the thresholds.*

1. The applicant shall notify the *[Planner insert appropriate school district]* of the expected buildout date of the project to allow the District to plan in advance for new students.

Plan Requirement: A copy of the notice shall sent to P&D prior to land use clearance for the project.

Monitoring: P&D shall ensure letter is sent prior to issuing land use clearance.

2. The applicant shall pay the adopted fees per square foot of livable space being created by the project to the appropriate school district(s). These fees are used by the districts to construct temporary or permanent classroom space, but are not used to provide additional teachers.

Plan Requirements and Timing: The applicant shall submit final square footage calculations and a copy of the fee payment to the school district(s) prior to _____.

Monitoring: P&D shall ensure payment made prior to issuance of building permits.

17. SURFACE AND STORM WATER QUALITY SIGNIFICANCE GUIDELINES (Approved by the Board of Supervisors September 2002)

A. Introduction.

The following information is excerpted from several EPA publications including the preamble to the NPDES Phase II rules as published in the Federal Register¹ and EPA storm water fact sheets and guidance documents².

Storm water runoff from lands modified by human activities can harm surface water resources and, in turn, cause or contribute to an exceedance of water quality standards by changing natural hydrologic patterns, accelerating stream flows, destroying aquatic habitat, and elevating pollutant concentrations. Such runoff may contain or mobilize high levels of contaminants, such as sediment, suspended solids, nutrients (phosphorous and nitrogen), heavy metals and other toxic pollutants, pathogens, oxygendemanding substances, and floatables. After a rain, storm water runoff carries these pollutants into nearby streams, rivers, lakes, estuaries, wetlands, and oceans. The highest concentrations of these contaminants often are contained in "first flush" discharges, which occur during the first major storm after an extended dry period. Individually and combined, these pollutants impair water quality, threatening designated beneficial uses and causing habitat alteration or destruction. Uncontrolled storm water discharges from areas of urban development and construction activity negatively impact receiving waters by changing the physical, biological, and chemical composition of the water, resulting in an unhealthy environment for aquatic organisms, wildlife, and humans. Although water quality problems also can occur from agricultural storm water discharges and return flows from irrigated agriculture, this area of concern is statutorily exempted from regulation as a point source under the Clean Water Act and is not addressed in these guidelines.

Urbanization alters the natural infiltration capability of the land and generates a host of pollutants that are associated with the activities of dense populations, thus causing an increase in storm water runoff volumes and pollutant loading in storm water that is discharged to receiving waterbodies. Urban development increases the amount of impervious surface in a watershed as farmland, forests, and other natural vegetation with natural infiltration characteristics are converted into buildings with rooftops, driveways, sidewalks, roads, and parking lots with virtually no ability to absorb storm water. Storm water runoff washes over these impervious areas, picking up pollutants along the way while gaining speed and volume because of their inability to disperse and filter into the ground. What results are storm water flows that are higher in volume, pollutants, and temperature than the flows from more pervious areas, which have more natural vegetation and soil to filter the runoff. Studies reveal that the level of imperviousness in an area strongly correlates with decreased quality of the nearby receiving waters. Research conducted in numerous geographical areas, concentrating on various variables and employing widely differing methods, has revealed that stream degradation occurs at relatively low levels of imperviousness, such as 10 to 20 percent (even as low as 5 to 10 percent). Furthermore, research has indicated that few, if any, urban streams can support diverse benthic communities at imperviousness levels of 25 percent or more. An area of medium density single family homes can be anywhere from 25 percent to nearly 60 percent impervious, depending on the design of the streets and parking.

¹ 64 FR 68722

² Available on the Internet at www.epa.gov/npdes.

	Primary Pollutants of Concern in Urban Runoff*										
Pollutant	Physical	Synthetic	Petroleum	Heavy	Nutrients	Pathogens	Sediments	Oxygen-	Floatables ^f		
Source/Activity	Parameters"	Organics	Hydrocarbons	Metals"				Demanding Substances ^e			
Vehicle Service		•	•	•				Duostanees			
Facilities											
Gas Stations		•	•	•							
Metal		•	•	•							
Fabrication											
Shops											
Restaurants									•		
Auto Wrecking	•	•	•	•							
Yards											
Mobile		•									
Cleaners											
Parking Lots	•		•	•					•		
Residential	•	•		•	•	•	•	•			
Dwellings											
Parks/Open					•	•	•	•	•		
Spaces											
Construction	•						•	•			
Sites											
Corporation	•	•	•	•							
Yards											
Streets &	•		•	•				•	•		
Highways											
Marinas									•		
Golf Courses		•			•		•	•			
Sewer	•					•		•			
Overflows											

Relationship of Sources to Primary Pollutants of Concern

a. salinity, pH, temperature. b. pesticides, herbicides, PCBs. c. oil, grease, solvents. d. lead, copper, zinc, cadmium. e. plant debris, animal waste. f. litter, yard wastes.

* adapted from *Model Urban Runoff Program.* July 1998. City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde and Central Coast Regional Water Quality Control Board. EPA Assistance Agreement No. C9-999266-95-0.

In addition to impervious areas, urban development creates new pollution sources as population density increases and brings with it proportionately higher levels of car emissions, car maintenance wastes, pet waste, litter, pesticides, and household hazardous wastes, which may be washed into receiving waters by storm water or dumped directly into storm drains designed to discharge to receiving waters. More people in less space results in a greater concentration of pollutants that can be mobilized by storm water discharges into storm sewer systems.

The first national assessment of urban runoff characteristics was completed for the *Nationwide Urban Runoff Program (NURP)* study. The NURP study is the largest nationwide evaluation of storm water discharges undertaken to date. EPA conducted the NURP study to facilitate understanding of the nature of urban runoff from residential, commercial, and industrial areas. One objective of the study was to characterize the water quality of discharges from separate storm sewer systems that drain residential, commercial, and light industrial (industrial parks) sites. Storm water samples from 81 residential and commercial properties in 22 urban/suburban areas nationwide were collected and analyzed during the five-year period between 1978 and 1983. The majority of samples collected in the study were analyzed for eight conventional pollutants and three heavy metals. Data collected under the NURP study indicated that discharges from separate storm sewer systems draining runoff from residential, commercial, and light industrial areas carried more than 10 times the annual loading of total suspended solids (TSS) than discharges from municipal sewage treatment plants that provide secondary treatment. The NURP study also indicated that runoff from residential and commercial areas carried somewhat higher annual loadings of chemical oxygen demand (COD), total lead, and total

copper than effluent from secondary treatment plants. Study findings showed that fecal coliform counts in urban runoff typically range from tens to hundreds of thousands of most probable number (MPN) per hundred milliliters (ml) of runoff during warm weather conditions, with the median for all sites being around 21,000 MPN/100 ml.

B. Construction Site Runoff.

Polluted storm water runoff from construction sites often flows to storm drains and ultimately is discharged into local rivers and streams. Of the pollutants listed below, sediment is usually the main pollutant of concern. Sediment runoff rates from construction sites are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. During a short period of time, construction sites can contribute more sediment to streams than can be deposited naturally during several decades. The resulting siltation, and the contribution of other pollutants from construction sites, can cause physical, chemical, and biological harm to our nation's waters. The siltation process described previously can (1) deposit high concentrations of pollutants in public water supplies; (2) decrease the depth of a waterbody, which can reduce the volume of a reservoir or result in limited use of a water body by boaters, swimmers, and other recreational enthusiasts; and (3) directly impair the habitat of fish and other aquatic species, which can limit their ability to reproduce. Excess sediment can cause a number of other problems for waterbodies. It is associated with increased turbidity and reduced light penetration in the water column, as well as more long-term effects associated with habitat destruction and increased difficulty in filtering drinking water.

Pollutants Commonly Discharged From Construction Sites

Sediment Solid and sanitary wastes Nitrogen (fertilizer) Phosphorous (fertilizer)

Pesticides Concrete truck washout Construction chemicals Construction debris

C. Post Construction Runoff.

There are generally two forms of substantial impacts of post-construction runoff. The first is caused by an increase in the type and quantity of pollutants in storm water runoff. As runoff flows over areas altered by development, it picks up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients (e.g., nitrogen and phosphorus). These pollutants often become suspended in runoff and are carried to receiving waters, such as lakes, ponds, and streams. Once deposited, these pollutants can enter the food chain through small aquatic life, eventually entering the tissues of fish and humans. The second kind of post-construction runoff impact occurs by increasing the quantity of water delivered to the waterbody during storms. Increased impervious surfaces interrupt the natural cycle of gradual percolation of water through vegetation and soil. Instead, water is collected from surfaces such as asphalt and concrete and routed to drainage systems where large volumes of runoff quickly flow to the nearest receiving water. The effects of this process include stream bank scouring and downstream flooding, which often lead to a loss of aquatic life and damage to property.

D. Federal and State Regulations.

The Federal Water Pollution Prevention and Control Act (i.e., the Clean Water Act or CWA) requires that discharges do not substantially degrade the physical, chemical or biological integrity of the Nation's waters. Specifically Section 402 established the National Pollutant Discharge Elimination System (NPDES) Regulations for wastewater and other pollutant discharges.

Congress amended the CWA in 1987 to require the implementation of a two-phased program to address storm water discharges. Phase I, promulgated by the U.S. Environmental Protection Agency (EPA) in November 1990, requires NPDES permits for storm water discharges from municipal

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separate storm sewer systems (MS4s) serving populations of 100,000 or greater, construction sites disturbing greater than five acres of land, and ten categories of industrial activities.

Despite the comprehensiveness of the NPDES Phase I program, the EPA recognized that smaller construction projects (disturbing less than 5 acres) and small municipal separate storm sewers (MS4s³) were also contributing substantially to pollutant discharges nationwide. Therefore, in order to further improve storm water quality, the EPA promulgated the NPDES Phase II program (*Federal Register* Vol. 64, No. 235, December 8, 1999). The Phase II regulations became effective on February 7, 2000, and require NPDES permits for storm water discharges from regulated small MS4s and for construction sites disturbing more than 1 acre of land. The Phase II regulations published by the EPA designated the urbanized areas⁴ of Santa Barbara County as a regulated small MS4.



In addition, Section 401 and 404 established regulations for the discharge of dredged or fill material into waters of the United States and water quality impacts associated with these discharges. In California, the Porter-Cologne Water Quality Control Act establishes waste discharge standards pursuant to the Federal NPDES program, and the state has the authority to issue NPDES permits to individuals, businesses, and municipalities.

E. County Water Quality Issues.

Because the EPA has determined that the urbanized areas of Santa Barbara County are subject to the Phase II NPDES regulations, it is presumed that the county has a general urban runoff water quality problem. In addition to this general presumption, over the last three years Project Clean Water has collected analytical water quality data and identified the water quality concerns in county streams, creeks and beach areas. These concerns include:

- Bacteria levels consistently above applicable standards during storm events,
- Levels of metals (copper, chromium, zinc, and lead) approaching or exceeding Regional Water Quality Control Board Basin Plan objectives,
- Elevated levels of nitrogen and phosphorus in all creeks during storm events, and
- Detection of pesticides in all watersheds.

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³ Those generally serving less than 100,000 people and located in an urbanized area as defined by the Bureau of the Census.

⁴ An urbanized area is a land area comprising one or more places (central place(s)) and the adjacent densely settled surrounding area (the urban fringe) that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile.

The Regional Water Quality Control Board has also identified that the quality of several important recreational water bodies and water supplies have been impaired. These water bodies and their contaminants include:

- San Antonio Creek (northern) sediments.
- Santa Ynez River nutrients (e.g., phosphorus and nitrogen), salinity, total dissolved solids, chlorides and sediments.
- Goleta Slough metals, pathogens, and sediment.
- Arroyo Burro Creek pathogens (e.g., bacteria).
- Mission Creek pathogens.
- Carpinteria Salt Marsh nutrients and sediment.
- Carpinteria Creek pathogens
- Rincon Creek pathogens and sediment.

F. County Water Quality Protection Policies.

Policies regarding the protection of water quality in the unincorporated areas of Santa Barbara County are provided in the Comprehensive Plan Land Use Element, various Community Plans, and the Local Coastal Plan. The overarching policy which applies to both construction and post-construction is Land Use Element Hillside and Watershed Protection Policy 7 (Coastal Plan Policy 3-19), which states:

"Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw sewage, and other harmful waste shall not be discharged into or alongside coastal streams or wetlands either during or after construction."

Project approval requires a finding of consistency with this and all other applicable water quality policies in the Comprehensive and Community Plans.

G. Significance Guidelines for Assessment of Water Quality Impacts.

Guidelines for assessing project-specific and cumulative water quality impacts are presented below. The assessment of impacts must account for construction-related impacts (i.e., vegetation removal, erosion, use of construction materials on the site, and staging of construction activities) and post-construction (or post-development) impacts (i.e., increases in impervious surfaces and increased runoff, entrainment of pollutants, and effects of discharges on aquatic habitats and biota).

1. Project Specific Potential Significance Impacts.

- a. A significant water quality impact is presumed to occur if the project:
 - Is located within an urbanized area of the county and the project construction or redevelopment individually or as a part of a larger common plan of development or sale would disturb one (1) or more acres of land;
 - Increases the amount of impervious surfaces on a site by 25 percent or more;
 - Results in channelization or relocation of a natural drainage channel;
 - Results in removal or reduction of riparian vegetation or other vegetation (excluding non-native vegetation removed for restoration projects) from the buffer zone of any streams, creeks or wetlands;
 - Is an industrial facility that falls under one or more of categories of industrial activity regulated under the NPDES Phase I industrial storm water regulations (facilities with effluent limitation; manufacturing; mineral, metal, oil and gas, hazardous waste, treatment or disposal facilities; landfills; recycling facilities; steam electric plants; transportation facilities; treatment works;; and light

industrial activity);

- Discharges pollutants that exceed the water quality standards set forth in the applicable NPDES permit, the Regional Water Quality Control Board's (RWQCB) Basin Plan or otherwise impairs the beneficial uses⁵ of a receiving waterbody; or
- Results in a discharge of pollutants into an "impaired" waterbody that has been designated as such by the State Water Resources Control Board or the RWQCB under Section 303 (d) of the Federal Water Pollution Prevention and Control Act (i.e., the Clean Water Act).
- Results in a discharge of pollutants of concern to a receiving water body, as identified in by the RWQCB.
- b. Projects that are not specifically identified on the above list or are located outside of the "urbanized areas" may also have a project-specific storm water quality impact. Storm water quality impacts associated with these projects must be evaluated on a project by project basis for a determination of significance. The potential impacts of these projects should be determined in consultation with the county Water Agency, Flood Control Division, and RWQCB. The issues that should be considered are:
 - the size of the development;
 - the location (proximity to sensitive waterbodies, location on hillsides, etc.);
 - the timing and duration of the construction activity;
 - the nature and extent of directly connected impervious areas;
 - the extent to which the natural runoff patterns are altered;
 - disturbance to riparian corridors or other native vegetation on or off-site;
 - the type of storm water pollutants expected; and
 - the extent to which water quality best management practices are included in the project design.
- c. All projects determined to have a potentially significant storm water quality impact must prepare and implement a Storm Water Quality Management Plan (SWQMP) to reduce the impact to the maximum extent practicable. The SWQMP shall include the following elements:
 - identification of potential pollutant sources that may affect the quality of the discharges to storm water;
 - the proposed design and placement of structural and non-structural best management practices (BMPs) to address identified pollutants;
 - a proposed inspection and maintenance program; and
 - a method of ensuring maintenance of all BMPs over the life of the project.

Implementation of best management practices identified in the SWQMP will generally be considered to reduce the storm water quality impact to a less than significant level.

⁵ Beneficial uses for Santa Barbara County are identified by the Regional Water Quality Control Board in the Water Quality Control Plan for the Central Coastal Basin, or Basin Plan, and include (among others) recreation, agricultural supply, groundwater recharge, fresh water habitat, estuarine habitat, support for rare, threatened or endangered species, preservation of biological habitats of special significance.

- **2.** Less than Significant Impacts. The following land uses and projects are generally presumed to have a less than significant project-specific water quality impact. These include:
 - Redevelopment projects that do not increase the amount of impervious surfaces on the site nor change the land use or potential pollutants;
 - New development and redevelopment projects that incorporate into the project design construction BMPs for erosion, sediment and construction waste control and incorporate post-construction BMPs to protect sensitive riparian or wetland resources, reduce the quantity of runoff, and treat runoff generated by the project to pre-project levels;
 - Lot line adjustments that do not alter the development potential of the lots involved;
 - Development of a single family dwelling (and associated accessory uses including but not limited to roads and driveways, septic systems, guesthouse, pool, etc.) disturbing less than one acre on existing legal lot.
- **3. Cumulative Impacts.** Because of the county's designation under the Phase II NPDES regulations, all discretionary projects (except those that do not result in a physical change to the environment) within the urbanized area whose contributions are cumulatively considerable must implement one or more best management practices to reduce their contribution to the cumulative impact.

H. General Mitigation Guidelines for Water Quality Impacts.

If water quality impacts are considered from the beginning stages of a project more opportunities are available for water quality protection. Best management practices (mitigation measures) chosen for a project should minimize water quality impacts and attempt to maintain pre-development runoff conditions. Best management practices are divided into two main categories, non-structural BMPs and structural BMPs.

Non-structural BMPs are preventative actions that involve management and source controls such as protecting and restoring sensitive areas such as wetlands and riparian corridors, maintaining and/or increasing open space, providing buffers along sensitive water bodies, minimizing impervious surfaces and directly connected impervious areas, and minimizing disturbance of soils and vegetation. Structural BMPs include: storage practices such as wet ponds and extended-detention outlet structures; filtration practices such as grassed swales, sand filters and filter strips; and infiltration practices such as infiltration trenches. In many cases combinations of non-structural and structural measures will be required to reduce water quality impacts.

Non-structural and structural BMPs most applicable to the development projects in the county are included in "A Planner's Guide to Conditions of Approval and Standard Mitigation Measures" and the county's adopted BMP manuals for construction site runoff control. Additional guidance on best management practices is available from the State⁶, the EPA⁷ and from other sources such as BASMAA "Starting at the Source"⁸. Storm water technologies are constantly being improved, and staff and developers must be responsive to any changes, developments or improvements in control technologies.

⁶ California Storm Water Best Management Practice Handbooks (California Stormwater Quality Task Force, 1993).

⁷ On the Internet at www.epa.gov/npdes/menuofbmps/menu.htm.

⁸ Start at the Source: Design Guidance Manual for Stormwater Quality Protection (Bay Area Stormwater Management Agencies Association, 1999).

18. SOLID WASTE THRESHOLDS (Approved by the Board of Supervisors, August 1993;

revised by the Board of Supervisors, September 16, 2008)

A. **Background and Existing Policies.**

Four landfills operate within the County. These landfills include: the County operated Tajiguas Landfill (serving the South Coast, Santa Ynez Valley, Cuyama and Ventucopa), the City operated Santa Maria Landfill (serving the City of Santa Maria and the unincorporated areas of the Santa Maria Valley), the City operated Lompoc Landfill (serving the City of Lompoc and unincorporated areas of the Lompoc Valley, and the federally operated Vandenberg Air Force Base Landfill (serving Vandenberg Air Force Base). Two waste recycling and transfer stations and two waste transfer stations also serve the County's unincorporated areas including: the South Coast Recycling and Transfer Station (serving the South Coast area), the Santa Ynez Valley Recycling and Transfer Station (serving the Santa Ynez Valley), the Cuyama Transfer Station (serving Cuyama Valley), and the Ventucopa Transfer Station (serving the Ventucopa area).

In September 1989, the California Integrated Solid Waste Management Act (also known as AB 939) was enacted into law. It required each municipality in the state to divert at least 50 percent of its solid waste from landfill disposal through source reduction, recycling, and composting by 2000. This 50 percent requirement also includes the waste stream that comes exclusively through construction and demolition (C&D) of buildings and homes in the County.

As of 2004, 63 percent of all solid waste generated in the unincorporated areas of the County of Santa Barbara was diverted for recycling or re-use (as certified by the California Integrated Waste Management Board). This diversion level is the result of implementation of the County Source Reduction and Recycling Element adopted by the Board of Supervisors in February 1992. Despite these diversion levels, landfill space is still limited.

In order to preserve our limited landfill resources, the County must maintain its high levels of diversion. New construction, especially remodeling and demolition, represents the greatest challenge to maintaining existing diversion rates. The solid waste thresholds described in this section will establish when a discretionary project is considered to result in a significant solid waste impact under the California Environmental Quality Act. Considering solid waste impacts of new development and providing mitigation to reduce solid waste will help the County maintain its State-mandated diversion rates and minimize impacts to the County's limited landfill space.

The primary mitigation measure for reducing solid waste impacts to less than significant level is preparation and implementation of a Solid Waste Management Plan (SWMP). The Public Works Department maintains a sample SWMP for public distribution with all permit applications that are expected to exceed thresholds. In addition, Land Use Development Policy 4 of the County's Comprehensive Plan Land Use Element requires a finding that there are adequate public services (in this case landfill capacity) to serve new development. This policy also provides the basis for inclusion of waste reduction mitigation measures as part of the conditions of project approval. Preparation and implementation of a SWMP for projects that exceed the defined threshold will reduce all solid waste impacts to a less than significant level.

Impact Assessment. B.

Solid waste impacts can be divided into two categories: 1) short-term waste generated from construction and demolition projects, and 2) long-term waste generated during project occupancy/operation.

1. Waste generation during construction. Generation of construction and demolition waste

Commercial Development	Amounts in Pounds per Square foot
Remodel	40
Demolition	100
New construction	25
Residential Development	Amounts in Pounds per Square foot
Remodel	100
Demolition	60
New construction	15

per cubic foot varies widely depending on the type and location of the project. Here are some general guidelines:

These estimates are based on the US Environmental Protection Agency's 1998 construction and demolition study (Document: EPA530-R-98-010; June 1998) and data gathered by the San Luis Obispo Integrated Waste Management Authority in 2005 and 2006.

2. Waste generation during occupancy/operations.

a. Residential projects. The annual per capita waste generation rate for Santa Barbara County is currently 2.11 tons. Of this 2.11 tons, the residential per capita waste generation rate is 0.95 tons (1,900 pounds), including interior and exterior waste. Waste generation rates are based on the County of Santa Barbara Waste Generation Study (February, 1991) and the Area Planning Council Forecast of 1989.

The County average residents per household rates are:

Single family residence: 3.01 people per household

Attached residences (condos, townhomes, apartments, duplex, triplex): 2.65 people per household

(These statistics come from 1990 census date, C. Pauley, Comprehensive Planning RMD.)

To calculate a residential project's solid waste generation the following formula is used:

For single family residence: 3.01 people/unit x # of units x 0.95 tons/year = tons/year/project.

For attached units: 2.65 people/unit x # of units x 0.95 tons/year = tons/year/project.

b. Commercial/industrial/institutional projects. To determine the waste stream for a specific project the following information is provided:

Type/Description	Annual Generation Rate (in tons)						
Neighborhood Center (30,000 to 100,000 sq. ft.	sq. ft. x 0.0009						
Regional Shopping Center (100,000 to 300,000 sq. ft.)	sq. ft. x 0.0012 (anchor store) sq. ft. x 0.0048 (tenant)						
General Retail and Miscellaneous Services	sq. ft. x 0.0057						
Eating and Drinking Establishment	sq. ft. x 0.0115						
Automobile Dealer and Service Station	sq. ft. x 0.0016						
Hotel and Motel	# of rooms x 0.80						
Warehouse	sq. ft. x 0.0016						
Health Services	sq. ft. x 0.0013						
Hospital	# of rooms x 1.90						
Office	sq. ft. x 0.0013						
Educational Institutions	sq. ft. x 0.0010						
Transportation, Communications and Utilities	sq. ft. x 0.0026						

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Manufacturing	sq. ft. x 0.0026

(Figures are based on Industry & National Standards as discussed in the Ventura County Solid Waste Thresholds)

For project types that are indicated above, the estimated waste stream can be determined by surveying similar uses, ideally within Santa Barbara County. If possible, three such uses should be used in the survey.

Residual Impact Calculation: Waste Generation (tons per year) x 0.50 (% of waste reduction) = tons per year.

C. Thresholds of Significance.

1. Construction and demolition. Construction and demolition waste accounts for 31 percent of all waste generated by residents of Santa Barbara County. In order to comply with AB939 requiring a minimum of 50 percent of all waste to be diverted from landfills, the particular source of waste has been targeted.

Any construction, demolition or remodeling project of a commercial, industrial or residential development that is projected to create more than 350 tons of construction and demolition debris is considered to have a significant impact on public services.

Although amounts of waste generated vary project to project we have the following estimates of projects that will reach the threshold of significance:

- a. Remodeling projects over 7,000 square feet for residential projects and 17,500 square feet for commercial/industrial projects.
- b. Demolition projects over 11,600 square feet for residential buildings and 7,000 square feet for commercial/industrial buildings.
- c. New construction projects over 47,000 square feet for residential buildings and 28,000 square feet for commercial/industrial buildings.

These estimates are based on the US Environmental Protection Agency's 1998 construction and demolition study (Document: EPA530-R-98-010; June 1998) and data gathered by the San Luis Obispo Integrated Waste Management Authority in 2005 and 2006.

2. Operations/occupancy.

Project specific. The following thresholds are based on the projected average solid a. waste generation for Santa Barbara County from 1990 - 2005. The goals outlined in the Source Reduction and Recycling Element (SRRE) assume a 1.2 percent annual increase, which equates to approximately 4,000 tons per year increase in solid waste generation over the 15 year period. A project is considered to result in a significant impact to landfill capacity if it would generate five percent or more of the expected annual increase in waste generation thereby using a significant portion of the remaining landfill capacity. Based on the analysis conducted (as illustrated in Table 1), the numerical value associated with the five percent increase is 196 tons per year. As indicated above, source reduction, recycling and composting can reduce a project's waste stream (generated during operations) by as much as 50 percent. If a proposed project generates 196 or more tons per year after reduction and recycling efforts, impacts would be considered significant and unavoidable (Class I). Project approval would then require the adoption of overriding considerations. A typical single family residential project of 68 units or less would not trigger the threshold of significance.

b. Cumulative thresholds. Projects with a specific impact as identified above (196 tons/year or more) would also be considered cumulatively significant, as the project specific threshold of significance is based on a cumulative growth scenario. However, as landfill space is already extremely limited, any increase of one percent or more of the estimated increase accounted for in the SRRE, mitigation would be considered an adverse contribution (Class III) to regional cumulative solid waste impacts. One percent of the SRRE projected increase in solid waste equates to 40 tons per year (in operational impacts). To reduce adverse cumulative impacts, and to be consistent with the SRRE, mitigation should be recommended for projects which generate between 40 and 196 tons of solid waste per year. Projects which generate less than 40 tons per year of solid waste generated by these projects and the existing waste reduction provisions in the SRRE. A typical single family residential project of 14 units or less would not trigger this adverse impact level.

D. Mitigation Measures.

The following mitigation measures are suggested for projects which would exceed County solid waste thresholds. This is a partial list of measures and does not preclude measures which may be applicable on a project specific basis.

The applicant shall develop and implement a solid waste management plan to be reviewed and approved by Public Works Department Resource Recovery and Waste Management Division and the Planning and Development Department and shall include one or more of the following measures:

- Provision of space and/or bins for storage of recyclable materials within the site.
- Establishment of a recyclable material pickup area.
- Implementation of a curbside recycling program to serve new development.
- Development of a plan for accessible collection of materials on a regular basis (may require establishment of private pick-up depending on availability of County sponsored programs).
- Implementation of a monitoring program (quarterly, bi-annually) to ensure a 35 50 percent minimum participation in recycling efforts, requiring businesses to show written documentation in the form of receipts.
- Development of Source Reduction Measures, indicating method and amount of expected reduction.
- Implementation of a program to purchase recycled materials used in association with the proposed project (paper, newsprint etc.). This could include requesting suppliers to show recycled material content.
- Implementation of a backyard composting yard waste reduction program.

One or more of the above measures may apply to a specific project. County waste characterization studies estimate that implementation of the measures described can reduce waste generation by 50 percent. The expected reduction in waste generation from mitigation measures for a specific project should be developed in consultation with the Public Works Department Resource Recovery and Waste Management Division.

	1% of	Change		35	36.6		36.8	37.3	2	37.8		38.3	1	38.7	000	790	39.6		40.1		40.6		41	41.6		42		42.6		39,15
	.5% of	Change		175	183		184	186.5	2.22	189		191.5		193.5	105	061	198		200.5	× ×	203	100	CU2	208		210		213		195.73
		Ghange		3500	3660		3680	3730	2000	3780		3830	0100	. 3870	0000	0320	3960		4010		4060	0077	4100	4160		4200		4260		
lations	Total	Generation	308070		311570	315230		318910	322640		326420		330250		021425	C S S S D A D	2	342000		346010		350070	021120	0/1+00	358330		362530		366790	
Calcu	5% of	Change		22.5	22.5		22.5	23	2	23		23		23.5	r.c	74	24	i	24		24		24.5	245	1	25		25		23.67
hold (Change		450	450	2	450	460	3	460		460	1	470		480	480		480		480		490	490	2	500		200		
Thres	Industrial	Generation	52780		53230	53680		54130	54590		55050		55510		22980	CEAGO	200	56940		57420		57900	00001	DECOC	58880		59380		59880	
Waste	5% of	Change		64.5	65	8	65.5	299	0.00	67.5		68.5		69	01	2	71		72		72.5	1	74	75	2	75.5		76.5		70.2
Solid V		Change		1290	1300	202	1310	1 230		1350		1370		1380		1400	1420	071-1	1440		1450		1480	1500	222	1510		1530		
ble 5: 5	Commercial	Generation	98650		99940	101240		102550	103880		105230		106600		107980	UDCUUF	000001	110800		112240		113690		0/1611	116670		118180		119710	
Та	5% of	Change		88	05.5	2.00	96	10	1.	98.5		100		101		102	103	3	104.5		106.5		106.5	1001	0.001	109.5		111.5		101.87
		Change		1760	1010	0101	1920	0101		1970		2000		2020		2040	0000	2007	2090		2130		2130	0440	0/17	2190		2230		
	Residential	Generation	156640		158400	160310		162230	164170		166140		168140		170160	00000	0077/1	174260		176350		178480		180610	187780	001701	184970		187200	8
		Year	, 1990		1991	1992		1993	1994	8	1995		1996		1997	0000	266	1000	200	2000		2001		2001	5000	2007	2004		2005	Avera

Table 1 - Solid Waste Threshold Calculations

Generation numbers were obtained from the County of Santa Barbara Waste Generation Study, February 1991. All figures are tonnages. Generation calculations assume a 1.2% growth rate.

19. THRESHOLDS OF SIGNIFICANCE FOR TRAFFIC IMPACTS AND CONTENTS OF A TRAFFIC STUDY

A. Introduction.

The threshold criteria and traffic report contents proposed in the following pages are intended to provide a basis for improved analyses of the potential traffic impacts of proposed projects. The criteria and report contents will also help to standardize traffic impact reports making them easier to use in the planning process. It is hoped that standardization will aid in the compilation of traffic data for use in other EIRs.

Evaluation of traffic impacts and development of proposed mitigation measures is a complex task. When a potential for significant adverse traffic impacts is evident, the traffic analysis should be performed by a registered civil engineer that is qualified to perform traffic engineering studies and is familiar with Santa Barbara County.

CEQA Guidelines, Appendix G, states that a project will ordinarily have a significant effect on the environment if it will "cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system." The following threshold criteria assume that an increase in traffic that creates a need for road improvements is "substantial in relation to the existing traffic load and capacity of the street system." It should be noted that the following criteria are guidelines for the majority of potential traffic impacts. The list of criteria is not intended to be all inclusive as the potential for impact may vary depending upon the environmental setting and the nature of the project.

B. Threshold Criteria - Significant Adverse Impact.

- 1. The impacts of project generated traffic are assessed against the following County thresholds. A significant traffic impact occurs when:
 - a. The addition of project traffic to an intersection increases the volume to capacity (V/C) ratio by the value provided below or sends at least 5, 10 or 15 trips to at LOS F, E or D.

LEVEL OF SERVICE	INCREASE IN V/C
(including project)	GREATER THAN
А	0.20
В	0.15
С	0.10
	Or The Addition Of:
D	15 trips
E	10 trips
F	5 trips

- b. Project access to a major road or arterial road would require a driveway that would create an unsafe situation or a new traffic signal or major revisions to an existing traffic signal.
- c. Project adds traffic to a roadway that has design features (e.g., narrow width, road side ditches, sharp curves, poor sight distance, inadequate pavement structure) or receives use which would be incompatible with substantial increases in traffic (e.g., rural roads with use by farm equipment, livestock, horseback riding, or residential roads with heavy pedestrian or recreational use, etc.) that will become potential safety
problems with the addition of project or cumulative traffic. Exceedance of the roadways designated Circulation Element Capacity may indicate the potential for the occurrence of the above impacts.

d. Project traffic would utilize a substantial portion of an intersection(s) capacity where the intersection is currently operating at acceptable levels of service (A-C) but with cumulative traffic would degrade to or approach LOS D (V/C 0.81) or lower. Substantial is defined as a minimum change of 0.03 for intersections which would operate from 0.80 to 0.85 and a change of 0.02 for intersections which would operate from 0.86 to 0.90, and 0.01 for intersections operating at anything lower.

If the above thresholds are exceeded, construction of improvements or project modifications to reduce the levels of significance to insignificance are required.

Mitigation Measures:

In order to reduce project impacts to levels of insignificance the proposed mitigations (e.g., road improvements, trip reductions) must restore affected intersections to an acceptable LOS (C) and/or reduce safety impacts to insignificance. The scope of the mitigation must reduce the project's contribution to insignificance and be timed to be implemented prior to occurrence of the impact (e.g., prior to intersection degrading to LOS D). The payment of offsite road fees in and of itself is not adequate to mitigate a project's impacts.

The thresholds of significance identified above assume full contribution to the Off-Site Road Improvement Fund. Without the fee program a much smaller increase in the V/C ratio would have to be considered significant.

2. When a Traffic Study is Required. A traffic study will generally be required when it appears that the thresholds of significance identified above will be exceeded. In almost all cases where trip generation during the peak hour is expected to exceed 50 vehicles a traffic study will be required.

A previous traffic study for the development under review will only be acceptable if it is less than two years old.

3. Coordination between County Departments. In order to ensure coordinated planning, the Planning and Development Department and the Public Works Department Road Division should discuss potential project impacts prior to sending out requests for proposal (RFP). The following items should be established prior to sending of the RFP: definition of study area, cumulative projects and intersections requiring critical movement analysis. A copy of the traffic study should be submitted for the County Traffic Engineer.

C. Contents of Traffic Study.

Some traffic studies may require information or analysis beyond what is described below; some may require less.

1. Executive Summary. This should be no more than two pages summarizing the project's traffic impacts, needed road improvements, and proposed changes in the project.

2. Maps Showing the Following.

- a. Location of proposed project
- b. Collectors, arterials and state highways that will be used by occupants and visitors to get to and from major attractions and productions.

- c. Location of cumulative projects that will impact those roads identified in (b) and the status of those projects (e.g. Proposed, Under Review, Approved, Under Construction).
- d. Percent distribution of traffic from the proposed project and cumulative projects.
- e. Traffic volumes on road identified in (b): existing traffic, existing plus project traffic, existing plus project plus cumulative traffic (weekday ADT and PHT).

3. Tables Showing the Following.

- a. Proposed project and cumulative projects, their size and nature, trip generation rates, trip generation (ADT and PHT) and status (see item 2C)
- b. Signalized intersections, intesections with potential for signals, LOS (Existing, existing plus project, existing plus project plus approved projects, existing plus project plus full cumulative), existence of signal warrants and existence of operational problems and project specific and cumulative impacts post mitigation implementation.
- c. Roadway design features that will become potential safety problems or will be below County standards with the addition of cumulative traffic. Roadways in critical need of reconstruction.
- d. Improvements needed to correct the identified deficiencies separated by project impacts and cumulative impacts, LOS after mitigation, approximate cost and the probable or scheduled timing of each improvement, identification of specific improvements to be constructed by developer and/or a dollar contribution to be made by developer (i.e., payment to Off-Site Improvement Fund).

4. Narrative, Footnotes and Appendices Containing the Following.

- a. Sources and dates of data including persons contacted
- b. Raw traffic count data (all traffic count data must be less than two years old)
- c. Methods used and special circumstances
- d. Level of service calculations
 - 1. Peak hour turning movements and LOS (show V/C), for existing, existing plus project, existing plus project plus cumulative traffic
 - 2. Lane configuration and traffic control
 - 3. Mitigation measures proposed and effect on LOS

CRITICAL MOVE GUIDELINE VALUES FOR ENVIRONMENTAL ASSESSMENTS TYPICAL SIGNALIZED INTERSECTIONS ALL PHASED OPERATIONS

L.O.S.	Project Impact	Cumulative Impact
А	100	50
В	70	30
С	40	15
D	10	0 - 10
Е	0 - 10	0 - 10

Notes:

1. Use restricted to environmental assessments only. More precise estimates are obtained by calculations changes in volume to capacity radius (V/C).

2. For all phases, the difference in critical moves between Levels of Service is approximately 150.

3. These values are guidelines only. Values should be adjusted on a project by project case if necessary.

4. No signalized intersection is typical. Use common sense.

COUNTY INTERSECTIONS Volume to Capacity and Level of Service (LOS)

South County

Intersection	Existing V/C Level of Service	Existing Approved Cumulative Projects	Approved and Pending Cumulative Projects	With Improvements	Date and Source
Storke/101 NB Ramp	NA/E – F	NA/F	NA/F	Unfunded	10/89
				U.68/B Unfunded	89-SD-5 10/89
Storke/101 SB Ramp	NA/E - F	NA/F	NA/F	0.55/A	89-SD-5
Los Carneros/101 NB Ran	mp				
	0.40/A	0.76/C	0.08/E	Unfunded	10/89
	0.49/A	0.70/C	0.90/L	0.47/A	89-SD-5
(PM)	0.46/A	0.55/A	0.71/C	Unfunded	10/89
Log Company				NA/B Unfunded	89-SD-5
101 SB Ramp	0.78/C	1.03/F	1.28/F	NA/B-C	10/89 89-SD-5
Cathedral Oaks/ Fairview	0.44/A				4/85
Fairview/101 NB Ramps	0.72/C				4/85
Fairview/101 SB Ramps	0.81/C				4/85
Los Carneros/Hollister	0.61/B	0.71/C	0.87/D	Unfunded 0.79/C	10/89 89-SD-5
Hollister/San Marcos	0.60/A/B				5/85
Hollister/Fairview	0.88/D	0.99/E	1.15/F	Funded 0.90/D	10/89 89-SD-5
Hollister/Storke	0.64/B	0.74/C	0.87/D	Unfunded 0.74/E	10/89 89-SD-5
Hollister/Orvieto Way	0.52/A	0.54/A			10/89 89-SD-5
Hollister/217 NB Ramp	0.75/C				6/88 88-EIR-11
Hollister/Walnut	0.72/C				6/88 88-EIR-11
Patterson/101 SB Ramp	NA/E-F	NA/E-F	NA/E-F	0.59/A	6/88 88-EIR-11
Hollister/217 SB Ramp	0.64/B	0.69/B	0.73/C		12/88

Intersection	Existing V/C Level of Service	Existing Approved Cumulative Projects	Approved and Pending Cumulative Projects	With Improvements	Date and Source
					00-EIK-22
Hollister/Ward Drive	0.75/C	0.81/D	0.86/D	0.82/D	12/88 88-EIR-22
Hollister/Patterson	0.76/C	0.82/D	0.92/E		12/88 88-EIR-22
Hollister/Turnpike	0.73/C	0.77/C	0.82/D		12/88 88-EIR-22
Calle Real/San Antonio	0.18/A	0.28/A	0.41/A		88-EIR-16
Calle Real/El Sueno	0.55/A	0.65/B	0.80/C		88-EIR-16
Calle Real/Hwy. 154	0.82/D	0.86/D	0.91/E		88-EIR-16
Turnpike/ Cathedral Oaks	0.75/C				89-EIR-8
Turnpike/101 NB	0.67/B	0.68/B	0.79/C		89-EIR-8
Turnpike/101 SB	0.56/A	0.58/A	0.69/B		89-EIR-8
Patterson/Calle Real	NA/E			0.43/A	89-EIR-8
Patterson/101 NB	1.03/F	1.09/F	1.23/F	0.50/A	89-EIR-8
Hollister/Modoc	0.75/C				2/88
Calle Real/Fairview	0.83/D				4/85
Calle Real/Turnpike	0.47/A				12/88
Calle Real/Las Positas	NA/C				3/78
Modoc/Las Positas	NA/A				3/78
East Valley/San Ysidro	NA/A				8/80
Carpinteria/Linden	NA/C				8/80
El Colegio/ Los Carneros	0.60/A-B				10/84

COUNTY INTERSECTIONS Volume to Capacity and Level of Service (LOS) <u>North County</u>

Intersection	Existing V/C Level of Service	Existing Approved Cumulative Projects	Approved and Pending Cumulative Projects	With Improvements	Date and Source
Clark Ave./	0.34/A				8/84
Frontage					
Clark Ave./	0.48/A	0.55/A	0.67/B		1/90
Rt. 135 NB					90-EIR-1
Clark Ave./	0.41/A	0.47/A	0.60/A		1/90
Rt. 135 SB					90-EIR-1
Clark Ave./	0.47/A	0.50/A	0.57/A		1/90
Orcutt Rd.					90-EIR-1
S.R. 246/	В				
Alamo Pintado					
S.R. 246/	0.59/A-B				3/85
Alisal					
Bradley Rd./	0.56/A	0.71/C	0.96/E		1/90
Clark Ave.					90-EIR-1
Bradley Rd./	0.41/A	0.52/A			88-EIR-13
Foster Rd.					
Bradley Rd./	0.54/A				
Santa Maria Way					
Broadway/Betteravia	Е				1980
Broadway/Main St.	D/E				1975

Intersection	Existing V/C Level of Service	Existing Approved Cumulative Projects	Approved and Pending Cumulative Projects	With Improvements	Date and Source
Rte. 135/Foster Rd.	0.73/C	0.96/E	1.33/F		1/90
					90-EIR-1
Bradley Rd./	0.24/A	0.24/A	0.25/A		3/90
Rice Ranch Rd.					90-EIR-1
Clark Ave./	0.56/A	0.65/B	0.85/D		3/90
Stillwell Rd. (E)					90-EIR-1
Clark Ave./	0.43/A	0.50/A	0.68/B		3/90
Stillwell Rd. (W)					90-EIR-1
Clarke Ave./	0.51/A	0.57/A	0.70/B		3/90
Hwy.101 NB Ramp					90-EIR-1
Clarke Ave./	0.59/A	0.70/B	0.92/E		3/90
Hwy.101 SB Ramp					90-EIR-1
Bradley Rd./	0.59/A	0.80/C	1.10/F		9/89
Patterson Rd.					89-SD-4
Clark Ave./Hwy. 101	0.51/A	0.58/A	0.71/C		9/89
NB Ramp					89-SD-4
Clark Ave./Hwy. 101	0.59/A	0.70/B	0.92/E		3/90
SB Ramp					90-EIR-1
Bradley Rd./	0.41/A	0.59/A	0.79/C		9/89
Foster Rd.					89-SD-4
Route 135/Main St.	0.76/C	1.27/F		1.11/F	88-EIR-13
Route 135/Cook	0.67/B				88-EIR-13
Miller St./Main St.	0.75/C	1.10/F		1.01/F	88-EIR-13
Miller St./Cook	0.52/A	0.93/E			88-EIR-13
Foster/Bradley	0.41/A	0.52/A			88-EIR-13
Foster/	0.49/A	NA/B-C			88-EIR-13
California Blvd.					
Clark Ave./	0.29/A	0.38/A			89-ND-64
Broadway St.					
Blosser Rd./	*/A	*/A			89-ND-64
Foster Rd.					
Blosser Rd./	*/A	*/A			89-ND-64
Clark Ave.					
Blosser Rd./	*/A	*/A			89-ND-64
Solomon Rd.					
Solomon Rd./Hwy. 1	*/A	*/A			89-ND-64

20. VISUAL AESTHETICS IMPACT GUIDELINES

A. Determinations of Significance.

The classification of a project's aesthetic impacts as beneficial or adverse, and insignificant or significant, is clearly subject to some personal and cultural interpretation. However, there are guidelines and policies which can be used to direct and standardize the assessment of visual impacts. Thus, this discussion does not constitute a formal significance threshold, but instead it directs the evaluator to the questions which predict the adversity of impacts to visual resources.

B. Assessing Visual Impacts.

Assessing the visual impacts of a project involves two major steps. First, the visual resources of the project site must be evaluated. Important factors in this evaluation include the physical attributes of the site, its relative visibility, and its relative uniqueness. In terms of visibility, four types of areas are especially important: coastal and mountainous areas, the urban fringe, and travel corridors.

Next, the potential impact of the project on visual resources located onsite and on views in the project vicinity which may be partially or fully obstructed by the project must be determined. To some extent, the former step is more important in rural settings, and the latter in urban areas. Determining compliance with local and state policies regarding visual resources is also an important part of visual impact assessment.

Significant visual resources as noted in the Comprehensive Plan Open Space Element which have aesthetic value include:

- Scenic highway corridors
- Parks and recreational areas
- Views of coastal bluffs, streams, lakes, estuaries, rivers, water sheds, mountains, and cultural resource sites
- Scenic areas.

All views addressed in these guidelines are public views, not private views.

C. Initial Study Assessment Questions for the Analysis of Visual Resources.

CEQA Guidelines Appendix G (b) states: "A project will normally have a significant effect on the environment if it will have a substantial, demonstrable negative aesthetic effect". The following questions are intended to provide information to address the criteria specified in Appendix G. Affirmative answers to the following questions indicate potentially significant impacts to visual resources.

- 1a. Does the project site have significant visual resources by virtue of surface waters, vegetation, elevation, slope, or other natural or man-made features which are publicly visible?
- 1b. If so, does the proposed project have the potential to degrade or significantly interfere with the public's enjoyment of the site's existing visual resources?
- 2a. Does the project have the potential to impact visual resources of the Coastal Zone or other visually important area (i.e., mountainous area, public park, urban fringe, or scenic travel corridor)?
- 2b. If so, does the project have the potential to conflict with the policies set forth in the Coastal Land Use Plan, the Comprehensive Plan or any applicable community plan to protect the

identified views?

3. Does the project have the potential to create a significantly adverse aesthetic impact though obstruction of public views, incompatibility with surrounding uses, structures, or intensity of development, removal of significant amounts of vegetation, loss of important open space, substantial alteration of natural character, lack of adequate landscaping, or extensive grading visible from public areas?

REFERENCES.

- 1. <u>Scenic Highway Element of the County Comprehensive Plan</u>, 1982.
- 2. <u>Open Space Element of the County Comprehensive Plan</u>, 1979.
- 3. <u>Coastal Land Use Plan</u>, January 1982.
- 4. United States Forest Service, <u>Visual Management System</u>, 1973.
- 5. Geological Survey Circular 620, <u>Quantitative Comparison of Some Aesthetic Factors Among</u> <u>Rivers</u>, 1969.
- 6. U.S. Dept. of Agriculture, Agriculture Handbook 478, <u>National Forest Landscape Management</u>, Vol. 2, Chap. 2, Utilities, July 1975.
- 7. Viohl, Richard C., Nieman, Thomas J., <u>The Description, Classification, and Assessment of Visual Landscape Quality</u>, School of Landscape Architecture, S.U.N.Y. College of Environmental Science and Forestry, Syracuse N.Y., 13210, Exchange Bibliography #1064, Council of Planning Librarians.

APPENDIX A

Santa Barbara County Planning and Development Department

Biological Resources Guidelines Technical Background Document

September 1994

Synopsis:

As an appendix to the Biological Resources Guidelines (September 1994) of the County Environmental Thresholds and Guidelines Manual, this document provides additional technical background information about biological resources, which may be useful when evaluating development proposals for impacts on vegetation, wildlife, and biological habitats.

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A. Summary of Biological Resource Statutes (September 1994)

The Biological Resources Guidelines provides a short summary of legal authority under the California Environmental Quality Act (CEQA) for evaluating biological resource impacts, and Federal, State and County requirements and polices for the protection of biological resources.

Following are additional excerpts describing the statutory basis for the protection of individual plant and animal species, and biological habitats.

1. The legal basis for protection of threatened, endangered and candidate species.

The following text is excerpted from a "Revised Memorandum of Law Demonstrating Continuing Compliance by the State of California with USC Section 1535(c) of the Federal Endangered Species Act of 1973", originally prepared in 1974 by Evelle Younger, Boronkay and Mok with revisions made by John K. Van de Kamp, Attorney General of California and others in 1990.

"The authority of the state to conserve resident species of fish, wildlife or plants determined by the state agency to be endangered or threatened is granted in the Federal Endangered Species Act (ESA) 16 USC section 1535(c)(1)(A) and (2) (A).

California Fish and Game Code Section 200 grants general authority to the Fish and Game Commission to regulate the taking or possession of birds, mammals, fish, amphibians and reptiles subject to more specific statutory restrictions...."

a. **Regulations and statutory authority.** "Important state authority for the conservation of endangered and threatened species of fish, wildlife and plants is found in California Endangered Species Act (CESA) enacted in 1984. California Fish and Game Code Section 2051 et seq. ... In addition for a complete picture the California Endangered Species Act (CESA) must be read with the Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.) which also governs the preservation, protection and enhancement of endangered or rare native plants...."

b. California Endangered Species Act (California Fish and Game Code Sections 2051 et seq.) "This important conservation legislation declares State policy regarding threatened and endangered species, provides for a listing and review process, prohibits certain acts damaging to listed species, and provides a consultation process whereby state projects are reviewed for impacts on listed species. Both the Commission and Department are given important powers and duties vis-à-vis protection of subject species.

The CASE declares the State's interest in threatened and endangered species (California Fish and Game Code Section 2051) and unequivocally sets out the State's policy in California Fish and Game Code Section 2052:

"The Legislature further finds and declares that it is the policy of the state to conserve, protect, restore, and enhance any endangered species or any threatened species and its habitat and that it is the intent of the Legislature, consistent with conserving the species, to acquire lands for habitat for these species."

Toward that end state agencies in approving projects are required to seek out feasible alternatives to avoid jeopardizing the continued existence of listed species or provide appropriate mitigation and enhancement measures. California Fish and Game Code Sections 2053 - 2054. The California thresholds for endangered and threatened status (California Fish and Game Code Sections 2062 and 2067) are equivalent to Federal definitions. See 16 USC Sections 1532(6) and 1532(20). Also the tools listed for "conserving" resources (California Fish and Game Code Section 2061) are identical to the federal model. 16 U.S.C. Section 1532(3)."

"...Species to be so conserved must first be listed. That responsibility rests with the Fish and Game Commission upon consideration of sufficient scientific information. California Fish and Game Code Section 2070. The listing process may be initiated by petition from any interested person (California Fish and Game Code Section 2071, 2072 and 2072.3) or on recommendation of the Department of Fish and Game (California Fish and Game Code Section 2072.7. Petitions are evaluated by the Department which makes a recommendation to the Commission as to whether the petition contains sufficient information to determine if action is warranted. California Fish and Game Code Section 2073.5. Petitions and Department-initiated recommendations are then acted upon by the Commission, which decides whether to require formal review of the request. California Fish and Game Code Section 2074.2. Formal review and the corresponding "candidate species" status triggers substantial opportunities for public participation through the notification of interested parties. See California Fish and Game Code Section 2074, 2074.2, 2075, 2077 and 2078. This notification and opportunity to participate continues throughout the designation process. Formal review itself may take up to one year and results in a Department report on listing including, if appropriate, a preliminary identification of the habitat that may be essential to the continued existence of the species and recommendation as to management activities and other recommendations for recovery of the species. California Fish and Game Code Section 2074.6."

"Currently California's list of threatened or endangered plants and animals is set out in 14 Section Code Choosy. Sections 670.2 and 670.5. This listing is subject to periodic Department review and appropriate Commission response. California Fish and Game Code Section 2077...."

"Once a species is listed "[N]o person shall import into this state, export out of this state,

or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the Commission determines to be an endangered species or a threatened species, or attempt any of those acts," subject to some exceptions principally involving plants. California Fish and Game Code Section 2080....**This prohibition generally applies to candidate species undergoing formal review.** [emphasis added] California Fish and Game Code Section 2085..."

"In the event a project is being carried out by a local agency the Department [of Fish Section Game] may participate in the environmental review process as a responsible or trustee agency as appropriate. In that regard the status of threatened or endangered is recognized in the environmental review process (14 Section Code Choosy. 15380) and a project impact is normally considered significant, thus requiring the consideration of alternatives and mitigation, if a project will substantially affect a threatened or endangered species of animal or plant or the habitat of the species. 14 Section Code Choosy. Causa. 6, Chap. 3, Cheesy. G(c)."

"The Native Plant Protection Act [California Fish and Game Code Section 1900 et seq.] provides further authority to conserve plant species and conduct investigations in support of conservation in accordance with 16 U.S.C. sections 1535(c)(2)(A)(C).

c. Wildlife and Natural Areas Conservation Act (California Fish and Game Code Section 2700 et seq.). This legislation became effective November 9, 1988 and provides money for habitat protection for California species including those designated as threatened or endangered. California Fish and Game Code Section 2701. The principal protection focus is acquisition...."

"California Fish and Game Code Section 1700 et seq., entitled "Conservation of Aquatic Resources," declares State policy to encourage conservation of the living resources of the ocean and other state waters, including species preservation.

Similarly California Fish and Game Code section 1750 et seq. (Native Species Conservation and Enhancement Act) declares a policy of maintaining sufficient populations of all species of wildlife and native plants and the habitat necessary to insure their continued existence at optimum levels and establishes an account to manage private donations toward that end....California Fish and Game Code Section 1800 et seq. provides that the policy of the State, inter alia, is "to encourage the conservation and maintenance of wildlife resources" including the maintenance of "sufficient populations of all species of wildlife and the habitat necessary to ...perpetuate all species of wildlife for their intrinsic and ecological values...." Lastly, California Fish and Game Code Sections 1930-1933 establishes the significant natural areas program to protect and preserve important habitats and ecosystems through developing information with respect to natural resources (the California Natural Diversity Data Base)....[and other mechanisms]."

d. Public Resources Code. "California Public Resources Code Section 21000 et seq. was [enacted] in 1970 as the [California] Environmental Quality Act of 1970 (CEQA), to promote the declared legislative intent to maintain a quality environment including the protection of natural resources.

Section 21001(c) of the code provides that it is the policy of the State to "Prevent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future

generations representations of all plant and animal communities and examples of the major periods of California history."

The Act goes on to provide for an environmental impact report, similar to the provisions in the National Environmental Policy Act of 1969 and for the preparation of environmental impact reports by all local agencies, state agencies, boards, and commissions on any project which would have a significant effect on the environment."

- e. California Coastal Act. "California Public Resources Code Section 30000 et seq. was added by statute in 1976 as the California Coastal Act. The act sets out various policies protecting marine and land resources including species and habitat. To this end, the California Coastal Commission was established to regulate development with local government along the coast to insure that development will be consistent with conservation policies."
- **f.** Authority and jurisdiction over wetlands. The Federal Clean Water Pollution Control Act of 1972, ("Clean Water Act") requires a permit for the discharge of pollutants into the waters of the United States. The Clean Water Act defines pollutants to include dredge and fill materials (33 U.S.C. S 1362). Section 404 of the Clean Water Act authorizes the Army Corps of Engineers to issue permits to discharge dredge and fill materials into waters of the United States (33 U.S.C. S 1344(a). Federal Regulations define waters of the United States to include wetlands (33 CFR S 328.3(a)(7).

Due to the widely recognized high economic and biologic value of wetlands, the California Coastal Act mandates governmental regulation of these areas. The Act requires that the biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes be maintained and, where feasible, restored. Sections of the Act provide general policies for development in and adjacent to wetlands, and specific policies for protecting these areas (California Coastal Commission, 1981).

Fish and Game Sections 1601 and 1603 prohibit any person or governmental agency, or public utility from substantially diverting or obstructing the natural flow or substantially change the bed, channel or bank of any river, stream or lake designated by the department, or use any material from the streambeds without obtaining the appropriate permit from the California Department of Fish and Game.

It is generally advisable to consult with representatives of these agencies prior to submittal of an application to the County, so that impacts to Wetlands and Deepwater Habitats are avoided or minimized to the greatest extent feasible.

2. The legal basis for the protection of habitats. California Fish and Game Code Section 1750 et seq. (Native Species Conservation and Enhancement Act) declares a policy of maintaining sufficient populations of all species of wildlife and native plants and the <u>habitat</u> necessary to ensure their continued existence at optimum levels.

California Fish and Game Code Section 1800 et seq. states that it is the policy of the state "to encourage the conservation and maintenance of wildlife resources" including the maintenance of "sufficient population of all species of wildlife and the habitat necessary to ... perpetuate all species of wildlife for their intrinsic and ecological values...."

Furthermore, CEQA (Public Resources Code section 21000(c) states that it is the policy of the state to: "...prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for

future generations representations of all plant and animal communities and examples of the major periods of California history."

CEQA Appendix G, items (c), (d), and (t) specifically mention or refer to habitat.

The California legislature has further recognized the need to conduct habitat-based land use planning through adoption of the *Natural Community Conservation Planning Act of 1991* (*NCCP*) (California Fish and Game Code Section 2800 et. seq.). The purpose of this Act is to provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth. The NCCP process is designed to provide an alternative to current "single species" conservation efforts by formulating regional, natural community-based habitat protection programs to protect the numerous species inhabiting each of the targeted natural communities.

In 1986, the U.S. District Court for Hawaii (*Palila v. Hawaii Department of Land and Natural Resources and Sportsmen of Hawaii, 649 F.Supp.1070 [1986] (Palila II)* issued a ruling regarding destruction of habitat of an endangered bird known as "Palila" in the State of Hawaii. Regarding the term "harm" within the definition of "take" of the Federal Endangered Species Act, the Court concluded:

"A finding of "harm" does not require death to individual members of the species; nor does it require a finding that habitat degradation is presently driving the species further toward extinction. Habitat destruction that prevents the recovery of the species by affecting essential behavioral patterns causes actual injury to the species and effects a taking under Section 9 of the Act."

"The key to the Secretary's [of the Interior] definition is harm to the species as a whole through habitat destruction or modification. If the habitat modification prevents the population from recovering, then this causes injury to the species and should be actionable under Section 9."

See also *Sierra Club v. Lyng*, 694 F.Supp.1260 (E.D. Tex. 1988) and *Sierra Club v. Yeutter*, 926 F.2d 429 (5th Cir.1991). Further discussion of habitat protection under the Endangered Species Act is provided by Sidle and Bowman (1988).

B. Biological Survey Guidelines.

- 1. Initial assessment of biological resources (Initial Studies, EIRs and Mitigated NDs). During the overall land use permit process, an on-site inspection is conducted by the Planning and Development Department to determine if critical or sensitive biological resources may be impacted by a proposed project. Should the on-site investigation indicate the presence, or a high potential for the presence, of critical or sensitive biological resource, a biological survey may be required, pursuant to CEQA Section 15064 (Determining Significant Impacts). The biological survey could be completed as part of an EIR or it could be used to develop a Mitigated Negative Declaration as provided for by CEQA Section 15070:
 - a. The Initial Study shall be used to provide a written determination of whether a Negative Declaration or an EIR shall be prepared for a project.
 - b. Where a project is revised in response to an Initial Study so that potential adverse effects are mitigated to a point where no significant environmental effects would occur, a Negative Declaration shall be prepared instead of an EIR. If the project would still result in one or more significant effects on the environment after mitigation measures are added to the project, an EIR shall be prepared.

c. The EIR shall emphasize study of the impacts determined to be significant and can omit further examination of those impacts found to be clearly insignificant in the Initial Study.

Biological survey reports are conducted and written by professional biologists under contract to the County. Payment for the study is accomplished by a deposit with the County from the applicant in an amount equal to the cost estimate of the consulting biologist. In some cases, work is performed by a Planning and Development Department-qualified biologist under contract to the applicant.

All biological surveys are subject to review and acceptance by Planning and Development Department staff and may require reexamination by an outside consulting biologist acceptable to the Planning and Development Department. If a disagreement among experts occurs, review by an independent biologist may be required.

In a majority of cases, applicants work with the staff of the Development Review Division to modify the project design for the purpose of reducing impacts to biological resources to an acceptable level. Project design modifications, with the applicant's consent, then become a part of the project description and the basis for issuing a Mitigated Negative Declaration. However, if design modifications are not acceptable to an applicant, then additional biological analysis (and possibly development of additional mitigation measures) would be required as a component of an EIR pursuant to the above citation from CEQA.

- 2. Qualifications to perform the biological survey. Biological consultants must be on the Planning and Development Department list of qualified biologists or on staff of a Planning and Development Department-qualified consulting firm or otherwise be acceptable to Planning and Development Department. A file is retained in the Planning and Development Department which tracks the performance of each consultant. Consultants should be selected on the basis of possessing objectivity and the following qualifications, in order of importance:
 - a. A BA/BS in biological sciences or other degree specializing in the natural sciences.
 - b. Professional or academic experience as a biological field investigator, with a background in field sampling design and field methods;
 - c. Taxonomic experience and a knowledge of plant or animal (whichever is appropriate) ecology;
 - d. Familiarity with plants, animals, or both (whichever is appropriate) of the area, including the species of concern; and
 - e. Familiarity with the appropriate county, state and federal policies related to special status species and biological surveys.
 - f. In addition, the County of Santa Barbara requires that a consultant, hired to perform a biological survey, presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed. Therefore, to avoid a real or perceived appearance of a conflict of interest, a biological survey submitted by a consultant shall be subject to verification of the Planning and Development Department staff biologists or a third outside consulting biologist.
- **3. Guidelines for preparation of biological survey reports.** These guidelines were prepared by James R. Nelson, a botanist with the California Energy Commission, published in its original form by the California Department of Fish and Game (1984) and supplemented by Planning and Development Department staff in consultation with local biologists.

- **a.** When to conduct a biological survey. It is appropriate to conduct a biological field survey to determine if, or the extent to which, sensitive plants or animals or a habitat of concern will be affected by a proposed project when:
 - (1) Based upon an initial biological assessment, it appears that the project may damage potential special status plant or animal habitats;
 - (2) Special status species have historically been identified on the project site and adequate information for impact assessment is lacking; or
 - (3) No initial biological assessment by the Planning and Development Department biologist has been conducted and it is not known which habitats or the quality of habitats exist on the site, nor what the potential impacts of the project may be.
- **b. Guidelines and goals of the biological survey.** Biological surveys that are conducted to determine the environmental impacts of development activities should include particular attention to all rare, threatened, and endangered species and habitats. The species and habitats are not necessarily limited to those that have been "listed" by state and federal agencies, but include any species that, based upon all available data, can be shown to be rare, threatened and/or endangered. These can include "federal candidate" species, "state special concern" species, and those of local concern such as those species which are endemic, rare in the region, or declining in number.

Field searches should be conducted in such a manner that they will locate any listed or special status plant or animal species that may be present/a resident or that may utilize the site on a seasonal rather than year-round basis. Specifically:

- (1) Investigations should be conducted at the proper season and time of day when special status species are both evident and identifiable. Field surveys should be scheduled to coincide with known flowering periods, and/or during periods of phenological development that are necessary to identify plants of concern, and during periods critical to the species such as nesting for birds or larval development for amphibians.
- (2) Investigations should be both predictive in nature and based upon field inspection. Surveys should predict the presence of rare plants and animals (which may not be present every year or which may use it infrequently) based upon the occurrence of habitats or other physical features, in addition to actual field observation. The survey should not be limited to a description of those species that are actually observed in the field. Every species noted in the field should be identified to the extent necessary to ensure that it is neither a listed nor special status species.
- (3) Investigations should be conducted in such a manner that they are consistent with conservation ethics. Collections of voucher specimens or rare (or suspected rare) plants or animals should be made only when such actions do not jeopardize the continued existence of the population and in accordance with applicable state and federal regulations. All voucher specimens should be deposited at local public herbaria or recognized museums of natural history for proper storage and future reference. Photography should be used to document plant identifications and habitat whenever possible, especially when rare plant populations cannot withstand collection of vouchers.
- (4) Investigations should be conducted using systematic field techniques in all habitats of the site to ensure a reasonably thorough coverage of potential impact areas.

- (5) Investigations should be well-documented. When rare or endangered plants or animals or unusual plant communities are located, a California Native Plant Field Survey Form or its equivalent must be completed and sent to the Natural Diversity Data Base and a copy attached to the report sent to the Planning and Development Department.
- **c.** Contents of the biological survey. Reports of biological field surveys and reports must contain the following information with the exception of items 10 through 12 which are recommended for inclusion but may not be necessary in all cases.
 - (1) A detailed map of the project regional location and specific study area;
 - (2) A written description of the biological setting, referencing the plant community and a detailed map of the vegetation and/or animal habitat areas.
 - (3) A detailed description of the survey methodology;
 - (4) The dates and times of field visits;
 - (5) An assessment of all potential direct and indirect impacts;
 - (6) A discussion of the status, distribution, and habitat affinities of all special status plants or animals found at the project site;
 - (7) A discussion of the quality of the habitat considering: its ability to support species diversity, its ability to be self-sustaining (in the context of the surrounding area, not just the project boundaries), how common or rare it is (see Table 3 for example), how good a representative it is (plant community), the degree of previous disturbance, and other history of the site, etc.
 - (8) Recommended mitigation measures to reduce impacts to the maximum extent feasible and to protect the resource(s) by considering a range of possibilities, including: avoidance, fencing, open space easements, clustering and off-site mitigation;
 - (9) Suggestions for monitoring and evaluating the effectiveness of the mitigation measures;
 - (10) Solutions which, when feasible, work toward regional protection of the resources, including: combining open space easements with adjacent ownerships, maintenance of open space corridors; attempting to preserve as much contiguous habitat as possible;
 - (11) Recommended methods for the restoration of damaged habitats, where appropriate and feasible, and suggested success criteria to be achieved at the end of the proposed monitoring period;
 - (12) A list of all listed or special status plant or animal species observed or expected to occur on site. A list of additional species observed or expected should also be included. This may be representative of the communities present rather than exhaustive. Division by taxonomic group is not necessary.
 - (13) Copies of all Natural Diversity Data Base Field Survey Forms sent to Sacramento and Natural Community Field Survey Forms, for sensitive species or communities found on the project site;

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(14) The name(s) of the field investigator(s); and

(15) A list of references cited, persons contacted, herbaria and museums visited, and the location of voucher specimens.

C. Biological habitat descriptions and project design suggestions.

The following provides brief descriptions of some, though not all, of the habitats occurring in Santa Barbara County, an explanation of the habitat's importance, and project design suggestions for minimizing impacts to habitats, as well as individual plant and animal species. These habitats are by no means the only priority habitats in the County, rather, they represent the habitats where conflicts with land use developments most often occur.

1. Wetlands. All naturally occurring wetlands are considered significant resources because they provide a high number of functional values in a generally dry, arid region, and because of their extremely rare occurrence within the region. Examples include, but may not be limited to coastal salt and brackish marshes, fresh water marshes and vernal pools.

Wetlands, due to the presence of water, support the most diverse assemblages of plants and animals found in the southwestern United States. Because of the high biological productivity in wetlands and the historic elimination of 90 percent of California's wetlands, the highest numbers of threatened and endangered species most often occur here. Wetlands are utilized by a large number of organisms including invertebrate larvae, large mammals and plants that may only survive in wetland areas. Wetlands provide food, cover for protection against predators, and habitat for breeding of some species. Because Santa Barbara County is located along the Pacific Flyway, the County not only has a diverse resident bird population, but also those migrating birds that over-winter in Santa Barbara County (migrants). Wetlands provide seasonal and year-round habitat to several migrating bird species along the Pacific Flyway and fish utilize some of these areas as spawning and foraging habitat.

Wetlands also provide a number of public benefits¹ including: 1) protection of the shore from erosion (typically applicable to marshes, sloughs, and other estuaries), 2) Water Quality/Hydrology which support groundwater recharge, surface water availability, and water purification/filtration, 3) food chain support, 4) nutrient cycling, and 5) Socio-Economic benefits which include aesthetics, ethno-botany, recreation, research, education, economic benefit, etc.

a Coastal Salt Marsh

(1) **Description.** Coastal salt marshes are restricted to the upper intertidal zone of protected shallow bays, estuaries, and coastal lagoons. Physical conditions are dominated by the tides and variances in elevation which influence the frequency and duration of tidal flooding. The harsh, tidal environment of a salt marsh results in zones of different indicator plants. The environment includes tidal inundations of salt or brackish water, water-saturated soils containing few air spaces and hence reduced oxygen levels, and an environment fully exposed to sun, wide temperature fluctuations, wind, etc. The lowest zone is inundated twice daily; whereas the middle or upper zones may be inundated only once or twice a month, or even by only the highest spring tides (Faber, 1982).

Because tides are so important in providing moisture for coastal marshes, any interruption in tidal circulation can have drastic effects on these communities. The total area of marsh habitat may be correlated with the tidal prism (the total volume

¹ Bowland and Ferren (1992), and Sather and Smith (1984)

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of water moving in and out of the slough/marsh/lagoon, etc). As tidal prisms are reduced through sedimentation due to urban and agricultural development or for road construction, the likelihood of closure at the mouth increases. This event can change the soil and water salinity and water levels. This is turn affects many salttolerant plants adapted to this type of environment and convert salt-marsh habitat to upland habitats available to species such as the Beldings Savannah sparrow. Additionally, wildlife species such as the tidewater goby, depend on brackish waters to survive.

In addition to sedimentation, increases of fresh water inputs into the system due to urban and agricultural runoff may reduce salinity levels, while upstream dams may have the opposite effect. This runoff may also introduce toxic elements into the marsh such as fertilizers, septic effluent, pesticides, oil, grease, etc. Other potential impacts include changes in depth of enclosed water, elevated temperatures and decreased oxygen from algal blooms often associated with high nitrogen levels from polluting sources. These changes can alter the number and diversity of wildlife species. (Zedler, J. 1982). Development adjacent to the area could also disrupt wildlife behavioral patterns due to noise, neighboring domestic dogs and cats and other physical disturbances.

(2) **Project design suggestions**

- (a) Maintain tidal prism.
- (b) Minimize adverse hydrologic changes, sedimentation, and introduction of any toxic elements.
- (c) Timing of construction activity should be carefully planned to minimize indirect impacts such as noise and turbidity on sensitive animal species during critical periods such as breeding and nesting.
- (d) Maintain wildlife dispersal corridors.
- (e) Enhancement and restoration of salt marshes that can be incorporated into the project include: removal of existing fill, improving tidal circulation through grading, channel excavation, or removing other impediments to circulation, and cleanup.

b. Vernal Pools and associated features

(1) **Description.** Vernal pools are perhaps the most unique, rare, and endangered type of wetlands in California according to a number of studies cited in the Ferren and Pritchett 1988 report (p. 3). In fact, these wetlands are found only in a few places in the world outside California, namely southern Oregon and in the Cape Province of South Africa (Faber, P. 1982).

A vernal pool is a small depression that fills with water during the winter (gradually drying during the spring and becoming completely dry in the summer) and supports a unique assemblage of plants.

V.L. Holland and David Keil (1990) add: "Vernal pool vegetation is characterized by herbaceous plants that begin their growth as aquatic or semi aquatic plants and make a transition to a dry-land environment as the pool dries. This generally results in the development of concentric rings of vegetation that develop around the margins of the drying pool. Most vernal pool plants are annual herbs. The relatively few perennial species grow from deeply seated rhizomes or rootstocks. Shrubs and trees are absent from vernal pool communities. Some species from vernal pool communities have very showy flowers and act as aspect dominants."

"Vernal Flat" is used to describe areas that are not easily definable as discrete basins (vernal pools) and whose wetland/upland affiliations fluctuate corresponding to changing precipitation trends from year to year. Following several years of average to above-average rainfall, these tend to support vernal pool species and exclude upland species. Following several years of low rainfall, these areas tend to be characterized by upland species (Olson, 1992).

"Swales" are low moist areas, that when associated with vernal pools, may support vernal pool species including invertebrates (for example: U.S. Fish Section Wildlife Service, 1992). They may also be important because they transport rain water to a vernal pool or complex of pools.

Wildlife species, such as the Western Spadefoot Toad and California Tiger Salamander utilize these seasonal wetlands for breeding and egg-laying during the first rains of the year (December through April). The Tiger Salamander can spend several months in the larval stage, metamorphosing to adult salamanders as late as May through August when the pools dry up and then dispersing to rodent burrows in adjacent grassland areas. Spadefoot toads breed later in the year than tiger salamanders (March through April) and are dependent upon grass pollen and other vegetation for food and to conserve moisture during the tadpole stage. This species also metamorphoses to adults and disperses to surrounding rodent burrows in adjacent grasslands. Furthermore, other amphibians utilize these seasonal ponds as habitat.

Direct and indirect impacts to the pool itself may result in adverse changes to either the physical or chemical properties of the pool. Impacts to the watershed or community in which it functions may also impact the pool. For example, fragmentation of habitat may interrupt interaction between the habitat and the organisms within the pools (pollination, seed, invertebrate and vertebrate dispersal, provision of drinking and bathing water, etc.).

(2) **Project design suggestions.**

- (a) Because vernal pools do not exist by themselves as isolated units, and instead function within a larger plant community such as a grassland, the surrounding upland habitat should be preserved to the maximum degree feasible. If the vernal pools occur in a dispersed pattern throughout an upland community, the entire community should be preserved as one unit.
- (b) Design developments to provide a buffer around all vernal pools (with the possible exception of artificially created pools), or include enough of a buffer to protect the topographic watershed, whichever is greater. Typical buffer area: 100-250 feet from edge of pool.
- (c) Vernal Pool "complexes" (groupings of several pools have swales according to hydrology and topography) should be avoided and buffered (minimum of 100 feet) or enough of a buffer to protect the topographic watershed of the entire complex, whichever is greater.
- (d) Restoration and enhancement can include removal of exotic (non-native)

species, planting of appropriate native species (seeding), removal of fill, relocation of foot and bike paths around rather than through the pools, etc.

(e) Disturbance to vernal pools or vernal pool complexes should be timed to avoid breeding seasons of sensitive wildlife species.

c. Riparian Habitats

(1) **Description.** Riparian habitat is generally considered as the terrestrial or upland area adjacent to freshwater bodies, such as the banks of linear watercourses (e.g.: creeks and streams), the shores of lakes and ponds, and aquifers which emerge at the surface such as springs and seeps (Bowland and Ferren 1992). The habitat is typically thought of as a corridor from stream bank to bank (from edge of riparian vegetation to edge of riparian vegetation) which may include a wetland portion in the center.²

Riparian habitat occurs in and along the County's four major rivers (Santa Ynez, Santa Maria, Cuyama and Sisquoc) and in and along the County's many creeks and streams. This habitat can also occur along arroyos and barrancas, and other types of drainages throughout the County.

Riparian habitat is particularly rich in wildlife species, in that water is present at least during some part of the year in these corridors and the dense plants of varying heights provide a diverse food source and safety from predators. In particular, riparian habitat provides forage, cover, water, migration and fawning for Santa Barbara County's resident deer herd. Various types of cover are required by deer including protective cover, for fawning, feeding and resting, escape cover from predators, and thermal cover to provide temperature regulation in the winter and summer. Riparian habitats typically provide all these habitat requirements. Deer also require a variety of food types in their diet, depending upon the time of year and will utilize oak woodlands, chaparral and grasslands adjacent to riparian corridors in order to obtain a sufficient diet. The shade of bank side vegetation can keep a stream cold enough for migratory sport fish such as steelhead trout.

Less obvious species that utilize the riparian corridors are the amphibians that require plunge pools in which to reproduce, seek protection from predation and maintain a constant body temperature. Pool and riffle sequences within streams and creeks are necessary for successful spawning for many species of fish. Specialized bird species such as Cooper's hawks and a great variety of songbirds utilize riparian habitat for breeding, nesting and foraging due to the diversity of structural heights and continuity of vegetation along the drainages.

(2) **Project design suggestions.**

- (a) Incorporate into project design a vegetated buffer from the upland edge of the riparian canopy at least 50 feet in width.
- (b) Inclusion of adjacent upland vegetation in the buffer. Upland vegetation is important as habitat for a large number of species, particularly amphibians,³

² The Cowardin classification system does not use the term "riparian". Cowardin categories for riparian systems are palustrine and riverine.

³ Some species such as the western pond turtle may utilize upland habitat as much as 1/4 mile away from the riparian wetland (Sweet 1992).

and also aids in stabilizing the banks, which reduces erosion and sedimentation potential.

- (c) Retain animal dispersal corridors, including the understory.
- (d) Construction activity can be planned to avoid critical time periods (nesting, breeding) for fish and other wildlife species.
- (e) Careful siting of some projects such as bridges and pipelines can limit the disturbance area to previously disturbed locations.
- (f) Restoration or enhancement of riparian habitat on a project site can enhance the ecological value of the creek, stream, or river, both upstream and downstream.
- 2. Chaparral. Chaparral is composed mainly of woody, evergreen shrubs. It forms extensive shrub lands that occupy most of the hills and lower mountain slopes of Santa Barbara County and throughout California. It is adapted to drought and fire, passing through cycles of burning and re-growth approximately every 30 years. Even though chaparral has no commercial value, it provides the most highly valued watershed cover of any vegetation community in the state (Hanes, 1977). Chaparral occurs throughout Santa Barbara County and is further broken down into a number of categories.

a. Burton Mesa Chaparral.

(1) **Description.** Central Maritime Chaparral, also known as Sandhill or Burton Mesa Chaparral is a unique form of chaparral that is restricted to the aeolian sands of the Orcutt soils formation north of Lompoc. Many of the species unique to Burton Mesa Chaparral are narrowly restricted in distribution (Odion, Storrer and Semonsen 1993, Ferren et. al 1984, Smith 1976, Dames and Moore 1985). Because of the high number of endemic species (many of which are dominants in the community), the unusual oaks, and a rich herbaceous understory, Burton Mesa Chaparral has been recognized as a valuable biological resource by local biologists and the County of Santa Barbara. Various land uses have reduced its original limited extent which has been estimated as follows:

Original Central Chaparral Habitat	22,153 acres
1938 Central Maritime Chaparral	14,563 acres
1987 Central Maritime Chaparral	8,618 acres

In 1988 it was reported that of the 39 percent of original habitat that remains, twothirds is found within Vandenberg Air Force base, where it is severely threatened by military development and land management practices that have resulted in the invasion of vigorous exotic (non-native) species particularly ice plant. These trends are continuing at a rapid rate (Odion, Hickson and D'Antonio 1992, Philbrick and Odion 1988).

Since the time the 1988 report was written a 5,125 acre property was acquired by the State of California. This land contains roughly 3,250 acres of semi-pristine to pristine, and roughly 150 acres of degraded Central Maritime Chaparral, in addition to substantial acreages of other important plant communities (Odion, Storrer and Semonsen 1993). Mitigation efforts are now being focused on acquisition of adjacent lands and funding of habitat restoration and management within the preserve.

b. Coastal Sage Scrub.

(1) **Description.** Coastal sage scrub is a drought-tolerant, Mediterranean habitat characterized by soft-leaved, shallow-rooted sub-shrubs such as California sagebrush, (*Artemisia californica*), several sage species (*Salvia spp.*), California buckwheat (*Eriogonum spp.*), and California encelia (*Encelia californica*) (Bowler, 1990). Commonly called "soft chaparral", Coastal sage scrub is highly fire adapted, and increases in species richness following fires, but a second wave in the number of species (mostly understory species that are not fire successional) occurs 15-25 years after burning (Westman 1987).

Coastal sage scrub and the related coastal succulent scrubs in northern Baja California originally extended from San Francisco to El Rosario in Baja California and has been divided into four floristic associations, two of which occur in Santa Barbara County: Diablan (San Francisco to Point Conception) and Venturan (Point Conception to Los Angeles). Coastal sage scrub is limited to the lower elevations of both the coastal and interior regions of the mountains where moist maritime air penetrates inland.

More than a decade ago it was estimated that 85 to 90 percent of the original coastal sage scrub habitat (Westman, 1981) had been eliminated as a result of urban development and agriculture (O'Leary, 1989). Other factors contributing to loss of this habitat have been reported to be increased air pollution and changes in fire frequency due to fire suppression activities. Coastal sage scrub is being reduced in its overall extent and fragmented by road and urban development particularly in Orange and San Diego Counties.

(2) **Project design suggestions.**

- (a) The basic principles of preserving biodiversity apply to this habitat type. Design the project so that continuous, unbroken habitat areas are preserved to the greatest extent feasible.
- (b) Retain corridors to connect with other undisturbed areas to preserve wildlife travel corridor.
- (c) Removal of invasive exotic species such as freeway ice plant (Zedler and Scheid 1988) and pampas grass improves the quality of the remaining habitat.
- (d) Consider indirect effects of chaparral removal, including reduction of groundwater recharge, increased erosion and sedimentation to adjacent creeks and streams which may affect riparian habitats and wildlife.
- (e) Balance between design measures for habitat protection and for fire management.

c. Native grasslands.

(1) **Description.** Native grasslands which are dominated by perennial bunch grasses such as purple needlegrass (*Stipa pulchra*) tend to be patchy (the individual plants and groups of plants tend to be distributed in patches). Valley Grassland in California once occurred over 8 million acres in the Central Valley and in scattered patches along the Coast Ranges (Heady, 1977). Few stands of native grasslands remain in the state and the habitat is considered rare both in the state and within the

county. Even among the "pristine" grasslands in the state, the vegetative cover of native grassland species is reportedly rarely greater than 50 percent, and in many of these reserves it is commonly found between 15 and 25 percent of the total vegetative cover (Keeler-Wolf, 1992). A study commissioned by the County in 1989 reported that native grassland areas are exceedingly rare in the County, except on the Channel Islands and inside Gaviota State Park (Odion, 1989).

(2) **Project design suggestions.**

- (a) Design the project so that continuous habitat areas are preserved to the greatest extent feasible.
- (b) Incorporation of restoration and enhancement measures, including weeding, intentional burning, revegetation (planting of seeds or plugs), or other procedures will facilitate natural regeneration of the grassland.

d. Woodlands and Forests.

(1) **Description.** Generally speaking, there are three types of oak woodlands in Santa Barbara County. Valley Oak Woodland is typically characterized by scattered trees surrounded by grassland, whereas trees in live oak and blue oak woodlands tend to be more closely spaced. Coast Live Oak (Quercus agrifolia) forms dense groves of trees on north-facing slopes and is the primary oak species found in southern oak woodlands. Deep alluvial soils in interior valleys support grasslands and Valley Oak Woodland (Quercus lobata and Quercus agrifolia). The foothills of the inner coast ranges are inhabited by Blue Oak (Quercus douglasii), Coast Live Oak (Quercus agrifolia), Digger Pine (Pinus sabiniana), and other components of blue oak woodland. The number, type, and density of oak trees, are principal characteristics which define the various types of woodlands; further, the relationship between trees and vegetation in the understory below in woodlands also define variety in woodland habitats. In addition to oak forests, a variety of pine and other coniferous forests also occur in the county. Oak communities are emphasized in the following discussion because they so frequently occur in the same areas in which developments are proposed.

Oak habitats offer diverse resources to wildlife: shade in summer, shelter in winter, perching, roosting, nesting, and food storage sites. Acorns are the most plentiful food source, but oak catkins, twigs, leaves, buds, sap, galls, fungi, lichens, and roots all provide important foods. Other species associated with the oak woodland include redberry, coffeyberry, toyon, mistletoe, poison oak, forbs and grasses which are also important foods for wildlife. Insects feeding in oak habitats are eaten by birds, reptiles, amphibians, mammals and other insects which in turn feed larger predators such as owls, hawks, snakes, bobcats, coyotes, mountain lions and bears. Some oak trees are "granary trees" in which acorn woodpeckers store acorns. Scrub jays and magpies inadvertently "plant" acorns when they store them in the ground. Dead trees, or snags, provide perching, feeding and nesting sites for raptors as well as thermal cover for smaller mammals, reptiles and amphibians. Oaks provide wildlife habitat from the seedling through the snag (dead tree) stages of succession in the woodland. This habitat type supports a diverse wildlife population, and disruption of the woodland often indirectly results in disrupting wildlife breeding, nesting, foraging, and dispersal.

(2) Project design suggestions for Woodlands and Forests.

- (a) Retain contiguous blocks of habitat area particularly where adjacent to offsite habitat areas.
- (b) Retain animal migration corridors to other habitat areas.
- (c) Retain understory.

(3) Project design suggestions for individual native trees.

(a) Avoidance. The preferred method of protecting native trees is to avoid any disturbance within the area 6 feet away from their driplines (the outermost edge of a tree's foliage) and drainage patterns above and below the tree. Although the stabilizing structural roots generally occur within the dripline, numerous and highly significant "feeder roots" which facilitate gas and water exchange and uptake of nutrients occur outside the dripline.

For management purposes, it is useful to think of a tree's root zone as being one third larger than the drip line area (University of California Cooperative Extension, no date). As a general rule, avoid grading and impervious surfaces within 6 feet of the dripline of all significant trees where ever feasible. This may be adjusted upwards or downwards depending on the size of the tree. It is advisable to include a margin of safety to account for unintentional errors during the construction phase of the project. The most vulnerable parts of a mature tree are the root crown (at the base of the trunk) and the entire root zone.

- (b) **Broad scale irrigation.** Avoid irrigation with rainbirds beneath previously un-irrigated oaks because it is likely to create conditions favorable to oak root fungus. It is advised that irrigation water, if necessary, be infrequent (i.e., once a week), be done by hand or drip method (Semonsen 1992, Doud 1992), and be no closer than 6 to 10 feet (depending on the size) from the trunk of the tree.
- (c) Hard surfaces. Any hard surfaces under oaks would better consist of paving blocks or other material which will allow air and rain water to reach the roots.
- (d) **Ground disturbance.** As a general guideline, disturb no more than 20 percent of the total area beneath the dripline of any one tree.

(4) **Project design guidelines for non-native trees**

- (a) Monarch butterfly wintering sites can be preserved by keeping the grove of trees in a state so that shelter from wind and temperature extremes are retained. This may include other trees outside the main grove that affect wind exposure.
- (b) Where possible, preserve other non-native trees that have value to important wildlife species.

D. Biological Mitigation Measures.

Please refer to the conditions of approval or mitigation measures in the biology section of the Santa Barbara County *A Planners Guide to Conditions of Approval and Mitigation Measures* which contains a listing of model measures containing standard language used when such measures are applied as

conditions of permit approval. Please note that these measures are not applicable to all cases and projects. In addition, the wording of measures may be customized as appropriate to address specific project circumstances.

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