

EXECUTIVE SUMMARY

This section summarizes the characteristics of the proposed project, the environmental impacts, mitigation measures, and residual impacts associated with the proposed project.

PROJECT SYNOPSIS

Project Applicant

County of Santa Barbara
Planning and Development
123 E. Anapamu Street
Santa Barbara, CA 93101

Project Description

The Carpinteria Valley Greenhouse Program recommends rezoning areas located throughout the Study Area through a set of rezone ordinance amendments to Article II, County Coastal Zoning Ordinance. These amendments would result in two new zone districts specific to the Carpinteria Valley. One would designate lands suitable for the continuation and expansion of greenhouse development greater than 20,000 sf and the other would promote the continuation of open field agriculture. Areas identified for continued greenhouse use and expansion would be designated by a new AG-I-CARP zone district, while a new AG-I-OF (Open Field) zone district would be applied to all remaining agriculturally zoned parcels in the study area. These two zone districts would be substantially similar to the existing AG-I zone district except for the greenhouse use. Treatment of greenhouse and greenhouse related development (including packing and shipping facilities), of less than 20,000 sf of cumulative development per legal parcel would remain unchanged. Under the existing AG-I zoning, greenhouse development of less than this threshold requires a Coastal Development Permit. The primary intent of the AG-I-OF zone district is to promote and support open field agriculture as a long-term viable use by limiting the piecemeal expansion of greenhouse development and related intensive infrastructure improvements. ~~However, m~~ Modifications and specific standards would be included to address both open field uses and greenhouse development as discussed below. Specifically, these amendments would:

- *Amend Division 1, General, Section 35-52 to include two new zone districts (AG-I-CARP and AG-I-OF).*
- *Amend Division 2, Definitions, Section 35-58 to add definitions for greenhouses and related structures.*
- *Amend Division 4, Zone Districts, to add two new zone districts (AG-I-CARP and AG-I-OF).*

- *Conduct rezones and map changes to retire the AG-I-5, AG-I-10, AG-I-20, and AG-I-40 zone districts from the Carpinteria Valley study area and add the AG-I-CARP and AG-I-OF to the identified parcels.*

ALTERNATIVES

Three alternatives to the proposed project were selected for consideration. In addition to the alternatives analyzed in this document, other alternatives were considered but rejected. These include implementation of a greenhouse construction moratorium and reduced lot coverage alternatives. A brief description of the alternatives addressed in this document is provided below.

No Project Alternative. Section 15126.6(e) of the State CEQA Guidelines requires evaluation of a “no project” alternative. The No Project Alternative assumes that existing Comprehensive Plan policies, Article II Zoning Ordinance (AG-I zone district) requirements, Local Coastal Plan policies, and other county plans, policies, and programs now in effect would continue to apply. Applications for greenhouse development would continue to be processed on a case-by-case basis through a major conditional use permit with no restrictions on the location of such development within the AG-I zone district. Under this option, development standards would be identified through individual environmental and permit review.

Approximately 3 million square feet of greenhouse development have been approved within the Study Area during the last 10 years (Santa Barbara County, 1999). The No Project Alternative assumes this growth rate would continue over the next 15 years, resulting in an increase of 4.5 million square feet of new greenhouse development.

The location and rate of future greenhouse development is not known at this time but would be influenced by a variety of factors, including economic stability, industry competition, availability of suitable land, governmental regulations, and business objectives of individual growers. The No Project Alternative could permit greenhouse expansion on any AG-I zoned parcel within the study area.

High Buildout Alternative. Under the High Buildout Alternative, the proposed AG-I-CARP zone district would be applied to all of the parcels under the proposed project, as well as six additional parcels located north of Highway 192 and east of Casitas Pass Road. The AG-I-OF zone district would be applied to the remaining AG-I parcels in the study area and would have identical provisions as the AG-I-OF district proposed in the project description. One of the factors for considering this area for expansion is that it has developed into an emerging greenhouse “cluster area” in recent years. Approximately 1.5 million square feet of new

greenhouse structures have been approved in this area since 1989. Further consideration was given to ownership patterns of growers with known greenhouse expansion interests. Zoning ordinance requirements for this alternative would be the same as proposed for the AG-I-CARP zone district. The High Buildout Alternative would allow approximately 4.3 million square feet of new greenhouse development.

Low Buildout Alternative. This scenario examines the potential impacts that would be associated with a more limited area of greenhouse development than that currently proposed. Buildout of this alternative would be similar to the EIR project description; however, potential expansion of underdeveloped parcels and/or redevelopment of older greenhouses is encouraged as the primary means of accommodating new development. Since many of the greenhouses within these clusters are of older design, redevelopment and/or retrofitting of these older structures could add greenhouse square footage and increase overall productivity. A new AG-I-CARP zone district would designate areas identified for greenhouse expansion while a new AG-I-OF (Open Field) zone district would designate open field areas.

This alternative would result in the construction of approximately ~~2.282.2~~ million square feet of greenhouse structures in the proposed AG-I-CARP zone district (see Appendix C for detailed parcel analysis). This total does not include additional development that would result from retrofitting and reconstruction of aging greenhouse structures. The AG-I-OF zone district would be applied to the remaining AG-I parcels in the study area and would have identical provisions as the AG-I-OF district proposed in the project description.

Environmentally Superior Alternative. Based on the analysis contained herein, the Low Buildout Alternative was determined to be environmentally superior to the project and other alternatives considered.

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table ES-1 includes a brief description of the environmental issues relative to the proposed project, the identified environmental impacts and proposed mitigation measures, ~~and residual impacts~~. Impacts are classified as to the level of significance that may be obtained. Class I impacts are defined as significant, unavoidable adverse impacts which require a statement of overriding considerations to be issued per Section 15093 of the *State CEQA Guidelines* if the project is approved. Class II impacts are significant adverse impacts that can be feasibly mitigated to less than significant levels and which require findings to be made under Section 15091 of the *State CEQA Guidelines*. Class III are considered less than significant impacts, and Class IV are beneficial impacts.

Class I - Unavoidable Adverse Impacts

Visual: Impacts to viewsheds and loss of open space.

Land Use: Land use conflicts with adjacent residential uses.

Traffic: Increase in AM and PM peak hour trips; increase in traffic safety impacts.

Class II - Significant Impacts That Can Be Mitigated To Insignificant Levels

Visual: Introduction of new sources of light and glare.

Water Quality: Increase in uncontrolled agricultural field runoff; increase in stormwater runoff; construction related runoff.

Flooding & Drainage: Off-site flooding and drainage impacts; on and off-site flooding and erosion impacts; impacts from 100-year flood events.

Land Use: Conversion of prime soils; conflict with existing agricultural operations.

Air Quality: Construction related PM₁₀ emissions.

Noise: Construction-related noise level increases; nuisance noise from greenhouse operations.

Biological Resources: Increased silt, sediment, nutrient, pesticide and stormwater pollutant runoff; changes in seasonal flow patterns of creeks; reduction in habitat for foraging and residence; interruption of wildlife corridors and habitat linkages.

Class III - Less Than Significant Impacts

Land Use: conflict with existing agricultural operations.

Traffic: Increased ADT; increase in roadway maintenance; Congestion Management Program impacts.

Air Quality: Incremental increase in ozone precursor emissions.

Noise: Noise generated by project-related traffic.

Table ES-2 provides a summary of cumulative impacts associated with the proposed project.

Table ES-1. Summary of Environmental Impacts and Mitigation Measures

CLASS I – SIGNIFICANT AND UNAVOIDABLE IMPACTS	
Impact	Mitigation Measures
VISUAL RESOURCES	
<p>Impact VIS-1 Development of new greenhouses and related agricultural structures has the potential to result in visual impacts to public view sheds and loss of open space.</p>	<ul style="list-style-type: none"> – Landscaping shall be required immediately adjacent to the perimeter of packing sheds and warehouse distribution facilities. Landscaping shall be sufficient to screen the structure within five years, and maintained for the life of the project. – Planning & Development shall work with the greenhouse growers to develop an approved landscape plant list for screening greenhouse development. Plants shall be selected based on their ability to achieve desired height and density within five years, plant hardiness and life span, compatibility with the coastal growing region, and ease of maintenance. – Landscaping within front setbacks shall gradually increase in height away from public roadways. Solid wall fencing shall be prohibited as a means of screening. Chain-link security fencing shall be screened from public view corridors by dense landscaping and or covered with attractive climbing vines. – Required landscape/vegetative buffers shall be depicted on a landscape plan that is submitted to the Planning and Development Department for review and approval. – Landscaping shall be maintained for the life of the project. If landscaping is removed or substantially altered, a landscape plan shall be submitted to P&D for substantial conformity review with the original conditions of approval and replacement landscaping shall be installed and maintained. The removal of landscaping or vegetation, for any reason, that has been installed or maintained as a required visual buffer shall be considered to be a substantial change to the previously approved project. Such as change may be cause to require an amendment to the previously issued land use entitlements for the project. – Where structures are proposed in existing orchards or adjacent to wind rows, perimeter trees shall be preserved, to the maximum extent feasible, in order to provide visual screening along adjacent public roadways. Remnant orchard trees shall be maintained in good condition to ensure that trees do not become hosts for pests or diseases.
LAND USE	
<p>Impact LU/AG-I Development of new greenhouse and related structures in the proposed AG-I-CARP zone has the potential to result in significant land use conflicts with adjacent residential uses.</p>	<p>The maximum net lot coverage for all greenhouses, hothouses, plant protection structures, and accessory structures (packing sheds, retention basins, parking areas, etc.) shall be: 75% for lots less than 5 acres; 70 % for lots 5 to 9.99 acres; and 65% for lots 10 acres or more. The following setbacks shall be required for all new development:</p> <ul style="list-style-type: none"> – <i>Front: Fifty (50) feet from the centerline and thirty (30) from the right of way line of any street.</i> – <i>Side and Rear: Thirty (30) from the lot lines on which the building or structure is located.</i> – <i>Interior: Twenty (20) from the lot lines on which the building or structure is located.</i> – <i>In addition, no structure greenhouse or packing facility shall be located within fifty (50) feet of a any residentially-zoned lot or an adjacent lot parcel where there is with an approved residential dwelling located use within fifty (50) feet of the subject parcel boundary.</i>

Table ES-1. Summary of Environmental Impacts and Mitigation Measures

CLASS I – SIGNIFICANT AND UNAVOIDABLE IMPACTS	
Impact	Mitigation Measures
	<p>A landscaping plan, approved by Planning and Development prior to the issuance of a Coastal Development Permit, shall be required for all new development which provides, to the maximum extent feasible, visual screening of all structures and parking areas from all adjacent public roads and view corridors. The landscaping plan shall consist of plants which will reasonably screen the development within five (5) years and which are compatible with visual character of the area. The maximum height of any structure shall be no greater than thirty (30) feet above finished grade.</p> <p><u>The maximum height of any structure shall be no greater than thirty (30) feet above finished grade.</u></p> <p><u>Implementation of Measures Vis-1 and 2, Vis-4 and 5, Vis-8,9 and 10 would also mitigate impacts in this area.</u></p>
TRAFFIC	
<p>Impacts T-2 <u>The project would generate 91 A.M. PHT and 183 P.M. PHT.</u></p> <p>and Impact T-3 Project generated traffic may expose persons and property to potentially significant traffic safety impacts along area roadways and intersections.</p>	<ul style="list-style-type: none"> - <u>Interchange Improvements. New greenhouse development contributing peak hour trips to the Santa Monica/Via Real/U.S. 101 NB ramp interchange and the Linden Avenue/U.S. 101 SB ramp interchange shall pay a pro-rata contribution towards future interchange improvements. A Memorandum of Understanding (MOU) to be developed by Public Works Department, Planning & Development Department, and the City of Carpinteria, shall establish appropriate mitigation fee calculation rates and procedures.</u> - <u>Peak Hour Trip Calculation. Application submittal for new greenhouse development shall include a focused traffic analysis that identifies the number of new peak hour trips a project will send to the Santa Monica/Via Real/U.S. 101 NB ramp interchange and the Linden Avenue/U.S. 101 SB ramp interchange.</u> - Sight Distance. Each greenhouse development project shall reviewed by County Public Works Department to ensure compliance with state and county sight distance requirements. - Driveway Access Design. Property access points shall be improved as determined necessary by County Public Works Department, to safely accommodate truck maneuvers. The design and scale of driveway entrances shall be consistent with the rural character of the area to the maximum extent feasible. Driveway access improvements shall not inhibit, or diminish the effectiveness of, required landscape mitigation. - On-Site Parking Requirements. All truck deliveries, shipments, and employee parking shall be accommodated on-site. - Route 192/Cravens Lane. The County Public Works Department shall work with Caltrans to investigate the source of elevated collision rates experienced at Route 192/Cravens Lane and to implement appropriate corrective action, if necessary. The design and scale of intersection improvements shall be consistent with the rural character of the area to the maximum extent feasible. - Route 192/Linden Ave. The County Public Works Department shall work with Caltrans and the City of Carpinteria to investigate the source of elevated collision rates experienced at Route 192/Linden Avenue and to implement appropriate corrective action, if necessary.

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Impact	Mitigation Measures
	<ul style="list-style-type: none"> – Route 192/Casitas Pass Road. The Public Works Department shall contact the local Utility Company to request relocation of the utility pole located on the North side of Route 192/Casitas Pass Road. The utility pole shall be located away from the intersection to provide adequate geometrics for trucks using the intersection. – Roadway safety signs. The Public Works Department shall evaluate the need for appropriate new signage along Santa Monica Road to alert drivers of possible truck traffic when entering or exiting at a blind curve area. – Traffic Management Plan. The applicant shall prepare a Traffic Management Plan for review and approval by County Public Works Department. The plan shall include, but not be limited to, information regarding approach and exit speeds, turning movements, hours of delivery, etc.

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Table ES-1. Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

CLASS II – SIGNIFICANT BUT MITIGABLE IMPACTS	
Impact	Mitigation Measures
VISUAL RESOURCES	
<p>Impact VIS-2 New greenhouse development has the potential to result in significant light and glare impacts.</p>	<ul style="list-style-type: none"> – All new or retro-fit greenhouse or plant protection structures shall be required to install a mechanized blackout screen system within growing areas to prevent interior night lighting from being visible outside the structure. If the applicant does not intend to use night lighting, the project description for individual greenhouse projects shall clearly state that night lighting within growing areas shall not occur. – Exterior lighting shall be for specific safety purposes only and shall be hooded/shielded to minimize the spread of light off-site and to minimize impacts to the rural nighttime character. – To the extent feasible, new greenhouse development shall be oriented with the roof axis extending from north to south to reduce glare impacts. – Where structures are proposed in existing orchards or adjacent to wind rows, perimeter trees shall be preserved, to the maximum extent feasible, in order to provide visual screening along adjacent public roadways. Remnant orchard trees shall be maintained in good condition to ensure that trees do not become hosts for pests or diseases. – All greenhouse development should be limited to a maximum lot coverage of 65 percent.
WATER QUALITY AND GROUNDWATER	
<p>Impact W-1 and Greenhouse buildout <u>has the potential to degrade the surface water quality and groundwater quality through the discharge of irrigation and surface runoff water containing fertilizers and other agricultural chemicals.</u></p> <p>Impact W-2 Storm water runoff from greenhouse operations has the potential to degrade the surface water quality of the Study Area and the Carpinteria Salt Marsh, and the adjacent ocean intertidal zone with elevated levels of storm water runoff pollutants.</p>	<ul style="list-style-type: none"> - Water Quality Management Plan. Applicants shall prepare a water quality management plan for review and approval by P&D, and EHS, RWQCB and the Carpinteria Valley Water District <u>the Carpinteria-Summerland Fire Protection District (approving agencies may vary depending on individual proposed greenhouse projects).</u> The plan shall include, but not be limited to, information on nutrient delivery systems, pesticide application methods, and wastewater disposal methods. The location of all existing and proposed surface and sub-surface drainage facilities shall be mapped. The water quality management plan shall incorporate the following components: <ol style="list-style-type: none"> a. <u>A flow diagram of the proposed water system to be used, including average and maximum daily flows.</u> b. <u>The mapped location of all existing and proposed surface and sub-surface drainage facilities.</u> c. <u>Information on water and nutrient delivery systems.</u> d. <u>Pesticide Best Management Practices as defined and required by the County Agricultural Commissioner.</u> e. <u>The location and type of treatment and disposal facilities for irrigation, washwater, boiler blowdown, water softener regeneration brines, and retention basins.</u> f. <u>Best Management Practices (BMPs), including but not limited to the following:</u> <ol style="list-style-type: none"> i) <u>Use of water systems that minimize surface water transport (i.e., trickle, drip, mist, hydroponic irrigation systems).</u> ii) <u>Use of water and nutrient recycling technologies.</u> iii) <u>Employment of fertilization methods that maximize the efficiency of nutrient delivery and uptake such as controlled-release fertilizers (CRF) or liquid fertilizer (LF).</u> iv) <u>Implementation of Integrated Pest Management techniques.</u>

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	<ul style="list-style-type: none"> - Leachate Management. Compost, and fertilizer and pesticides shall be stored in a manner that minimizes generation of leachate in accordance with Article 80 of the Uniform Fire Code. Leachate controls include covering compost piles and fertilizer storage with a roof and locating storage areas outside of the 100-year flood plain. Uncovered storage areas shall be located at least 250 feet from a waterway (i.e. storm drain, creek, salt marsh or ocean) unless it can be demonstrated that no adverse effect on water quality will result. Should any discharge occur that would impair water quality of the receiving body, then a discharge permit will be required from the Regional Water Quality Control Board. - Water Softener Brine Management. High saline brines from water softener units shall not be discharged to the storm drain or allowed to percolate into the groundwater unless it can be demonstrated that no adverse effect on groundwater quality will result. Waste brine shall be contained and disposed of in accordance with federal, state, county and local regulations and requirements. Should any discharge occur that could impair the water quality of the receiving body, then a discharge permit will be required from the Regional Water Quality Control Board. - Groundwater Monitoring. Applicants shall install upgradient and downgradient groundwater monitoring wells. Water quality tests shall be taken on a periodic basis with data submitted to County, and RWQCB, and Carpinteria Valley Water District, and kept by applicant as public record. Detection of contamination definitively tied to the permitted greenhouse would cause a subsequent review of the facility and operational methods. Groundwater testing and monitoring should be coordinated with the Carpinteria Valley Water District's Groundwater Basin Data Collection Program, a component of its AB 3030 Groundwater Management Plan. At a minimum, periodic testing should occur on an annual basis, or as frequently as needed as determined by the District. Applicant shall reimburse the Carpinteria Valley Water District (CVWD) for costs related to additional groundwater testing and reportin as deemed necessary by CVWD to monitor wells deemed necessary by CVWD. All data reports prepared by CVWD shall be submitted as public record to the CVWD Board of Directors and the County Planning & Development Department. Nitrate loading found to be in excess of District standards, as a result of the groundwater teseting by CVWD, shall cause a subsequent review of the greenhouse facility and operations by CVWD in consultation with Planning & Development. All subsequent review costs shall be paid for by the applicant. - A Watershed Management Program shall be established to ensure improvement in surface water quality and to provide for the long-term protection of the ecological functions and values of the Carpinteria Salt Marsh and its coastal stream tributaries from detrimental impacts originating in the watershed. The Watershed Management Program shall include a water quality monitoring program to identify the type, source and concentration of possible pollutants. Planning and Development shall seek available funding for monitoring and coordinate planning and implementation with the Agricultural Commissioner, RWQCB, UC Santa Barbara Natural Reserve System, City of Carpinteria, County of Santa Barbara Public Works Department, members of the public and other appropriate parties (including agricultural representatives) and the Carpinteria Salt Marsh Management Advisory Committee. - Planning and Development shall coordinate with the Environmental Protection Agency and Regional Water Quality

Table ES-1. Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

CLASS II – SIGNIFICANT BUT MITIGABLE IMPACTS	
Impact	Mitigation Measures
	<p><u>Control Board to establish Total Maximum Daily Loads (TMDL) for Carpinteria Salt Marsh and Carpinteria Creek, which have been identified as “impaired waters” by the USEPA (May 1999).</u></p> <p><u>A storage area for pesticides, herbicides and fertilizers shall be designed with the following mandatory components:</u></p> <ul style="list-style-type: none"> <u>a. A low berm shall be designated around the interior floor to prevent migration of materials in the event of a spill.</u> <u>b. The floor shall be a concrete slab.</u> <u>The berm shall be designed to provide 100% containment of any stored liquids.</u> <p>– <u>The Carpinteria-Summerland Fire Protection District shall review and approve storage areas for pesticides, herbicides and fertilizers. Storage areas for pesticides, herbicides and fertilizers shall be designed with the following mandatory components, and/or other requirements as deemed necessary by the District:</u></p> <ul style="list-style-type: none"> <u>a. A low berm shall be designated around the interior floor to prevent migration of materials in the event of a spill. Any spilled material shall be disposed of in accordance with Carpinteria-Summerland Fire Protection District requirements.</u> <u>b. The floor shall be a concrete slab.</u> <u>c. The berm shall be designed to provide 100% containment of any stored liquids.</u> <p>– <u>In the event that storage, handling or use of hazardous materials within the provisions of AB 2185/2187 occurs on site, the applicant shall implement a Hazardous Materials Business Plan (HMBP).</u></p>
<p>Impact W-3 Construction and reconstruction of greenhouses has the potential to degrade the surface water quality within the Study Area and the Carpinteria Salt Marsh with elevated levels of silt/sediment.</p>	<p>Construction Grading and Soil Erosion Management. Excavation and grading shall be limited to the dry season of the year (i.e. April 15th to November 1st) unless a Public Works approved erosion control plan is in place and all measures therein are in effect. In accordance with the National Pollution Discharge Elimination System (NPDES) permit, a Storm Water Pollution Prevention Plan (SWPPP) shall be developed and available onsite.</p> <p><u>A Watershed Management Program shall be established to ensure improvement in surface water quality and to provide for the long-term protection of the ecological functions and values of the Carpinteria Salt Marsh and its coastal stream tributaries from detrimental impacts originating in the watershed. The Watershed Management Program shall include a water quality monitoring program to identify the type, source and concentration of possible pollutants. Planning and Development shall seek available funding for monitoring and coordinate planning and implementation with the Agricultural Commissioner, RWQCB, UC Santa Barbara Natural Reserve System, City of Carpinteria, County of Santa Barbara Public Works Department, members of the public and other appropriate parties (including agricultural representatives) and the Carpinteria Salt Marsh Management Advisory Committee.</u></p>

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Impact	Mitigation Measures
	<p style="color: magenta;">Planning and Development shall coordinate with the Environmental Protection Agency and Regional Water Quality Control Board to establish Total Maximum Daily Loads (TMDL) for Carpinteria Salt Marsh and Carpinteria Creek, which have been identified as “impaired waters” by the USEPA (May 1999).</p>
FLOODING & DRAINAGE	
<p>Impact F&D-1 Buildout of the Project Description has the potential to cause off-site flooding and drainage impacts.</p>	<ul style="list-style-type: none"> – Unless otherwise exempted by the County Flood Control District, all new greenhouse development shall be required to fully mitigate for increased storm water runoff from development of the project site. Where required, retention basins and other storm water drainage facilities shall be designed in conformance with the Flood Control District standards. – New greenhouse development shall submit all final building and drainage plans to the Santa Barbara County Flood Control District for review and approval. – New greenhouse development shall be designed such that post-development runoff shall not exceed 75% of the calculated predevelopment runoff <u>for 5-100 year events</u>. <p style="color: magenta;">Prior to construction of the Craven’s Lane culvert and the Franciscan Sedimentation Basin, the design calculations for these improvements shall accommodate anticipated greenhouse development within the watershed.</p> <ul style="list-style-type: none"> – Temporary Hoop structures constructed within the AG-I-OF zoning district greater 5,000 sq. ft in area shall be subject to Flood Control District review to mitigate potential drainage and erosion impacts.
<p>Impact F&D-2 Greenhouse buildout has the potential to cause flooding and erosion impacts on-site and to neighboring properties.</p>	<p>Implementation of Measures F&D-<u>1</u>, <u>2</u>, <u>3</u> and <u>5-4</u> would mitigate impacts from flooding and erosion on and off-site.</p>
<p>Impact F&D-3 Construction of greenhouse structures within the 100-year flood plain zone could be susceptible to damage from flooding.</p>	<p>Implementation of Measures F&D-2, 3, and <u>5-4</u> would reduce the potential for impacts resulting from 100-year floods.</p>
LAND USE	
<p>Impact LU/AG-2 Implementation of the proposed AG-I-CARP zone would have the potential to result in the permanent placement of structures and pavement upon open field prime agricultural soils.</p>	<p>To the maximum extent feasible, hardscaped areas (i.e., parking lots, loading bays, interior walkways in greenhouses, and accessory building footprints) shall be minimized in order to preserve the maximum amount of prime agricultural soils. Minimizing the covering of soils shall be accomplished through efficient site and building design and the use of impervious surfaces wherever feasible.</p> <p>Implementation of Measures LU/AG-1 and <u>VIS-10</u> would also mitigate impacts in this area.</p>
<p>Impact LU/AG-3 Greenhouse development in the proposed AG-I-CARP zone would have the potential to result in</p>	<p>Implementation of Measures LU/AG-1, 2, 3, and 4 would reduce impacts related to disruption of existing agricultural operations.</p>

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Impact	Mitigation Measures
<p>physical changes to the environment that could interfere with or disrupt existing agricultural operations that are located in the project study area.</p>	
AIR QUALITY	
<p>Impact AQ-1 Greenhouse construction would result in temporary emissions of air pollutants, including PM₁₀.</p>	<p>The following measures are required for all projects involving earthmoving activities regardless of the project size or duration. Proper implementation of these measures would adequately mitigate fugitive dust emissions.</p> <ul style="list-style-type: none"> - During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever feasible. - Minimize amount of disturbed area and reduce on-site vehicle speeds to 15 mph or less. - Where appropriate, gravel pads must be installed at all access points to prevent tracking of mud onto public road. - If importation, exportation, and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin. - After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or re-vegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur. - <u>The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust off-site. Their duties shall include holiday and weekend periods when work may not be in progress. The name and phone number of such persons shall be provided to the APCD prior to the issuance of any Coastal Development Permit (CDP) for site grading.</u> - <u>All dust control requirements shall be shown on the applicable grading and/or building plans.</u> <p><u>Prior to approval of building permits, the applicant shall agree to comply with APCD dust control mitigation measures. All dust control requirements shall be shown on the applicable grading and/or building plans.</u></p>

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Impact	Mitigation Measures
NOISE	
<p>Impact N-1 Greenhouse construction would create temporary short-term noise levels that could be audible at nearby residences.</p>	<ul style="list-style-type: none"> – Acoustical Shelters. Stationary construction equipment that could generate noise exceeding 65 dB(A) at project site boundaries shall be shielded to County P&D’s satisfaction, and shall be located a minimum of two hundred (200) feet from sensitive receptors. – Construction Timing. Construction activities shall be limited to the daytime hours between 7:00 a.m. to 4:00 p.m. Monday through Friday. Construction maintenance shall be limited to the same hours. Non-noise generating activities (e.g., interior painting) are not subject to these restrictions.
<p>Impact N-2 Operation of fans and industrial heaters, as well as idling refrigerator trucks, could generate nuisance noise at nearby receptor locations.</p>	<ul style="list-style-type: none"> – Sound Level Management. Industrial fans and heaters for all greenhouse development shall be designed such that external sound levels do not exceed 65 dB(A) at the property line. Such equipment shall not be located on greenhouse walls that face adjacent existing residences. To ensure that this maximum sound level is not exceeded, acoustical analyses shall be conducted prior to zoning clearance of individual greenhouses and follow-up noise monitoring shall be conducted at least twice during the first year of greenhouse operation. If noise levels from greenhouse equipment is found to exceed 65 dB(A) at the property line, adjustments shall be made to ensure compliance with this requirement. – Sound Amplification Systems. Noise associated with paging and/or broadcasting of music over speakers within greenhouse structures shall be limited to levels that are not audible within 30 feet of the exterior of the structure. – Distribution Facility Management. To the maximum extent feasible, loading docks, packing sheds, and delivery bays shall be centrally located within individual greenhouse operations. A minimum 100 foot setback shall be maintained between loading/unloading areas, driveways, and parking areas and adjacent residential properties unless it can be determined that shielding or other measures can provide sufficient attenuation to reduce noise at the property line to less than 65 dB(A).
BIOLOGICAL RESOURCES	
<p>Impact B-1 Greenhouse development has the potential to impact aquatic biological resources of the Carpinteria Marsh through increased inputs of silt and sediment.</p>	<p>Implementation of Measures identified for Water Quality, Flood Control and Drainage and Visual Resources would reduce impacts to biological resources.</p>
<p>Impact B-2 Greenhouse development may impact aquatic biological resources of the Carpinteria Marsh due to increased inputs of nutrients or pesticides.</p>	<p>Implementation of Measures identified for Water Quality, Flood Control & Drainage and Visual Resources would reduce impacts to biological resources.</p>
<p>Impact B-3 Accessory use areas associated with greenhouse development may cumulatively impact</p>	<p>Implementation of Measures identified for Water Quality, Flood Control & Drainage and Visual Resources would reduce impacts to biological resources.</p>

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Impact	Mitigation Measures
<p>aquatic biological resources of the Carpinteria Marsh from inputs of pollutants carried in storm water runoff.</p>	
<p>Impact B-4 The change in water runoff patterns due to greenhouse development may impact aquatic biological resources by altering the seasonal flow pattern of the creeks.</p>	<p>Implementation of Measures identified for Water Quality, Flood Control & Drainage and Visual Resources would reduce impacts to biological resources.</p>
<p>Impact B-5 Conversion of open field areas to greenhouses has the potential to reduce available habitat for foraging and residence.</p>	<p>Implementation of Measures identified for Water Quality, Flood Control & Drainage and Visual Resources would reduce impacts to biological resources.</p>
<p>Impact B-6 Greenhouse development may cause an indirect and cumulative impact to regional fish and wildlife resources because of the interruption of wildlife corridors or habitat linkages.</p>	<p>Implementation of Measures identified for Water Quality, Flood Control & Drainage and Visual Resources would reduce impacts to biological resources.</p>

Executive Summary

Table ES-1. Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

CLASS III – LESS THAN SIGNIFICANT IMPACTS	
Impact	Mitigation Measures
Land Use	
Impact LU/AG-3 Greenhouse development in the proposed AG-I-CARP zone would have the potential to result in physical changes to the environment that could interfere with or disrupt existing agricultural operations that are located in the project study area.	None required.
TRAFFIC	
Impact T-1 Buildout of greenhouse development under the proposed project will add 822 ADT to the project area roadways.	None required.
Impact T-4 The project would generate large trucks on area roadways, which may necessitate additional roadway structural improvements.	Roadway Maintenance. The Public Works Department should make maintenance a priority on Santa Monica Road and Cravens Lane.
Impact T-5 Congestion Management Program (CMP) Impacts.	None required.
AIR QUALITY	
Impact AQ-2 Greenhouse buildout would incrementally reduce particulate emissions, but would increase ozone precursor emissions.	<p>Construction equipment used on the site should meet the following conditions to reduce NO_x emissions:</p> <ul style="list-style-type: none"> – The engine size should be the minimum practical size; – The number of pieces of equipment operating simultaneously should be minimized through efficient management practices; – Construction equipment should be maintained in tune per manufacturer's specifications; – Equipment should be equipped with 2 to 4-degree engine timing retard or pre-combustion chamber engines; – Catalytic converters should be installed, if feasible; and – Diesel-powered equipment such as booster pumps or generators should be replaced by electric equipment, if feasible. <p>Incorporate energy-saving design solutions to reduce energy consumption by at least 20 percent below current Federal guidelines as specified in Title 24 of the Code of Federal Regulations. Recommended design solutions include, but are not limited to, the following:</p> <ul style="list-style-type: none"> – Use of light colored water-based paint and roofing materials;

Table ES-1. Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

CLASS III – LESS THAN SIGNIFICANT IMPACTS	
Impact	Mitigation Measures
	<ul style="list-style-type: none"> – Installation of solar panels for water heating systems and other facilities and/or the use of water heaters that heat water only on demand; – Use of passive solar cooling/heating; – Use of natural lighting; – Use of concrete or other non-pollutant materials in parking lots (if necessary); – Installation of energy efficient lighting; use of landscaping to shade buildings and parking lots. <p><u>All boilers, steam generators, and process heaters proposed at new or expanded greenhouse operations shall utilize low-NOx burners.</u></p>
NOISE	
Impact N-3 Greenhouse buildout would increase traffic-related noise on study area roadway ^s .	None required.

Table ES-2. Summary of Cumulative Environmental Impacts

CLASS I – SIGNIFICANT AND UNAVOIDABLE IMPACTS
<p>VISUAL RESOURCES</p> <p>Significant acreages of contiguous open field agriculture still exist in the eastern valley. However, both urban and greenhouse development during the last forty years has contributed to the decline of significant open space lands, particularly in the central portion of the Study Area. Future buildout of the proposed project, in conjunction with cumulative non-agricultural development throughout the valley, will contribute to the cumulative loss of open space, impacts to public view corridors, and changes in the rural character of the area.</p>
<p>WATER QUALITY & GROUNDWATER</p> <p>The proposed project addresses the cumulative effect of greenhouse expansion within the Study Area as a result of the proposed zoning ordinance changes. Additional cumulative growth is expected to occur within the City of Carpinteria as undeveloped land parcels are converted to urban uses and in the Toro Canyon Planning Area, where additional residential development may be anticipated. This cumulative development within the Carpinteria Valley may cause an increase in the amount of pollutants, such as nutrients, pesticides, and urban contaminants (oil and grease, organic material), that are discharged to the local creeks, other receiving water bodies (i.e. Carpinteria Salt Marsh), groundwater and the adjacent ocean intertidal zone. In addition, future cumulative construction activity also may increase the amount of sediment eroded, transported in the creeks, and deposited either in the Carpinteria Salt Marsh or along the ocean intertidal zone.</p> <p>The inability to regulate non-point source pollution from cumulative projects (urban and non-greenhouse projects) within the City of Carpinteria and throughout the study area, combined with additional point and non-point source pollution from buildout of the proposed project, would result in a significant and unavoidable water quality impact to Carpinteria Marsh.</p>
<p>LAND USE & AGRICULTURE</p> <p>Potential land use conflicts that may result from greenhouse-related impacts such as traffic, noise, agricultural practices, loss of privacy, and changes in visual character would affect the study area on a cumulative, valley-wide basis. Combined with other proposed development and land use changes, which could occur in the Carpinteria Valley, these land use and community character impacts are considered significant and unavoidable.</p>
<p>BIOLOGICAL RESOURCES</p> <p>Cumulative development of residential, commercial, and industrial projects in the County of Santa Barbara and the Carpinteria Valley are anticipated to increase the inputs of nutrients, pesticides, and other pollutants into the receiving waters in the vicinity. Although the identified mitigation measures would help to improve the water quality related to the construction of new greenhouses and related development, they would not ensure that the cumulative effects on biological habitats from development throughout the Carpinteria Valley would not result in significant water quality related impacts to the Carpinteria Marsh ecosystem.</p>
CLASS II – SIGNIFICANT BUT MITIGABLE IMPACTS
<p>FLOODING & DRAINAGE</p> <p>Cumulative development of projects in the Carpinteria Valley is anticipated to incrementally increase the amount of impervious surface area available for stormwater runoff. The corresponding hydrologic response will likely consist of increased overland runoff to the storm drains and creeks in the Study Area. The increase in surface flows have the potential to over burden the existing flood control conveyance facilities, thus increasing risk of flooding, safety, and consequent damage to welfare and property.</p> <p>The Santa Barbara County Flood Control and Water Conservation District is managing a five-year Capital Improvement Projects (CIP) plan, which functions to support community resources and public facilities. With the combination of mitigation measures included in this report and the planned CIP projects, the project’s contribution to cumulative flood hazards would be less than significant.</p>

Table ES-2. Summary of Cumulative Environmental Impacts

LAND USE & AGRICULTURE
Potential project-specific impacts related to loss of prime agricultural soils can be reduced to a less than significant level with the implementation of mitigation measures that would limit hardscaping and coverage by greenhouse-related accessory uses at individual project sites. In addition, no other changes in agricultural land use patterns are expected to occur in the Carpinteria Valley as agricultural land is considered a priority use within the Coastal Zone. A number of LCP policies exist which protect agricultural resources and prohibit the conversion of coastal agricultural land to non-agricultural uses. Therefore, cumulative impacts to agricultural resources are considered significant but mitigable.
CLASS III – LESS THAN SIGNIFICANT IMPACTS
AIR QUALITY
Since the project and nearly all of the cumulative developments are individually insignificant and consistent with adopted land use plans and zoning, cumulative emissions are considered to be accounted for in the modeling and forecasting which factored in the Clean Air Plan. Therefore, cumulative air quality impacts would be considered adverse but not significant.
NOISE
Greenhouse development, in combination with other planned and pending development in the region, would cumulatively increase ambient noise levels in the Carpinteria Valley dB(A) Cumulative traffic growth without project added traffic could cause noise levels on Casitas Pass Road south of Foothill and Via Real west of Cravens to exceed the 65 dB(A) CNEL threshold. Since the project’s added contribution of 0.1 dB(A) and 0.3 dB(A) is not considered a perceptible noise level increase (min. 3 dB(A) increase), the project’s <i>de minimus</i> contribution to cumulative noise levels is considered adverse, but less than significant.
BIOLOGICAL RESOURCES
The portions of the Study Area that could be further developed with greenhouses under the proposed zoning changes are characterized by urbanization or agriculture. Conversion of the open fields to greenhouse use would not increase the fragmentation of significant viable biological habitat. The conversion would likewise not destroy or reduce sensitive habitat or species. However, various practices associated with greenhouses (i.e. irrigation process water discharge) may have the potential to cause cumulative water quality impacts, thereby impacting plant and animal species in the Carpinteria Marsh and the adjacent ocean intertidal zone. With implementation of the mitigation measures included herein potential impacts would be mitigated to less than significant levels.