SANTA BARBARA COUNTY OPERATIONAL AREA

PROPOSAL TO THE GOVERNOR'S DROUGHT TASK FORCE



February 8, 2017

This document was prepared at the request of the Governor's Drought Task Force in response to the ongoing drought emergency in Santa Barbara County.

TABLE OF CONTENTS

PURPOSE
BACKGROUND
ADDITIONAL WATER SUPPLIES
PROTECTION OF EXISTING RESOURCES
CONCLUSION
SUMMARY LIST OF PRIORITY PROJECTS
REACQUISITION OF SUSPENDED TABLE "A" WATER
RECOMMISSIONING AND EXPANSION OF CHARLES E. MEYER DESALINATION PLANT
COMPREHENSIVE WATER REUSE - GOLETA
COMPREHENSIVE WATER REUSE - CARPINTERIA
TREATMENT FACILITIES FOR THE REMOVAL OF HEXAVALENT CHROMIUM FROM GROUNDWATER
LAKE CACHUMA TEMPORARY EMERGENCY PUMPING FACILITY SYSTEM22
INTERAGENCY INTERTIE PROJECT BETWEEN GOLETA AND SANTA BARBARA

PURPOSE

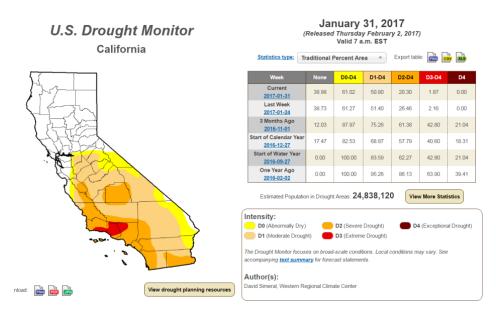
On January 17, 2014, Governor Brown proclaimed a drought emergency. He subsequently convened an interagency Drought Task Force to provide a coordinated assessment of the State's dry conditions and provide recommendations on current and future state actions. The response to this statewide disaster has required and will continue to depend on the combined efforts of all state agencies and the state's model mutual aid system. On December 12, 2016, the Governor's Drought Task Force convened a meeting in Santa Barbara County at the Emergency Operations Center, in order to bring together regional stakeholders with the objective of identifying and developing a list of regional priority projects that address both the immediate drought emergency and long-term water supply sustainability.

The Santa Barbara County Office of Emergency Management (OEM) as the Operational Area Coordinator was asked to facilitate the process of developing the priority project list with the intent of securing support from each of the region's water agencies. OEM convened an Action Working Group that met regularly to achieve the objectives of the Drought Task Force.

Following the development of the projects by the Action Working Group, 10 water agencies and the County of Santa Barbara Board of Supervisors have resolved to support the effort and provide the Governor's Drought Task Force with this project list.

BACKGROUND

Beginning in Water Year 2017, many parts of California have begun to emerge from a record-breaking drought, yet Santa Barbara County remains one of only two counties still experiencing extreme drought (see Image A).



Locally Lake Cachuma, which normally provides 80 percent of the drinking water to 250,000 people residing in the County's South Coast, as well as 80,000 residents downstream of the dam who rely on water rights held in the lake for drinking and agriculture needs, is at less than 15 percent of capacity and groundwater basins throughout the County

are showing signs of stress. The severe drought conditions that persist in Santa Barbara County continue to threaten the region's ability to maintain public health and safety for residents as we enter a sixth year of extreme drought. Communities throughout the County have become reliant on the State Water Project (SWP), as well as local groundwater supplies.

Although water agencies across Santa Barbara County have done much to diversify and secure their water supply sources over the past 30 years, this drought has made clear the need to further develop drought

resilient local water sources. Further, while simultaneously enhancing and securing existing supply sources and infrastructure; many communities in the County have implemented strict conservation goals and measures to withstand the drought. Communities continue to conserve, with some achieving conservation levels as high as 45 percent, and others also achieving the State's per capita goals of 55 gallons per person per day (GPDC); conservation is only one part of a holistic approach to withstanding this drought and future droughts.

It has also become increasingly apparent that the strain on the rate payers has been significant during this drought due to water agencies' decreased revenues combined with the need for emergency drought-related projects and water purchases. Due to all of the aforementioned factors, the region's water agencies have come together to develop a diverse set of projects that provide new water supplies for agencies across the County, increase water supply reliability, and take prudent steps to secure infrastructure critical to our ability to continue to safely deliver potable water during the current emergency.

Attached is the list of projects that has been developed and supported by local water agencies. These projects are grouped into two categories: Additional Water Supplies and Protection of Existing Resources.

ADDITIONAL WATER SUPPLIES

Santa Barbara County water agencies have identified the following three regional projects that will help to secure additional water for the region. These projects will provide drought relief and future drought mitigation.

- 1. Reacquisition of suspended Santa Barbara County Table A Water
- 2. Recommissioning of the Charles E. Meyer Desalination Plant in Santa Barbara
- 3. A comprehensive reuse program for Goleta and Carpinteria Valley Water Districts

The acquisition of suspended Table A Water will provide 12,214 AF of water to Santa Barbara County water agencies. The recommissioning and expansion of the desalination plant has the potential to provide up to an additional 10,000 AF of water annually. The comprehensive water reuse program, which includes projects designed for the service areas for Goleta and Carpinteria Water Districts, have the combined potential to add up to 6,100 AF of additional water annually.

It is important to note that desalination and water reuse projects are less impacted by drought and provide local sustainable supplies. Reacquisition of Table A Water, initially allocated to Santa Barbara County, will provide increased reliability as a drought buffer to Santa Barbara County when SWP allocations are less than 100%.

PROTECTION OF EXISTING RESOURCES

Santa Barbara County water agencies have identified the following regional projects that will protect the existing water supply in the region. All of these projects aim to ensure that existing supplies are clean, safe, and reliable for delivery to residents.

- 1. Removal of Hexavalent Chromium from groundwater to regain local supply reliability
- 2. Maintain the temporary emergency pumping system at Lake Cachuma
- 3. Construct an interagency intertie to facilitate emergency health and safety-related water transfers throughout the South Coast

While these projects do not provide additional water supplies, they either ensure that the delivery of current supplies will continue uninterrupted, or provide treatment to satisfy health and safety concerns for the delivery of potable water. Failure to proceed with these projects will either require additional new

water sources from elsewhere, place additional strain on already scarce shared resources, or result in an inability to supply water to residents and critical facilities.

CONCLUSION

Santa Barbara County has a long history of facing cyclical droughts of varying severity and will continue to confront worsening drought emergencies exacerbated by climate change. The intent of the Action Working Group and the following proposed projects is to provide water resiliency, climate change adaptation, and a proactive, long-term approach to future drought mitigation. A water outage/shortage is a real concern that could take place in the near-term. A failure of the Temporary Emergency Pumping System, a State Water Project mechanical failure or an operational delay in the startup or a failure at the Desal facility could all create a water crisis. Therefore, in addition to developing this list of priority projects, the Action Working Group has collaborated on a Water Outage/Shortage Contingency Plan and a tabletop exercise simulating a water outage/shortage scenario (scheduled to take place by March 2017). These tabletop exercises will provide input for further contingency planning focused on maintaining water service across communities impacted by the drought over the next 6-24 months.

SUMMARY LIST OF PRIORITY PROJECTS

Project	Туре	Acre Feet Increase	Estimated Cost	Completion Time	Regional Benefit	Regional Support
Reacquisition of Suspended Table "A" Water	Additional Water Supply	Up to 12,214 AF	\$36 million	12-18 months	All	All
Recommissioning and Expansion of Regional Desalination Facility	Additional Water Supply	Up to 10,000 AF/Y	\$110 million approx. (\$50 million expansion)	12-18 months	All	Most
Water Reuse - Goleta	Additional Water Supply	2,000-5,000 AF/Y	\$1mil. pilot. \$100-150 mil. final	5-10 years	All	All
Water Reuse - Carpinteria	Additional Water Supply	1,100 AF/Y	\$20 million	3 years	All	All
Treatment Facilities for the Removal of Hexavalent Chromium from Groundwater	Protection of Existing Resources	Restores 2,400 AF/Y	\$14 million	3 years	Most	All
Temporary Emergency Pumping System at Lake Cachuma	Protection of Existing Resources	N/A	\$2 million+ (costs vary, option to purchase or lease)	Immediate	South Coast	All
Interagency Intertie Project between Goleta and Santa Barbara	Protection of Existing Resources	N/A	\$5 million	12 months	South Coast	South Coast

Reacquisition of Suspended Table "A" Water

PROJECT DESCRIPTION:

To address water supply reliability in Santa Barbara County, the Central Coast Water Authority (CCWA) is proposing to acquire 12,214 acre-feet (AF) of State Water Project (SWP) Table "A" water from the State of California Department of Water Resources (DWR). This project will provide for an overall increase in water supply and will serve as a critical drought buffer.

REGIONAL BENEFIT:

CCWA member water purveyors that have agreed to participate in the purchase of this water, at this date, represent the South Coast, the Santa Ynez Valley and the Santa Maria Valley. In addition, terms of an agreement approved between CCWA and the Santa Barbara County Flood Control and Water Conservation District (County) specify that the use of this water be offered to other CCWA participants throughout the County when available.

HOW IT ADDRESSES HEALTH AND SAFETY:

This water provides additional high quality water for replenishment of the Santa Maria Groundwater basin; serves to supply additional water to areas in the Santa Ynez Valley in dire need due to Hexavalent Chromium in the groundwater supply; supplements water supplies to the South Coast; and increases deliveries of water to Lake Cachuma for subsequent delivery to the South Coast.

FUNDING CHALLENGES & POTENTIAL SOLUTIONS:

To reacquire this suspended Table "A" water all-back payments will be due both to DWR (approximately \$30 million) and the County (approximately \$6 million). It is estimated that the purveyors that are acquiring this additional Table "A" water will need to raise rates up to an additional ten percent to sustain the financing. Forgiveness of a portion of the back payments or repayment of the back payments from another source, such as grant funding, would reduce the burden on local rate payers.

DISCUSSION:

As a result of past contractual arrangements and litigation, the County is in the unique position of having the first right of refusal to acquire the last remaining quantity of SWP Table "A" Water available in California. In 1961, the County contracted with DWR for approximately 57,000 AF of SWP water. When the management of the water was transferred from the County to the County water purveyors in the early 1980's, the purveyors desired to acquire only approximately 45,000 AF. Payment for the difference in water (12,214 AF) that the County originally contracted for and the amount the purveyors desired was suspended. To reacquire this suspended Table "A" water all-back payments will be due both to DWR (approximately \$30 million) and the County (approximately \$6 million).

Due to environmental and operational constraints in the Sacramento Delta, the percentage of water available for allocation to the SWP contractors has steadily declined over the last ten years. This has resulted in the actual amount of water delivered to SWP contractors being significantly reduced. Acquiring this 12,214 AF will substantially restore the dependability of the SWP water supply to near levels originally anticipated when the purveyors anticipated their needs in 1981. This project will not increase the size of the conveyances or the flow capacity of the system to deliver water in excess of the original design of 45,000 AF per year. The reacquisition of the Suspended Table "A" water will allow the system to more consistently carry up to the full-capacity of the existing system.

CCWA represents the County water purveyors which deliver SWP water. The County is the contracting party with DWR. CCWA and the County have negotiated the deal points of a term sheet to proceed in discussions with DWR to acquire this water. These discussions will begin in late January of 2017. Transfer of the water will require an amendment of the contract between DWR and the County. DWR has

determined an EIR will be required for this project. It is estimated that the time required to satisfy this requirement will be eighteen months.

Funding the back payments (approximately \$36 million) will require financing by the purveyors that opt to receive this water. It is estimated that the purveyors that are acquiring this additional table "A" water will need to raise their rates up to an additional ten percent to sustain the financing. Acquisition of this water will require an amendment to the State Water Contract between the County and DWR. This amendment will require the approval of the Board of Directors of the County Flood Control and Water Conservation District (Board). While some members of the community are opposed to the SWP and actively participated in the recent discussions regarding this acquisition at the Board meetings, the Board ultimately directed staff to proceed with negotiating the terms of acquisition with both DWR and CCWA.

CCWA member water purveyors that have agreed to participate in the purchase of this water represent the south coast, the Santa Ynez Valley and the Santa Maria Valley. Terms negotiated between the County and CCWA specify a commitment and pricing structure to facilitate water transfers between purveyors in the County. Interagency transfers within the County are not subject to provisions requiring the payback of water at a future date. Interagency transfers of water at a future date. For example, some South Coast purveyors have a payback requirement (water debt) that meets or exceeds the purveyor's yearly allocation of SWP water. Water acquired from other purveyors within the County could be used to meet that water debt without an obligation from the borrowing purveyor to return the water in the future. As such, additional Table "A" water available to water purveyors within the County is a valuable asset that can provide the maximum flexibility for meeting water supply needs for all the CCWA member water purveyors.

IMPACTS:

<u>Fiscal</u> – Agencies that acquire this water will need to incur a rate increase of between five and ten percent to pay the back debt on this water (approximately \$36 million total).

<u>Operational</u> – No operational impacts anticipated.

<u>Legal</u> – Challenges to both the contract amendment between the County and DWR and the environmental document may occur.

<u>Labor</u> – No impact to Labor is anticipated. <u>Sociopolitical</u> – Historically, some opposition exists to the SWP.

<u>Policy</u> – Not aware of any policy conflicts that this acquisition incurs.

<u>Health and Safety</u> – High quality water helps sustain basin recharge, offsets issues associated with high Hexavalent Chromium in the Santa Ynez Valley, and provides additional water to Lake Cachuma and subsequently to the South Coast. This project will provide for an overall increase in water supply (drought buffer).

Environmental – An environmental document is required.

Permitting Status – No construction is required.

ACTIONS NEEDED:

The County and DWR will need to engage in the most efficient and effective process to transfer this water to the County, due to the critical nature of securing this water supply as a drought buffer. The Board will

need to approve a contract amendment with DWR to transfer this water to the County and funding options, including low cost financing and grants along with additional sources, need to be considered to reduce the impact on local rate payers.

Recommissioning and Expansion of Charles E. Meyer Desalination Plant

PROJECT DESCRIPTION:

The regional Charles E. Meyer Desalination Plant (Desal Plant) was originally put into service in 1991 to provide a much needed source of drinking water for Santa Barbara County. The Desal Plant was constructed and permitted to a capacity of 10,000 AFY to serve as a regional facility for Santa Barbara's South Coast water agencies. The Desal Plant was deactivated in 1992, after heavy rainfalls filled local surface water reservoirs. The regional partners withdrew their interests from the Desal Plant in 1995, and the Desal Plant was put into long term storage in 1997.

The current Desal Plant project consists of reactivating the Desal Plant to a capacity of 3,125 AFY, with water deliveries to the City of Santa Barbara being anticipated by April 2017. Design is underway for a transmission pipeline that will primarily serve the City of Santa Barbara, but also provides future opportunities to convey water to other South Coast water agencies. This transmission pipeline would make the Desal Plant a regional facility, allowing it to diversify the region's water supply mix and provide reliable drinking water supplies to Santa Barbara, Montecito, and Carpinteria. The current Desal Plant reactivation project is designed with the ability for the Desal Plant's capacity to be incrementally increased, depending on regional water demands. The Desal Plant size and approximate cost options are:

- \$70M for the current project, with water production of 3125 AFY.
- \$10M for construction of a transmission pipeline sized to convey 10,000 AFY (sized for future Desal Plant expansion).
- \$30M to increase the Desal Plant's capacity to 7,500 AFY.
- \$40M to increase the Desal Plant's capacity to 10,000 AFY.

REGIONAL BENEFIT:

The Desal Plant could potentially be expanded to serve as a regional water supply facility, indirectly benefiting the South Coast communities, serving Santa Barbara, Montecito, and Carpinteria. Regionalizing the Desal Plant could be accomplished through approval of water supply agreements and exchanges with South Coast water agencies, communities receiving State Water, and communities receiving water from the Santa Ynez River.

The Desal Plant is permitted, and construction is underway for a facility that will produce 3,125 AFY. The Desal Plant is designed for expansion to 7,500 and 10,000 AFY. Expansion would enable the Desal Plant to be converted into a regional water facility, where it would diversify the South Coast's water supplies and provide reliable drinking water supplies to Santa Barbara, Montecito, and Carpinteria.

In support of these regional opportunities and community benefits, the City of Santa Barbara is currently designing a transmission pipeline to connect the Desal Plant to the City's water distribution system and the South Coast Conduit, which is owned by the U.S. Bureau of Reclamation and conveys water to other South Coast water agencies. The transmission pipeline is being sized to convey up to 10,000 AFY of desalinated water. The transmission pipeline has the potential to be jointly used for a future direct potable reuse project, serving as infrastructure for both desalinated and potable reuse water supplies.

The Desal Plant supports key objectives from the Santa Barbara County 2013 Integrated Regional Water Management Plan by augmenting water supplies, protecting groundwater supplies, and improving emergency preparedness for the South Coast. The South Coast's surface water supplies are conveyed through tunnels that are miles long and subject to catastrophic failures following an earthquake. In contrast, the Desal Plant is being constructed to current seismic codes, and will have a more secure conveyance system than the South Coast's surface supplies, especially after a large earthquake. The Desal Plant has the unique opportunity to serve as a regional water supply facility, providing safe and reliable drinking water supplies to the nearly 250,000 people living on the South Coast.

HOW IT ADDRESSES HEALTH AND SAFETY:

While the near-term trigger for reactivating the Desal Plant is the current drought situation, there are also long-term risks to the reliability of the region's current water supplies to consider. These reliability concerns include a reduced yield from existing surface water supplies due to sedimentation in reservoirs, forthcoming environmental requirements for the Cachuma Project, and potential risks due to climate change. The region's water supplies are also at risk in the event that surface water supplies are interrupted due to conveyance failure through the tunnels. For example, a seismic event could interrupt flow to Tecolote Tunnel, which conveys State Water and Cachuma Project water to over 250,000 people, resulting in an outage of a lifeline water source and a catastrophic water supply emergency.

The Desal Plant could potentially supply critical drinking water to the South Coast region, should a catastrophic interruption in water supplies occur. To be prepared for an emergency situation and be able to provide regional drinking water supply, the City of Santa Barbara is pursuing the construction of a transmission line that would connect the Desal Plant with the City's water distribution system and the South Coast Conduit, which is a U.S. Bureau of Reclamation facility.

FUNDING, CHALLENGES & POTENTIAL SOLUTIONS:

The capital cost for the regional Desal facilities is as follows:

- \$70M for the current project, with water production of 3125 AFY.
- \$10M for construction of a transmission pipeline sized to convey 10,000 AFY (sized for future Desal Plant expansion).
- \$30M to increase the Desal Facility's capacity to 7,500 AFY.
- \$40M to increase the Desal Facility's capacity to 10,000 AFY.

The City of Santa Barbara is actively seeking opportunities for grant funding to offset the cost of the initial reactivation project (3125 AFY), the transmission pipeline to bring water to the South Coast Conduit, and future expansion of the desalination facility (up to 10,000 AFY). However, the largest opportunity for assistance, Proposition 1 (DWR Desalination Grant Program), has yet to be made available, and the grant guidelines have yet to be released. When Proposition 1 was passed in November 2014, the City of Santa Barbara was encouraged that almost \$100 Million was authorized for desalination projects. Now more than two years later, there appears to be no progress to disperse these funds, despite the urgency with which voters approved Proposition 1.

The City is urging the State to make the eligibility criteria for Proposition 1 funds based on project commencement dates that occurred after approval of Proposition 1 by voters, as opposed to projects that will begin after grant guidelines are released. Given the urgent need to address drought impacts and provide emergency water supply, the City could not wait for grant guidelines to be released before moving forward with the initial Desal Plant project. As a result, the City of Santa Barbara is seeking assistance for the financial burdens caused by the drought, and is asking the State to make eligibility for funding based on projects that commenced after Proposition 1 was approved by voters.

DISCUSSION:

The City of Santa Barbara, like many agencies in Santa Barbara County, is currently experiencing multiyear drought conditions. The City's adopted 2011 Water Shortage Contingency Plan outlines the stages of drought and actions to achieve planned demand reductions. The City first declared drought in February 2014, and is currently in a Stage 3 Drought condition which is the most critical stage. The current Stage 3 Drought water use regulations require a 40% reduction from normal demands.

The City's drought planning is based on its adopted 2011 Long Term Water Supply Plan (LTWSP), which uses the 1947-52 period as the design drought. While the current drought is drier and more severe than the Page 11 of 25

previous drought of record, the City has adaptively managed its supplies based on the policies in the LTWSP. During times of drought when surface water supplies are diminished, the City relies on extraordinary conservation, increased groundwater pumping, State Water, and desalination as drought supplies.

The original Charles E. Meyer Desalination Plant was completed in March 1991 and put into long-term standby mode in 1997 at the end of the last significant multi-year drought. The Desal Plant is included in the LTWSP as a recognized drought water supply to ensure the community continues to have sufficient uninterrupted drinking water supplies during critical drought periods.

In response to extreme and prolonged drought, Santa Barbara City Council awarded a Design Build Operate contract on July 21, 2015 to IDE Americas, Inc. to reactivate the Desal Plant to provide up to 3,125 AFY of drinking water. Onsite construction for the Desal Plant reactivation project started in September 2015, and desalinated water deliveries to the City's water distribution system are expected by April 2017.

The City's permits allow the Desal Plant to be operated as a regional facility, and produce up to a capacity of 10,000 AFY. In support of regional opportunities, the City of Santa Barbara is pursuing the construction of a transmission line that would connect the Desal Plant with the South Coast Conduit, which serves other neighboring water agencies. Reactivation of the Desal Plant will allow the facility to serve as a regional water supply. The City is also considering possible expansion of the Desal Plant, in order to serve regional water supply needs, especially in the event of a South Coast-wide disaster.

IMPACTS

<u>Fiscal</u> – The estimated capital cost for the regional Desal facilities is as follows:

- \$70M for initial Desal Plant reactivation project (3,125 AFY capacity)
- \$10M for the conveyance project (sized for future Desal Plant expansion)
- \$30M for Desal Plant expansion to 7,500 AFY. Costs to be refine in Spring 2017
- \$40M for Desal Plant expansion to 10,000 AFY. Costs to be refined as needed

The annual operating costs for a 3,125 AFY Desal Plant are \$4.1M in full production and \$1.5M in standby mode. The annual operating costs for an expanded facility will be determined in Spring 2017.

<u>Environmental and Permitting</u> Status – All required permits have been received for the Desal Plant project. The documentation of environmental assessments and determinations are found in the Final Environmental Impact Report and State Revolving Fund loan application (Project Number 4210010-005C).

Sociopolitical – All Santa Barbara water rate payers have been impacted by increased water rates resulting from the drought, and approximately 25 percent of the Santa Barbara community is of low and moderate income (American Community Survey).

Operational – N/A.

<u>Legal</u> – Water Supply or Exchange agreements would need to be negotiated with interested regional participants.

Labor – N/A.

<u>Policy</u> – Addressed above.

<u>Health and safety</u> – Addressed above.

ACTIONS NEEDED:

The City of Santa Barbara and its regional partners are seeking assistance for the financial burdens caused by the drought, and are requesting that the State make eligibility for funding based on projects that commenced after the Proposition 1 Desalination Grant Fund Program was approved by voters.

Comprehensive Water Reuse - Goleta

PROJECT DISCRIPTION:

This project would develop additional drought proof water supplies by treating recycled water to a potable standard. The proposed Direct Potable Reuse (DPR)/Indirect Potable Reuse (IPR) recycled water project would provide between 2,000-5,000 acre feet of new water supply that would further diversify the District's water supply portfolio, and support management of the groundwater basin. Phase 1 of the project, a Recycled Water Feasibility Study, is already underway. Under Phase 2, a proposed pilot project would test and demonstrate the use of new technologies to increase the amount of available potable drinking water. Results of the pilot project would inform the design of a final project under Phase 3.

REGIONAL BENEFIT:

Prolonged drought conditions and unseasonably warm, dry weather have resulted in increased customer demand while preventing the replenishment of shared water supplies in the region. As drought conditions persist, Lake Cachuma has been reduced to a conveyance facility, with a zero allocation for two years in a row. This has forced water suppliers to rely on alternative sources of supply and demand reduction programs to meet customer demand during drought. Water supply on the South Coast is further challenged by delivery capacity and reliability issues, and forthcoming environmental requirements for the Cachuma Project.

A project to expand the use of recycled water by the District would develop alternative sources of local supply that are reliable and unaffected by drought, and reduce the District's need to rely on Lake Cachuma and State Water to meet customer demand. Expanding and ensuring the continued delivery and use of recycled water benefits the entire Santa Barbara County region as it reduces reliance on imported water, and increases supply reliability. The IPD/DPR project envisioned by the District could ultimately result in the production and utilization of an additional 2,000 - 5,000 AF per year of drought-proof long-term water supplies.

The project involves a partnership with Goleta Sanitary District (GSD), and provides a multi-agency benefit by reducing ocean discharge. This project will also support key objectives from the Santa Barbara County 2013 Integrated Regional Water Management Plan; augmenting water supplies; protecting groundwater supplies; and improving emergency preparedness.

HOW IT ADDRESSES HEALTH AND SAFETY:

Recycled water plays a critical role in drought planning since it remains available even during periods of drought. Every drop of recycled water used conserves potable water supplies for drinking, health and safety.

Increasing treatment of recycled water to potable standards also increases the amount of reliable local supply available to the District during emergencies. Currently, the region's water supplies are at risk in the event that surface water supplies are interrupted due to conveyance failure through the tunnel system. For example, a seismic event could interrupt flow to the Tecolote Tunnel, which conveys State Water and Cachuma Project water to over 250,000 people on the South Coast, and could result in an interruption of service to customers. None of the agencies have storage capacity large enough to store more than a week's supply of water. The District's would depend on reservoir storage capacity, which is limited to only a few days of drinking water supply, and the groundwater basin. The proposed IPR/DPR project would increase the amount of water available should a catastrophic interruption in water supplies occur.

FUNDING, CHALLENGES & POTENTIAL SOLUTIONS:

As part of the District's efforts to develop additional water supplies, on November 10, 2015 the Board of Directors authorized the acquisition of State grant funding and directed staff to complete a Recycled

Water Feasibility Study (RWFS). The RWFS is underway and is anticipated to be completed in April. The study evaluates how the District could expand the use of recycled water within its service area.

- The District is seeking \$500,000 in grants for an estimated \$1 million pilot project at GSD, with a District match of up to \$500,000.
- The cost estimates for the final project range from \$100,000,000 up to \$150,000,000.

This project is eligible for Federal and State grants, including Proposition 1 funding, and Integrated Regional Water Management Plan.

DISCUSSION:

Since 1995, the District has served recycled water for irrigation and restroom facilities through a partnership with the GSD. The District serves approximately 1,000 acre feet per year (AFY) to 30 customers in the Goleta Valley, representing 7% of District supplies. Recycled water is not currently treated to potable standards and must be delivered through a completely separate system of purple pipe. Due to regulations limiting the use of recycled water as currently treated, and constraints in the existing recycled water treatment plant. Given the cost and difficulty of moving recycled water through a separate system, the industry has increasingly focused on how improvements to recycled water treatment technologies can bring recycled water to potable water standards.

The proposed recycled water project is a three-phase project that includes development of a RWFS (underway), a pilot project, and construction of a full-scale project. The proposed pilot project would test and demonstrate the use of new technologies to increase the amount of available potable drinking water, and inform the design of a final project.

IPR uses highly treated recycled water to replenish groundwater basins, while DPR treats the water to a drinkable standard and uses existing potable water infrastructure for distribution to customers. There is increasing interest in IPR and DPR across the State, though only IPR is currently on track to be permitted within the short term in CA. Treating recycled water to even higher standards so its use can be expanded and prioritized to the highest purpose is a common feature of the next generation of recycled water projects.

Orange County is currently producing approximately 100 MGD via IPR for agricultural and industrial customers and to buffer its aquifer against saltwater intrusion. The City of San Diego is currently designing a 30 MGD reuse project that will mix purified water with surface water supplies in reservoirs. DPR is not currently allowed by regulations, but it is the subject of ongoing research and consideration by regulators. In 2016, the State published its report on the feasibility of DPR, but final regulations are not anticipated before 2020.

IMPACTS:

<u>Fiscal</u> – Cost estimates are being produced as part of the RWFS, but a final project would likely require significant funding in the form of grants, matching funds, and loans.

<u>Operational</u> – Depending on the project selected, there may be issues with blending and corrosion that would need to be addressed.

<u>Legal</u> – Depending on the project selected, and the regulations and permitting requirements, there may be legal considerations.

Labor – A final project would require additional expertise to operate and maintain.

Sociopolitical – The State is currently developing regulations and permitting requirements.

<u>Policy</u> – A final project would need to be evaluated against the potential of other alternative water supply projects such as stormwater capture.

Environmental – Environmental review would depend on the proposed project.

<u>Interagency</u> – The project builds on an established interagency partnership between GWD and GSD. This project would also help GSD comply with State mandates to be zero discharge.

ACTIONS NEEDED:

The District and its regional partners are seeking assistance for the financial burdens caused by the extended drought on the region, and requests that the State give funding preference to Santa Barbara County projects that are addressing drought related water supply reliability issues. Funding is needed for the pilot study, and subsequent final project to provide additional drought proof water supplies and further diversify the region's supply portfolio.

Comprehensive Water Reuse - Carpinteria

PROJECT DESCRIPTION:

This project develops additional drought proof water supplies by treating secondary sewer effluent to a potable standard. This project provides a new source of water supply, and diversifies the water portfolio for the Carpinteria Valley Water District (CVWD). The Recycled Water Indirect Potable Reuse (IPR) project will treat approximately 1100 acre feet per year (AFY) at the Carpinteria Sanitary District (CSD) treatment plant using full advanced water treatment. The finished purified water will then be stored in the Carpinteria Groundwater Basin for potable use later. In conjunction with other reuse projects currently proposed along the South Coast of Santa Barbara County this project will add a drought proof sustainable water supply to the region.

REGIONAL BENEFIT:

Water supply for the South Coast of Santa Barbara County is under stress due to the historic drought, limitations on State Water Project related to delivery capacity and reliability, and forthcoming environmental requirements for the Cachuma Project. This water supply stress has become a driver for Carpinteria Valley Water District to begin developing an IPR Project to provide a new sustainable water supply to the region.

While the Carpinteria IPR project is not proposed to serve other agencies outside the Carpinteria Valley directly, it will improve regional water supply reliability and create opportunities for exchange, among agencies on the South Coast, communities receiving State Water, and communities receiving water from the Santa Ynez River.

The IPR Project will also support key objectives from the Santa Barbara County 2013 Integrated Regional Water Management Plan; augmenting water supplies; protecting groundwater supplies; and improving emergency preparedness; and protecting ocean water quality.

HOW IT ADDRESSES HEALTH AND SAFETY:

While the near term drivers for the project are the current drought and the likely reduction of existing water supplies in the near future, there are also long term risks to the reliability of the region's current water supply. Currently, the region's water supplies are at risk in the event that surface water supplies are interrupted due to conveyance failure through the existing conveyance system. This conveyance facility is a weak link in the water supply system and failure of the pipeline or tunnel could cause large scale water outages to Carpinteria Valley Water District customers and the South Coast. The IPR project provides a local supply that does not rely on the conveyance facilities. For example, in the event of a catastrophic interruption, the IPR project and local groundwater supplies could provide a reliable local source capable of meeting minimum health and safety needs.

Additionally, when regulations allow, the IPR project could be converted to a Direct Potable Reuse project that would provide even more water supply flexibility in such an event. This project also supports mutual aid to Montecito Water District because CVWD has the ability to deliver its local water supply to Montecito Water District both through existing interties and the South Coast Conduit.

FUNDING, CHALLENGES & POTENTIAL SOLUTIONS:

The capital cost for the Carpinteria Indirect Potable Reuse Project facilities is as follows:

- \$4.0 Million Planning, Design, CEQA and Permitting
- \$17.1 Million for Facilities Construction
- Total Project Cost \$21.1 Million

The CVWD who is the lead agency for the Carpinteria Valley IPR project is in the process of developing a grant application for funding through the Recycled Water Funding Program funded by Proposition 1. It is our understanding the grant funding under this program is under great demand and that we are unlikely

to acquire a grant from this funding source at this time. However, Carpinteria Valley Water continues to look for grant funding opportunities to help fund the project. CVWD is also looking to utilize State Revolving Fund low interest loans to fund the capital portion of the project. Since Carpinteria's water rates are some of the highest in the County, many residents of Carpentaria have expressed concern about the impact on water rates of the project. The challenge is to balance the cost of this new water supply with the reliability of the overall water supply. There are several opportunities that CVWD is looking into that may offset the expense of the IPR project while improving the water supply reliability.

DISCUSSION:

Santa Barbara County is currently suffering through the most intense drought on record for this area. The result of this drought is that Lake Cachuma, a major water supply for the Santa Barbara South Coast, has become depleted and project members have received no water allocation for two years. This is compounded by the fact that State Water project deliveries have been limited to an average of 41% of total allotment over the drought thus far. In Carpinteria the water district has heavily depended on the local groundwater basin to make up for the lack of other water supplies. Like Cachuma, the groundwater basin has also suffered depletion from increased extraction and minimal recharge over the past five years. The basin water level is nearing a fifty year low and showing signs of overdraft and the threat of seawater intrusion. Even with rain finally falling locally this year it is likely that the Cachuma Project safe yield will be reduced for the foreseeable future due to forthcoming environmental requirements for the Cachuma Project. This will apply pressure on an already depleted groundwater basin in Carpinteria. In 2014, at the height of the drought, CVWD decided to begin studying the potential for both a regional recycled water project and a local recycled water project. After determining the need for an additional reliable water supply, CVWD, Carpinteria Sanitary District and the City of Carpinteria commissioned a facility level study to determine what the best option for developing a project would be. With the assistance of The State Water Resources Control Board Recycled Water Planning Grant Program, the Carpinteria Recycled Water Facilities Plan (RWFP) was completed in May of 2015. The study concluded that an indirect potable reuse project was the most beneficial to the water users in Carpinteria Valley. CVWD is currently completing a funding analysis, public outreach and technical analysis for the project. The RWFP was developed to support decision making regarding building a Recycled Water Project in Carpinteria in order to mitigate water supply shortages. The Plan identified various uses for recycled water in Carpinteria Valley. Both non potable reuse (NPR) and indirect potable reuse were considered in the Plan. The RWFP found that the preferred project would be a treatment plant with Full Advanced Water Treatment (AWT) for use as an indirect potable water supply stored in the Carpinteria Groundwater Basin.

VWD and CSD have contemplated cooperatively developing a Recycled Water Project as described in "Alternative 3C" of the RWFP. The Recycled water treatment would occur at the CSD Treatment Plant using AWT, including microfiltration, reverse osmosis and advanced oxidation process. It is estimated that the proposed project would yield about 1100 acre feet per year of water for reuse. It is assumed that the required additional treatment equipment for AWT would be located on the existing CSD treatment plant property. The finished water would be pumped into a proposed transmission pipeline connected to two groundwater injection wells located about one and a quarter miles away. The injected water would remain in the groundwater basin between two and six months at a minimum. The Water District would recover the water after this period through its existing groundwater production facilities for use as potable water.

Required new facilities include an advanced water treatment plant, pumping station, one and a quarter miles of transmission main and two injection wells with flushing tanks. The Project analysis is currently in the final stages of a funding plan, outreach plan and technical analysis. In June of 2017 the Boards of Carpinteria Valley Water District and Carpinteria Sanitary District will decide if they would like to move forward with the project. If they conclude the project is needed, then it is projected that the entire project including construction and startup will be completed by January of 2020.

IMPACTS:

<u>Fiscal</u> – CVWD believes that the IPR project will have impacts on water rates for a period of 10 years; however, CVWD is evaluating ways to minimize any rate impacts including utilization of grant funding, public private partnerships, interagency partnerships and debt restructuring.

Operational – Operational impacts for both CVWD and CSD are minimal.

<u>Legal</u> – Potential legal complexity exist with respect to using the Carpinteria Groundwater Basin for storage of purified recycled water. The District is working to develop a steering group of local groundwater stakeholders to assist it with this issue.

<u>Labor</u> – The project will require 2 to 3 FTEs to operate and maintain the project. This is figured into the unit price of water.

<u>Sociopolitical</u> – There are no known negative sociopolitical impacts that would result from this project. This project will provide a more secure water supply for the industry and agriculture potentially resulting job stability and economic growth in the area.

<u>Policy</u> – The project is supported by policies from the State level to the local level. No known conflicts in policy with this project exist.

<u>Environmental</u> – Environmental impacts have not been analyzed yet, however CVWD believes that any environmental impacts will be mitigatable. CEQA analysis will begin in June of 2017.

<u>Interagency</u> – CVWD is working with the Carpinteria Sanitary District and the City of Carpinteria to develop the project to maximize the benefits to each agency. CVWD is interested in working with other local water agencies to expand the water supply benefits of the project.

ACTIONS NEEDED:

The Carpinteria Valley Water District and its regional partners are seeking assistance for the financial burdens caused by the extended drought on the region, and requests that the State give funding preference under any available funding programs to Santa Barbara County Reuse Projects that are addressing drought related water supply reliability issues.

Treatment Facilities for the Removal of Hexavalent Chromium from Groundwater

PROJECT DISCRIPTION:

The proposed Treatment Facilities Project would treat naturally occurring Hexavalent Chromium (Cr6) and will restore 2,400 AF/Year (average year production) local potable water supply in the Santa Ynez Upland Groundwater Basin through use of a new water treatment facility, blending facilities and well modification.

REGIONAL BENEFIT:

The Santa Ynez River Water Conservation District Improvement District No. 1 (District) supplies water to three mutual water companies, Cachuma Lake County Park and the City of Solvang in addition to its own customers. Additionally, restoration of local supplies will lessen demand on shared resources with other water agencies in the County by reducing dependency on State Water and Cachuma water.

HOW IT ADDRESSES HEALTH AND SAFETY:

The Division of Drinking Water (of the State Water Resources Control Board (SWRCB)) adopted a maximum contaminant level (MCL) for Cr6 in drinking water of 10 parts per billion, effective July 1, 2014. As a result, the District lost the use of half of its Upland well water availability that served as the backbone of the District's water supply system. Simultaneously, the ongoing drought that has plagued California for the last five years also took much or all of the District's water availability from its three remaining surface water sources, i.e., Lake Cachuma, Santa Ynez River alluvial wells, and the State Water Project. Over half of the Upland well supplies must be treated or blended to meet the new drinking water standards before these sources can again be utilized. Without full use, the District is in danger of not meeting peak day demands, water pressure or fire flow requirements under all conditions.

FUNDING, CHALLENGES & POTENTIAL SOLUTIONS:

All feasible methods of Hexavalent Chromium reduction are very expensive. Depending upon the Best Available Technology (BAT) chosen and the level of reliability desired, costs range from about \$14 million to over \$25 million. These considerable costs, made necessary due to drought and Hexavalent Chromium regulation, will be a huge burden to District customers.

The District continues to search for all Federal, State, and local grant and loan programs. A great amount of effort was expended pursuing Proposition 1 grants including making sure that naturally occurring Hexavalent Chromium was included in the original language as well as in the Water Code, attending and commenting on all workshops and draft guidance documents, setting up meetings with senior SWRCB staff and garnering lobbying assistance through the Association of California Water Agencies. All of this proved unfruitful, however, because the SWRCB stated that unless a contaminant could be removed from a groundwater basin (instead of treating it out of the pumped water) it could not be considered to be a groundwater project worthy of funding assistance. The SWRCB also stated that all districts looking for drinking water quality assistance must be a Disadvantaged Community to qualify for any grant assistance. Only loans from the State Revolving Fund would be considered otherwise.

The District continues to pursue IRWM assistance, loans through the USDA, loans through the State Revolving Fund as well as revenue bonds. Without some sort of grant assistance, however, the costs for a fully reliable system appear to be out of reach.

DISCUSSION:

The District and its consultant work group began studying and proposing solutions to the Cr6 problem in late 2013. Work included multiple rounds of water quality sampling and well profiling to characterize the average concentration of Cr6 from each of the District Upland wells; comparison of available treatment

technologies for removal of Cr6 and conceptual design of treatment facilities; comprehensive hydraulic analyses addressing potential water blending between multiple wells and distribution of water among and between the existing District water zones; conceptual engineering design of a dedicated distribution system for irrigation water, separate from the domestic water distribution system; and quantification of water supplies from all sources available to the District, with consideration for augmenting those supplies not containing Cr6.

Water quality sampling and well profiling efforts concluded that naturally occurring Cr6 concentrations vary between the District Upland wells. Four (4) of the ten (10) total District Upland wells demonstrated Cr6 concentrations consistently above the 10 ppb Cr6 limit. Several other wells demonstrated Cr6 concentrations hovering just below the 10 ppb Cr6 limit. Well profiling conducted for several of the Upland wells identified geologic zones with high Cr6 concentrations, which contributed to the overall Cr6 concentration in produced water exceeding the 10 ppb Cr6 limit. By preventing water from entering the well casing from the higher Cr6 zones, water below the Cr6 MCL can be produced. This technique is achieved by installing packers, which are commonly used in the oil industry.

Another approach for wells with total Cr6 concentrations very close to the Cr6 MCL is to blend this well's water with another well that is producing water containing very low Cr6 concentrations. The water blended from the two well sources would then have Cr6 concentrations well within the MCL. All of the techniques identified above are included in the Hexavalent Chromium Treatment Facilities Project.

IMPACTS:

<u>Fiscal</u> - Depending upon the BAT chosen and the level of reliability desired, costs range from about \$14 million to over \$25 million. Excessive cost increases necessary due to drought and Cr6 mitigation, however, remains a huge burden to District customers. Operations and maintenance requirements are currently estimated at \$500,000 to \$800,000 per year in addition to the capital debt.

Operational - N/A

Legal – To date, legal work has been minimal.

Labor – N/A

<u>Sociopolitical</u> - The lack of public acceptance that the MCL legislation will benefit them and that they are at any real risk has been a common theme in public workshops and meetings. <u>Policy</u> - N/A

Health and safety - Addressed above.

Environmental – N/A

Permitting status – Environmental and preliminary design are complete. Detailed design is ongoing.

ACTIONS NEEDED:

The District intends to treat and blend its affected water sources to reestablish water source reliability but the cost will be financially damaging to its customers without State/Federal grant assistance. Therefore, the District and its regional partners are seeking assistance for the financial burdens caused by the drought and new water quality regulations, and request that the State provide any and all assistance to make this project eligible for grant funding through Proposition 1 (including reinterpreting the guidance documents to come into conformance with the enabling legislation and the water code, so naturally occurring arsenic is included) and/or other grant programs.

Lake Cachuma Temporary Emergency Pumping Facility System

PROJECT DESCRIPTION:

This project maintains operation of the Temporary Emergency Pumping System (TEPS) at Lake Cachuma during the drought by providing for maintenance, relocation, and possible purchase of components of the system. This project is a highly critical operational infrastructure project, which provides lifeline delivery of Cachuma Project water and State Project water to 250,000 residents on the South Coast of Santa Barbara County. Without the ongoing operation of the EPS, water service to all major population centers on the South Coast would be interrupted, causing a widespread immediate threat to public health and safety.

REGIONAL BENEFIT:

The Cachuma Project was constructed in the late 1950's and has been the primary source of surface water supply for certain water agencies in central and south Santa Barbara County. When the lake was built, an intake gate was designed to deliver water to the South Coast through a gravity feed system. The severe drought has reduced Lake Cachuma storage to as low as 7% of its total capacity. For more than two years, water levels have been below the intake facility. Unable to flow by gravity into the intake tower, water has instead been pumped by the TEPS up to the lowest intake gate to continue water deliveries. Continued maintenance, and movement of the pump barge as lake levels rise and fall are critical to keeping the EPS operational. This project provides a regional benefit by ensuring continued, reliable conveyance of Cachuma Project water, State Project water and supplemental purchased water to purveyors on the South Coast of Santa Barbara County including Goleta Water District, the City of Santa Barbara, Montecito Water District and Carpinteria Valley Water District.

PUBLIC HEALTH AND SAFETY:

The continued operation and maintenance of the TTEPS is critical to prevent catastrophic failure or loss of water conveyance to 250,000 residents on the South Coast of Santa Barbara County. None of the agencies have storage capacity large enough to store more than a week's supply of water, and some can only store several days' worth, so even a short disruption could result in an interruption to maintaining delivery of potable water for public health and safety.

FUNDING, CHALLENGES & POTENTIAL SOLUTIONS:

The TEPS was built at a cost of \$4.1 million and ongoing annual operations and maintenance costs are \$1.5 million. These costs were shared across four South Coast agencies, and grant funding was provided by the State in the amount of \$3.1 million, but the ongoing costs and additional expenses associated with continued drought conditions have been a challenge for local agencies. While all the agencies that benefit from the TEPS have raised their rates, depending on the length of time the TEPS needs to remain in place, the level of maintenance required to keep it online, and how often it needs to be relocated as lake levels fluctuate, additional funding is required to ensure its continued operation.

Grant funding may be available through USBR WaterSMART Grant/Drought Resiliency Program or Santa Barbara County IRWMP. Limitations exist regarding potential eligibility, maximum funding amounts, competition for funding/awards and timing issues, especially since expenses such as mobilization for moving the barge are a nontraditional grant fit. Debt financing may be available through the California Drinking Water State Revolving Fund or through other local financial institutions. However, challenges exist on debt financing including qualification and timing process. Capital and Operating budgets from participating Member Agencies are exhausted due to unanticipated costs resulting from drought emergency financial implications and decreased water sales revenue.

DISCUSSION:

Cachuma Lake is owned and operated by the U.S. Bureau of Reclamation (Reclamation). Reclamation has permits from the State Water Resources Control Board (SWRCB) for the continuing operation and maintenance of the Cachuma Project diverting water from the Santa Ynez River.

Due to the ongoing drought and the critical need for a reliable and uninterrupted water supply, the pipeline project was implemented in 2014. Drought conditions continue in Santa Barbara County with water levels in Lake Cachuma receding such that originally designed gravity flow is no longer available to provide continued, reliable delivery of Cachuma Project water, State Water and supplemental purchased water to over 250,000 residents on the South Coast of Santa Barbara County.

The Temporary Emergency Pumping Facility Project – consisting of a pumping barge with seven variable speed pumps, a floating 10,100 foot conveyance pipeline, approximately 100 installed anchor pilings, a tower appendage connection, and electrical supply and cabling – was constructed and installed in 2014 and in 2016. Sustained operations of the barge facility at the first location began in August 2015 and the barge facility was moved to deeper waters in the lake in late June of 2016.

As lake levels fluctuate with winter storms, it may be necessary to move the barge facility to prevent damage and interruption from flood debris. If lake levels rise above 670' elevation, the barge facility must be relocated back to the original site for operation or it is at risk to be torn loose from its moorings.

The TEPS is likely to remain in service for at minimum several months, assuming enough inflow occurs this winter to bring the lake back to gravity feed conditions. However, given the severe drought conditions, it is possible the TEPS will need to operate intermittently for several more years, requiring significant funding to keep the system operational as lake levels rise and fall during continued drought conditions.

IMPACTS:

<u>Fiscal</u> – The ongoing costs of maintaining the temporary facility has placed additional financial burdens on previously strained district budgets. The temporary EPS is operated under a lease-operate contract. As the drought continues and conditions require ongoing operations it may be more economical to purchase the TEPS equipment and/or begin operating the facility by agency staff.

- Annual O & M costs \$1,500,000
- Estimated relocation costs \$500,000
- Estimated facility and pipeline acquisition costs \$1,500,000

<u>Operational</u> – The EPS provides water conveyance for a community of over 250,000 residents. Without continued operation of this project, the community would face a catastrophic failure and South Coast water purveyors would be unable to obtain Cachuma water, state water and supplemental water to meet regional demands.

<u>Sociopolitical</u> – The project has been operating since 2015 with a collaboration of stakeholders who support a temporary EPS project. This temporary facility is intended to serve through the duration of the current drought and is not a permanent project.

Environmental – All required permits have been received and are current for the regional project.

ACTIONS NEEDED:

Funding for financial relief is requested for maintenance, potential relocation, and possible acquisition of components critical to ensuring the continued operation of the temporary EPS as the life-line infrastructure water conveyance facility from Lake Cachuma to the South Coast of Santa Barbara County.

Interagency Intertie Project between Goleta and Santa Barbara

PROJECT DISCRIPTION:

This project will provide an emergency water supply by providing a larger intertie between Santa Barbara and Goleta, while also benefiting Montecito and Carpinteria. By constructing a high capacity intertie between Santa Barbara and Goleta to facilitate the delivery of water between systems on the South Coast, the overall reliability of the region's water supplies will be improved.

REGIONAL BENEFIT:

The Intertie Pump Project between Goleta and Santa Barbara (Intertie) involves construction of a new, larger connection (interconnect) between the water distribution systems of the Goleta Water District (GWD) and the City of Santa Barbara. The project would allow neighboring agencies to provide mutual assistance to one another in the event of an emergency such as a transmission line failure, earthquake, wildfire, or for a planned system shut down for repairs or maintenance. Since Santa Barbara is also connected to Montecito and Carpinteria, the regional benefit would extend to the entire South Coast.

HOW IT ADDRESSES HEALTH AND SAFETY:

While the project does not provide for additional water supplies, it does increase reliability. Currently, the Goleta Water District and the City of Santa Barbara are limited in their ability to supply or transfer water from one system to another in the event of an emergency or major water treatment plant problem. The Interconnect project increases regional water supply reliability by providing for the ability to exchange large volumes of water between the two systems.

The interconnect would allow both agencies to convey between 3 to 4 million gallons of treated water per day (gpd) to one another in the event of an emergency (i.e., wildfire, drought, earthquake), during shutdowns of GWD or SB water system facilities, and during periods of high demand when supplemental supplies may be needed. The project would also help to mitigate downstream peaking impacts along the South Coast Conduit, as well as maximize the use of the limited regional storage facilities. The proposed booster pumping station will include data collection capabilities and will allow for the monitoring of the transfer of water from one agency to the other.

FUNDING, CHALLENGES & POTENTIAL SOLUTIONS:

This project has been included in the Integrated Regional Water Management Plan of Santa Barbara County. The total cost of the project is \$5 million, and the project is eligible for grants under Proposition 1 and IRWMP. This project may also qualify for emergency preparedness grants.

DISCUSSION:

The alternative to the project would be to use the existing smaller interties in the system located at Willowbrook, St. Vincent's, and Modoc. These interties allow for up to 800,000 gpd to be moved between the systems. However, the Modoc intertie cannot be operated while the Goleta Water District wells are running, which given current drought conditions is continuous.

IMPACTS

<u>Fiscal</u> – Competes with other immediate concerns for drought related projects, especially those related to developing new water supplies, water quality, and large-scale conveyance and regional water system reliability.

<u>Operational</u> – Water quality and distribution issues related to blending of different water sources would need to be examined and proactively addressed.

Legal – N/A

Labor - N/A

Sociopolitical – N/A

<u>Policy</u> – In advance of a project, operational protocols and various agreements regarding exchanges and mutual aid will need to be established.

<u>Health and safety</u> – Beyond the water quality issues noted above, the needs of the dialysis center on the City of Santa Barbara side would also need to be reviewed and addressed.

Environmental - The CEQA process has not been initiated, but significant opposition is not anticipated.

<u>Interagency</u> – A project would require funding and approval by the City of Santa Barbara and Goleta Water District. As the two agencies are the two treatment points on delivery of water to the South Coast, benefits could also extend to other South Coast agencies.

ACTIONS NEEDED:

Funding in the form of grants or matching funds are needed to move the project forward.