



November 16, 2022

TO: Utilities Advisory Committee

FROM: Ron Munds, General Manager

SUBJECT: Agenda Item 4 – 11/16/2022 Utilities Advisory Committee Meeting
County of San Luis Obispo Desalination Executable Solution and Logistics Plan (DESAL) Phase 1 Project Review and Resolution of Intent to Participate in Phase 1.

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Marshall E. Ochylski
Christine M. Womack

General Manager
Ron Munds

District Accountant
Robert Stilts, CPA

Unit Chief
John Owens

Battalion Chief
Paul Provence

Mailing Address:
P.O. Box 6064
Los Osos, CA 93412

Offices:
2122 9th Street, Suite 110
Los Osos, CA 93402

Phone: 805/528-9370
FAX: 805/528-9377

www.losososcscsd.org

STAFF RECOMMENDATION

Staff recommends that the UAC adopt the following motion:

Motion: I recommend to the Board that the Board adopt a resolution approving the District's participation in Phase 1 of the County of San Luis Obispo's DESAL Project

DISCUSSION

At the September 1, 2022 Board meeting, staff informed the Board that the District received a letter (attached) from County Public Works which provided an introduction of the project and that a request from the County to participate in Phase 1 of a regional desalination project would be coming in the fall of 2022, if approved by the Board of Supervisors (BOS). Phase 1 is an exploratory effort to see what kind of value there may be for each participating agency. Phase 1 includes:

- Securing resolutions from agencies agreeing to be evaluated in the DESAL Plan (Fall '22)
- Developing and vetting a scope of work with participating agencies (Winter '22/Spring '23)
- Establishing stakeholder and public engagement process (all phases)
- Seeking/pursuing grant opportunities (all phases)
- Reviewing scope of work' engagement process with BOS and seek direction to proceed (Summer '23)

On October 18, 2022, the Board of Supervisors approved of moving the regional desalination project forward. The County has requested that agencies interested in participating in Phase 1 of the project provide a resolution of intent by February 2023. There is no cost to the District to be part of Phase 1.

Project Goal

The project is part of a regional effort to provide future water supply resiliency to water purveyors county-wide. At the March 16, 2022 BOS meeting, the Board received a presentation on the various water supply efforts in the county, including conservation, stormwater capture, Nacimiento Water Project optimization, Lopez Water Project spillway raise and optimization, Salinas Dam transfer and spillway raise, State Water Project and Water Management Tools, recycled water,

produced water from oil extraction operations, cloudseeding, and regional resiliency. The conclusion drawn in the report is as follows:

While many of these efforts are in the planning and/or implementation phases and will help extend the county's water supply, they are not enough to overcome long-term shortages or be relied upon to sustainably meet future needs. Competition for existing water supplies (particularly those that depend on precipitation) in the county, and across the state, is anticipated to increase with new regulations related to groundwater/surface water interactions and minimum sustainability thresholds, water quality, environmental flow, and housing directives. Relying on water sourced from precipitation from a different region is challenging due to the county's relative geographic isolation, energy and right of way requirements, and the fluctuating supply availability year to year. A new, drought proof, local water supply will be necessary to sustain the county long-term.

Desalination is the longest-term and most resilient strategy since it leverages a renewable, almost inexhaustible resource that would not be diminished by insufficient rainfall or water conservation efforts. Desalination is a drought proof solution for current and projected water supply imbalances caused by strained alternative supplies, increased demand and could be scalable such that its capacity could be expanded as future needs increase.

Financial Impact

As previously stated, there is no cost to the District to be part of Phase 1.

Attachments

Letter of upcoming request for participation in the DESAL Plan

BOS report from October 18, 2022 requesting approval to move forward with the DESAL Plan



COUNTY OF SAN LUIS OBISPO
Department of Public Works
John Diodati, Director

June 22, 2022

Mr. Ron Munds, General Manager
Los Osos Community Services District
2122 9th Street, Suite 110
Los Osos, CA 93402

Subject: Upcoming request for Agency Resolution Approving Participation in the Development of a Desalination Executable Solution and Logistics (DESAL) Plan

Dear Mr. Munds:

On November 16, 2021, the County of San Luis Obispo (County) Board of Supervisors (Board) identified water resilience, including desalination specifically, as a top priority. Pursuant to this, in fall 2022, it is anticipated that the Board will consider directing staff to return with an approach and scope for moving forward on a path to a regional desalination project, starting with the development of a DESAL Plan.

A desalination project in the County could potentially benefit various agencies under current or future conditions, both directly and indirectly, by leveraging existing regional supply and infrastructure. Therefore, the DESAL Plan will be most robust if all agencies are willing to join for this exploratory effort to see what kind of value there may be for their agency. While the approach for developing a DESAL Plan will not require a cost share from agencies willing to be evaluated in it, it will require a formal planning participation commitment; supporting attachments, including a draft Resolution Approving Participation in the DESAL Plan, are enclosed for your agency's reference. This letter is to introduce the proposed approach and give agencies advance notice that our staff will likely request this, or a similar, resolution from your agency, in late 2022, if you wish to be considered in the DESAL Plan.

Ideally, at a minimum, the agencies that comprise the Countywide Water Action Team (CWAT), will adopt resolutions agreeing to participate in the DESAL Plan. The CWAT last met on May 24, 2022, to discuss this proposed approach and advised our staff to proceed and provide this letter to initiate participating agency internal efforts accordingly. Please see enclosed CWAT meeting material for more information and contact Angela Ford at (805) 781-5139 with any questions or comments.

Sincerely,

JOHN DIODATI
Director of Public Works



Enclosure: May 24, 2022 CWAT Meeting Material with Attachments

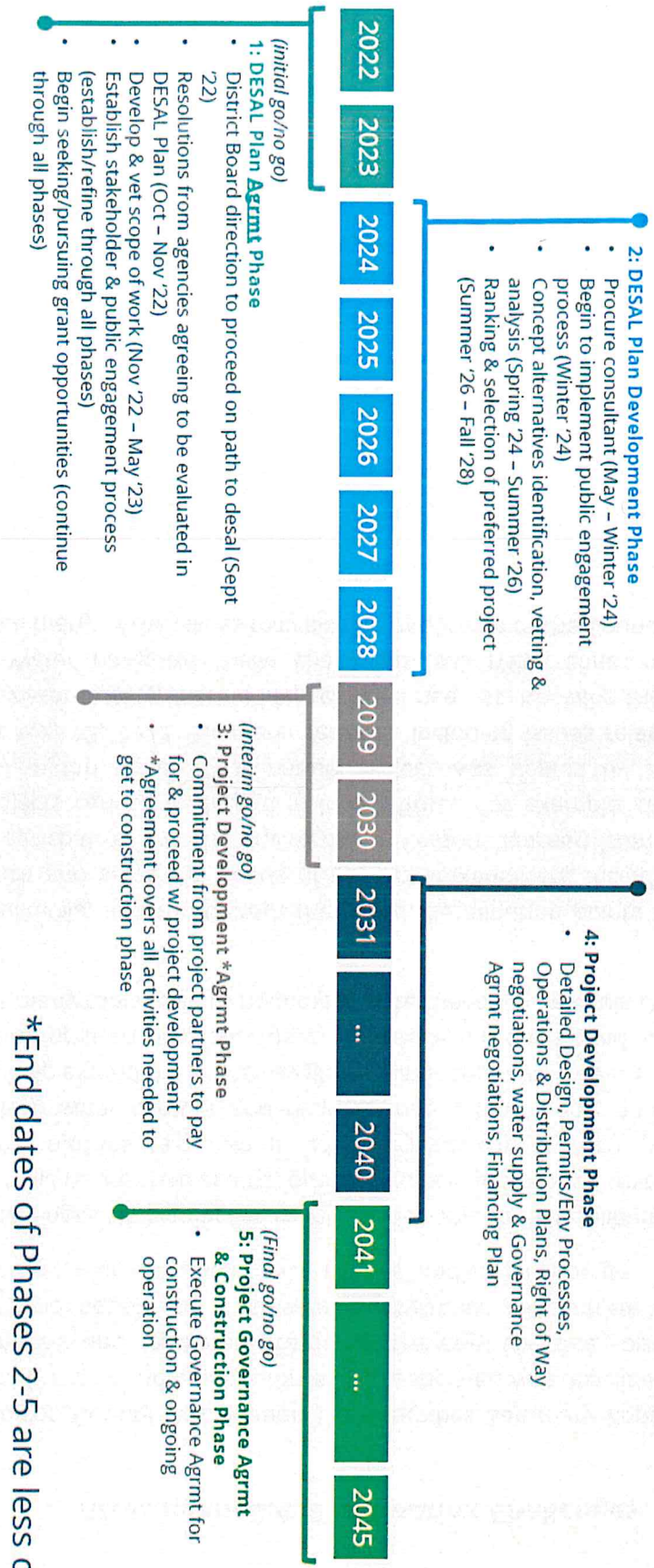
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Countywide Water Action Team (CWAT) Participants

Staff Representative	Entity
Aaron Floyd	SLO City
Mychal Boerman	SLO City
Bill Robeson	Arroyo Grande
Greg Ray	Grover Beach
Ben Fine	Pismo Beach
Will Clemens	Oceano CSD
John Neil	Atascadero MWC
Jeff Britz	Templeton CSD
Kirk Gonzalez	Paso Robles
Christopher Alakel	Paso Robles
Rob Livick	Morro Bay
Greg Kwolek	Morro Bay
Mario Iglesias	Nipomo CSD
Mark Zimmer	Golden State Water Co
Toby Moore	Golden State Water Co
Ron Munds	Los Osos CSD
Kelly Dodds	San Miguel CSD
Brad Hagemann	Avila Area Water Agencies

Attachment 3.1: DESAL Plan Timeline (Phases 1-5)

Desalination Executable Solution And Logistics Plan DESAL Plan*

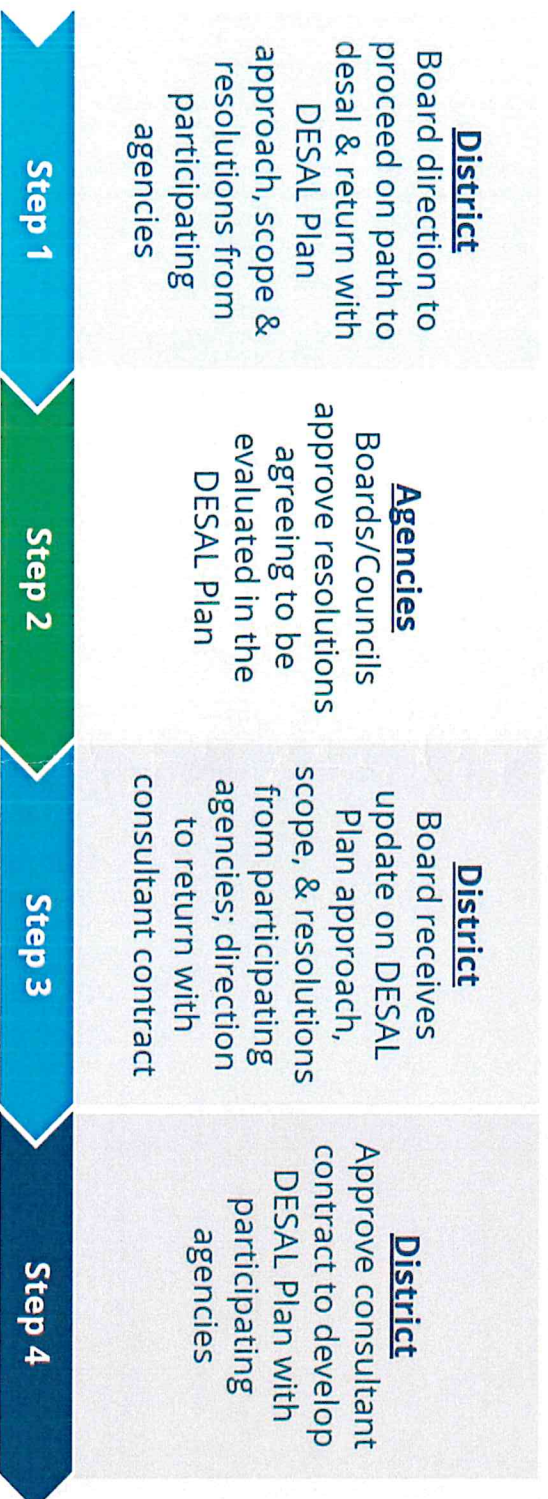


*End dates of Phases 2-5 are less certain



Attachment 3.2: DESAL Plan Timeline (Phase 1)

Desalination Executable Solution And Logistics Plan **DESAL Plan**



*4-Step process for
Phase 1: DESAL Plan Agreement Phase*





**COUNTY OF SAN LUIS OBISPO
BOARD OF SUPERVISORS
AGENDA ITEM TRANSMITTAL**

(1) DEPARTMENT Public Works	(2) MEETING DATE 10/18/2022	(3) CONTACT/PHONE Angela Ford, Supervising Water Resources Engineer (805)781-5139	
(4) SUBJECT Submittal of a resolution authorizing staff to proceed with developing the Desalination Executable Solution and Logistics Plan in coordination with other participating water-purveying agencies and stakeholders and authorizing the Director of Public Works, or designee, to pursue grants to offset project costs and return to the Board of Supervisors for grant award approval. All Districts.			
(5) RECOMMENDED ACTION It is recommended that the Board, acting as the Board of Supervisors for the San Luis Obispo County Flood Control and Water Conservation District (District) to adopt the attached resolution authorizing staff to proceed with developing the Desalination Executable Solution and Logistics (DESAL) Plan in coordination with other participating water-purveying agencies and stakeholders and authorizing the Director of Public Works, or designee, to pursue grants to offset project costs and return to the Board of Supervisors for grant award approval.			
(6) FUNDING SOURCE(S) SLO County Flood Control and Water Conservation District	(7) CURRENT YEAR FINANCIAL IMPACT N/A	(8) ANNUAL FINANCIAL IMPACT N/A	(9) BUDGETED? Yes
(10) AGENDA PLACEMENT <input type="checkbox"/> Consent <input type="checkbox"/> Presentation <input type="checkbox"/> Hearing (Time Est. _____) <input checked="" type="checkbox"/> Board Business (Time Est. 30 min)			
(11) EXECUTED DOCUMENTS <input checked="" type="checkbox"/> Resolutions <input type="checkbox"/> Contracts <input type="checkbox"/> Ordinances <input type="checkbox"/> N/A			
(12) OUTLINE AGREEMENT REQUISITION NUMBER (OAR) N/A		(13) BUDGET ADJUSTMENT REQUIRED? BAR ID Number: N/A <input type="checkbox"/> 4/5th's Vote Required <input checked="" type="checkbox"/> N/A	
(14) LOCATION MAP N/A	(15) BUSINESS IMPACT STATEMENT? No	(16) AGENDA ITEM HISTORY <input type="checkbox"/> N/A Date 11/16/22, #35; 8/25/15, #16	
(17) ADMINISTRATIVE OFFICE REVIEW Zachary A. Lute			
(18) SUPERVISOR DISTRICT(S) All Districts			

Reference: 22.125



COUNTY OF SAN LUIS OBISPO

TO: Board of Supervisors

FROM: Public Works
Angela Ford, Supervising Water Resources Engineer

VIA: Courtney Howard, Water Resources Division Manager
Kate Ballantyne, Deputy Director of Public Works

DATE: 10/18/2022

SUBJECT: Submittal of a resolution authorizing staff to proceed with developing the Desalination Executable Solution and Logistics Plan in coordination with other participating water-purveying agencies and stakeholders and authorizing the Director of Public Works, or designee, to pursue grants to offset project costs and return to the Board of Supervisors for grant award approval. All Districts.

RECOMMENDATION

It is recommended that the Board, acting as the Board of Supervisors for the San Luis Obispo County Flood Control and Water Conservation District (District) to adopt the attached resolution authorizing staff to proceed with developing the Desalination Executable Solution and Logistics (DESAL) Plan in coordination with other participating water-purveying agencies and stakeholders and authorizing the Director of Public Works, or designee, to pursue grants to offset project costs and return to the Board of Supervisors for grant award approval.

DISCUSSION

Water is critical to the health and well-being of the people, economy, and environment and the District has an important role in ensuring our county's water supplies are adequate and able to respond to, and accommodate, change while continuing to meet the many various needs. In the county, existing conditions and future projections indicate that water security is decreasing as demands increase and available supplies and their reliability decrease. Over the past decade, the Board has expressed interest in desalination as a water supply opportunity and, on November 16, 2021, as the statewide drought continues, the Board identified water resilience and desalination as a top priority.

Water Supplies, Demand and Outlook

On March 16, 2021, the Board received a presentation on the various water supply efforts in the county, including conservation, stormwater capture, Nacimiento Water Project optimization, Lopez Water Project spillway raise and optimization, Salinas Dam transfer and spillway raise, State Water Project and Water Management Tools, recycled water, produced water from oil extraction operations, cloudseeding, and regional resiliency. While many of these efforts are in the planning and/or implementation phases and will help extend the county's water supply, they are not enough to overcome long-term shortages or be relied upon to sustainably meet future needs. Competition for existing water supplies (particularly those that depend on precipitation) in the county, and across the state, is anticipated to increase with new regulations related to groundwater/surface water interactions and minimum sustainability thresholds, water quality, environmental flow, and housing directives. Relying on water sourced from precipitation from a different region is challenging due to the county's relative geographic isolation, energy and right of way requirements, and the fluctuating supply availability year to year. A new, drought proof, local water supply will be necessary to sustain the county long-term.

Desalination is the longest-term and most resilient strategy since it leverages a renewable, almost inexhaustible resource that would not be diminished by insufficient rainfall or water conservation efforts. Desalination is a drought proof solution for current and projected water supply imbalances caused by strained alternative supplies, increased demand and could be scalable such that its capacity could be expanded as future needs increase.

DESAL Plan

Recognizing that a desalination project will take time to plan for, permit, and construct, it is recommended that the Board authorize staff to begin planning now. County staff has coordinated with the Countywide Water Action Team (CWAT), an informal working group of staff from entities across the county with water supply planning responsibilities, to develop a five-phase approach to developing a DESAL Plan and project. All phases, including an anticipated schedule for Phase 1, are described in the following table:

Phase 1: DESAL Plan Agreement Phase
<ul style="list-style-type: none">• District Board direction to proceed on path to desalination (Today's recommended action)• Get resolutions from agencies agreeing to be evaluated in DESAL Plan (Fall '22)• Develop and vet scope of work with participating agencies (Winter '22/Spring '23)• Establish stakeholder and public engagement process (implement through all phases)• Seek/pursue grant opportunities (continue through all phases)• Review scope of work/engagement process with the Board/direction to proceed (Summer '23)
Phase 2: DESAL Plan Development Phase
<ul style="list-style-type: none">• District procure consultant• Implement public engagement process• Identify project concept alternatives, vet, and analyze• Rank and select preferred project
Phase 3: Project Development Agreement Phase
<ul style="list-style-type: none">• Commitment from project partners to pay for and proceed with project development and all efforts necessary to get to construction phase
Phase 4: Project Development Phase
<ul style="list-style-type: none">• Detailed project design, permits and environmental processes, operations and distribution plans, right of way negotiations, water supply and Governance Agreement negotiations, Financing plan
Phase 5: Project Governance Agreement and Construction Phase
<ul style="list-style-type: none">• Execute Governance agreement for construction and ongoing maintenance

Stakeholder engagement

Stakeholder outreach and early engagement are critical to the success of a desalination project for many reasons. One reason is that it takes time to build a broad coalition and public buy-in, both of which are necessary to obtain future permits. This was exhibited recently when Poseidon, in Huntington Beach, had a regional desalination project denied by the California Coastal Commission, in part, because there was not sufficient evidence of local community need/acceptance. Another reason for early engagement is to ensure comprehensive understanding of existing infrastructure deficiencies and opportunities from the outset, informing the widest range of conceptual alternatives for consideration.

To address this need, on June 7, 2022, the Board approved working with stakeholders to update the Countywide Master Water Report. This effort will compliment desalination project planning efforts by providing up-to-date information on supply/demand imbalances and information on short-term water supply strategies such as conservation, recycled water, and groundwater management. It is important to first optimize the use of existing water supplies and there are other separate efforts currently underway to explore and develop those options. However, since they may only be sustainable short-term, it is important to pursue a long-term solution for water supply, such as desalination.

The key stakeholders in a desalination project are water-purveying agencies because they are tasked with supplying water to customers and potentially investing in such a project. The regional infrastructure and/or regional supply associated with these agencies may also be needed both directly and indirectly to make a project feasible. It follows that the DESAL plan, and any resulting project, will be most robust if there is wide interest and involvement from the local water-purveying agencies and their communities. Therefore, a first step is asking those water-purveying agencies to adopt resolutions agreeing to be evaluated and participate in development of the DESAL Plan. Staff would then work with designated staff from those agencies to draft a publicly vetted scope of work for developing the DESAL Plan and approach for involving the full spectrum of stakeholders, from regulatory agencies to the general public.

OTHER AGENCY INVOLVEMENT/IMPACT

Throughout development of the DESAL Plan, local stakeholder engagement and public involvement is anticipated to be facilitated by public meetings of the Water Resources Advisory Committee, where regular updates and opportunities for input will be provided.

In addition to local stakeholders, the outreach/coordination/permitting requirements and the practical realities of developing a successful DESAL Plan will require involvement with many other entities across the state. Other likely entities include, but aren't limited to, the State Water Resources Control Board (SWRCB), California Coastal Commission (CCC), California Department of Fish and Wildlife, Central Coast Regional Water Quality Control Board, and National Marine Fisheries Service.

Additionally, it should be noted that on August 11, 2022, Governor Newsom released a publication called California's Water Supply Strategy that discusses how the "...State will help streamline and expedite permitting to provide clarity and to further desalination projects. By June 2023, the SWRCB, CCC, the Department of Water Resources, and other state entities (State Land Commission) will develop criteria for siting of desalination facilities along the coast and recommend new standards to facilitate approval." ¹

¹ <https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Water-Resilience/CA-Water-Supply-Strategy.pdf>

FINANCIAL CONSIDERATIONS

For FY 2022-23 one of the Board's priorities listed Water Resiliency of which included desalination as a water resource management strategy to pursue. Efforts for preliminary desalination planning were included in the District's FY 2022-23 budget. Staff will return to the Board at a future date with a proposed scope of work for a consultant and the estimated costs associated with DESAL Plan development, including consultant costs, Board/Committee processes, outreach and engagement, to request authorization to proceed with consultant procurement.

Grants will be pursued to offset project costs throughout DESAL Plan development and implementation.

RESULTS

Approval of the resolution will authorize staff to proceed with developing the DESAL Plan in coordination with other participating entities, direct staff to begin stakeholder engagement, and authorize the Director of Public Works, or designee, to pursue grants to offset project costs and return to the Board for grant award approval.

ATTACHMENTS

- 1 Resolution Authorizing Staff to Proceed with Developing the Desalination Executable Solution and Logistics (Desal) Plan in Coordination with Other Participating Agencies and Stakeholders and Authorizing the Director of Public Works, or Designee, to Pursue Grants to Offset Project Costs and Return to the Board of Supervisors for Grant award Approval
- 2 PowerPoint Presentation

File: 890.30.01

Reference: 22.125

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