### CALIFORNIA COASTAL COMMISSION

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Click here to go to original staff report

**F12b** 

February 11, 2015

To: Coastal Commissioners and Interested Parties

From: Alison Dettmer, Deputy Director

Tom Luster, Senior Environmental Scientist

Subject: Addendum to CDP Application 9-14-1781, City of Santa Barbara

This addendum provides staff's recommended revisions to the January 30, 2015 staff report, *ex parte* submittals, and correspondence received since publication of the staff report. The proposed modifications do not change staff's recommendation that the Commission **approve** CDP 9-14-1731.

### **Revisions to the Staff Report**

Additions are shown below in underline and deletions in strikethrough.

**Special Condition 3**, pages 5-6:

"Anchoring Plan – Initial Repair and Maintenance Activities. PRIOR TO PERMIT ISSUANCE THE START OF INWATER PROJECT ACTIVITIES, the Permittee shall submit, for Executive Director review and approval, a revised Offshore Anchoring Plan that is consistent with the submitted *Utility Work Boat Anchoring Locations – Subtidal Biological Survey Report*, dated September 30, 2014, but with the following modifications:

- a. Clarify that offshore anchoring will be conducted at one location using a four-point anchoring system.
- b. Incorporate results of a seafloor survey conducted no less more than 60 days prior to Plan submittal."

### **Special Condition 4**, page 6:

"Anchoring Plans – Ongoing Repair and Maintenance Activities: At least 45 days prior to future offshore repair and maintenance activities that will involve anchoring, the Permittee shall submit, for Executive Director review and approval, an updated Anchoring Plan that includes measures consistent with those in the Anchoring Plan

approved pursuant to **Special Condition 3**, but that has been modified to include updated information based on seafloor surveys conducted no less more than 60 days prior to submittal of each updated Plan."

### **Special Condition 5**, page 7:

**"Turbidity Minimization and Monitoring.** PRIOR TO PERMIT ISSUANCE THE START OF INWATER ACTIVITIES, the Permittee shall submit..."

**Special Condition 6**, page 7:

"Sensitive Marine Species Monitoring and Mitigation Plan. PRIOR TO PERMIT ISSUANCE THE START OF INWATER ACTIVITIES, the Permittee shall submit..."

**Special Condition 6**, page 8, start of second paragraph:

"Project work involving the movement or positioning of vessels <u>offshore</u>, use of heavy equipment <u>onshore</u>, and attachment or removal of project components shall occur during daylight hours only."

### **Protection of Coastal Waters and Species**, pages 17-18:

"<u>Turbidity</u>: Before initially connecting equipment to the intake, the City would use a high-pressure water spray and hand removal to remove growth from the concrete structures. Any ongoing repair and maintenance activities would require similar cleaning of the inwater structures. To reduce potential turbidity-related impacts, the City has proposed cleaning, <u>where possible</u>, only those surfaces needed to attach equipment to the structures or needed for access to accomplish such repair and maintenance. It has proposed implementing a Turbidity Minimization Plan ("TMP") that will include measures such as vacuuming sediment and biological material collected during the cleaning process, monitoring to ensure low levels of turbidity, and reducing the rate or extent of cleaning if turbidity levels exceed certain thresholds."

### 9-14-1781

### City of Santa Barbara

### • EX PARTE COMMUNICATIONS

# Repair and Maintenance Activities at the Charles Meyer Desalination Facility City of Santa Barbara

CCC Hearing
February 13, 2015
Item F12b
Application 9-14-1781



A copy of this briefing book has been provided to Coastal Commission Staff.

## **Briefing Topics**

- Overview of Repair and Maintenance Project
  - (Slides 3 to 5)
- Desalination Facility Background
  - (Slides 6 to 8)
- Need for Existing Facility to Operate
  - (Slides 9 to 14)
- Scope of Repair and Maintenance Activities
  - (Slides 15 to 18)
- Project's Consistency with the Coastal Act
  - (Slides 19 to 26)

### Location



Santa Barbara Harbor and StearnsWharf

## **Project Description**

- Repair and maintenance of Charles Meyer Desalination Facility at offshore intake structure southeast of Stearns Wharf in City of Santa Barbara, including:
  - Redeployment of intake screens; maintenance and repair of pumps and check valves; intake pipeline cleaning; installation of electrical, communication, and chlorination lines; and maintenance activities at weir box located on beach

Note: Existing outfall requires no repair, maintenance, or physical changes, and approved CDP allows for continued desalination facility operation.

## Scope of Current CDP Application

- Current application limited to repair and maintenance of existing facilities (both offshore and on beach):
  - Coastal Act Section 30610(d): "Repair or maintenance activities that do not result in an addition to, or enlargement or expansion of, the object of those repair or maintenance activities" do not require CDP unless specified in Commission's regulations.
  - <u>CCR Section 13252</u> requires CDP for: "Any method of repair or maintenance of a seawall revetment, bluff retaining wall, breakwater, groin, culvert, outfall, or similar shoreline work that involves . . .
    - (D) The presence, whether temporary or permanent, of mechanized construction equipment or construction materials on any sand area, bluff, or environmentally sensitive habitat area, or within 20 feet of coastal waters or streams.

## Overview of Existing Desalination Facility and Scope of R&M Project

- Intake: 2,500-ft off shore
- Pump Station/Chemical Area:420 Quinientos Street
- Desalination Plant:525 Yanonali Street
- Outfall: 8,720-ft off shore
   (shared with El Estero Wastewater
   Treatment Plant)



## **Approved CDPs**

- May 9, 1991: CCC approved CDP #5-91-18 for temporary desalination facility and associated infrastructure
- October 9, 1996: CCC approved CDP #4-96-119 for conversion of temporary desalination facility and infrastructure to permanent facilities

CDPs authorized construction, operation and maintenance of these facilities.

## CDP Approval Included Flexible Operating Conditions

STATE OF CALIFORNIA-THE RESOURCES AGENCY

PETE WILSON, Governor

#### CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA 89 SOUTH CALIFORNIA ST., SUITE 200 VENTURA, CA 93001 (805) 641-0142

Page 1 of 3 Date: October 15, 1996 Permit No. 4-96-119

#### COASTAL DEVELOPMENT PERMIT

On October 9, 1996, the California Coastal Commission granted to City of Santa Barbara, Permit 4-96-119 this permit subject to the attached Standard and Special conditions, for development consisting of:

Conversion of temporary desalination facilities to permanent facilities. Facilities include liner sleeve in abandoned ocean outfall line, ocean intake structures, and appurtenant facilities to service a reverse osmosis desalination

Date: October 15, 1996 Permit No. 4-96-119

Conversion of temporary desalination facilities to permanent facilities. Facilities include liner sleeve in abandoned ocean outfall line, ocean intake structures, and appurtenant facilities to service a reverse osmosis desalination plant with a maximum production capacity of 10,000 acre feet per year and is more specifically described in the application on file in the Commission offices.

By: Mark Capelli
Title: Coastal Program Analyst

#### ACKNOWLEDGMENT

The undersigned permittee acknowledges receipt of this permit and agrees to abide by all terms and conditions thereof.

The undersigned permittee acknowledges that Government Code Section 818.4 which states in pertinent part, that: "A public entity is not liable for injury caused by the issuance. . of any permit. .." applies to the issuance of this permit.

IMPORTANT: THIS PERMIT IS NOT VALID UNLESS AND UNTIL A COPY OF THE PERMIT WITH THE SIGNED ACKNOWLEDGEMENT HAS BEEN RETURNED TO THE COMMISSION OFFICE. 14 Cal. Admin. Code Section 13158(a).

10-22-96

Date

Signature of Permittee

A6: 8/95

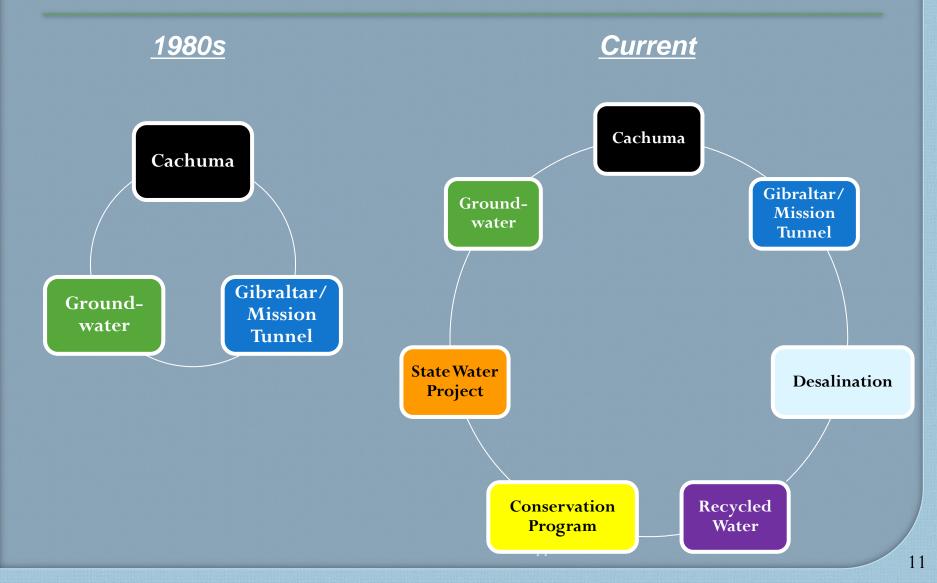
## Current Need for Repair & Maintenance of Offshore Facilities

- Due to California's historic drought, water from Santa Barbara's existing desalination facility is again necessary to meet the City's water demand despite significant conservation efforts:
  - February 11, 2014: City Council declared Stage One Drought, seeking voluntary 20% reduction in customer water use through extraordinary water conservation measures.
  - May 20, 2014: City Council declared Stage Two Drought, including water rate increases of up to 103%, initiation of preliminary design for desalination reactivation, and mandatory water use restrictions to help ensure the 20% reduction. (City water customers met 20% targeted reduction in July 2014.)

## Severe Water Supply Shortage Requires Desalinated Water Supply

- Unless rainfall is well above average during the 2014-2015 winter, third and final drought stage (Stage Three Drought) will be triggered in <u>Spring 2015</u>.
- Current water supply shortage requires the existing desalination plant's first 3,125 AFY of capacity.
  - Will take approximately one year to undertake repair and maintenance activities; available for production by Fall 2016
  - If drought conditions continue through Winter 2015-2016, desalination capacity up to 7,500 AFY may be necessary. However, no additional off-shore construction will be needed.

## City Has Diversified Water Supply Portfolio to Improve Reliability



## Drought Supply as Called for by Long-Term Water Supply Plan

- Increased groundwater pumping
- Import banked and purchased water
- Demand reduction
  - Rates
  - Regulations
- Desalination

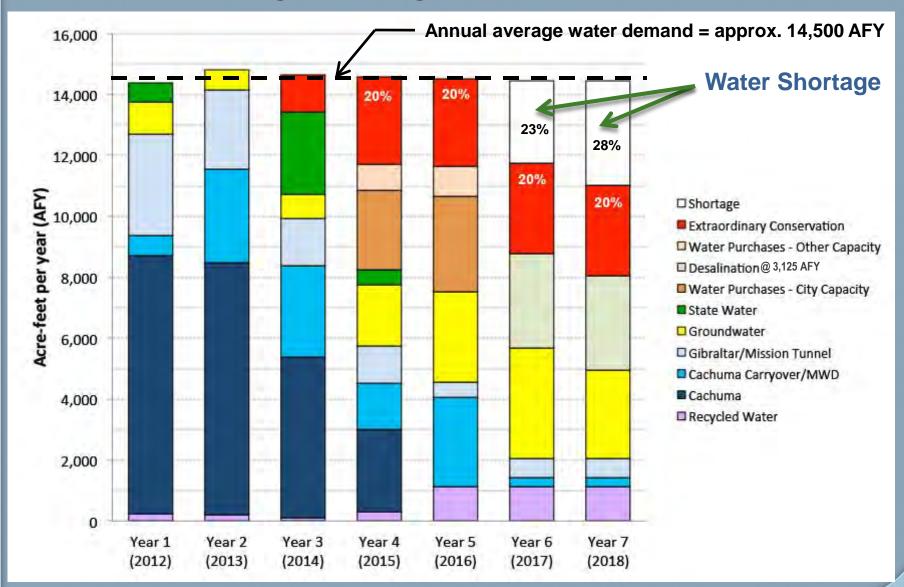


Charles Meyer Desalination Facility

Based upon current drought, City will need desalinated water supply by Fall 2016 (start of Water Year 2017)

### **Current 7-Year Dry Weather Water Supply Projection**

Assumes Continued Drought with No Significant Inflow to Gibraltar, Cachuma, or Delta



## City's Schedule Based Upon Water Supply Projections - Consistent with 2011 LTWSP

• March 2015 Design/Build/Operate Proposals Due

June 2015 Award Contract and Commence Repair
 and Maintenance Activities

• Fall 2016
Restart Desalinated Water Production

## Scope of Repair & Maintenance Activities for Intake

## Redeploy existing pumps & check valves

Replace power & control wiring

### Redeploy screens

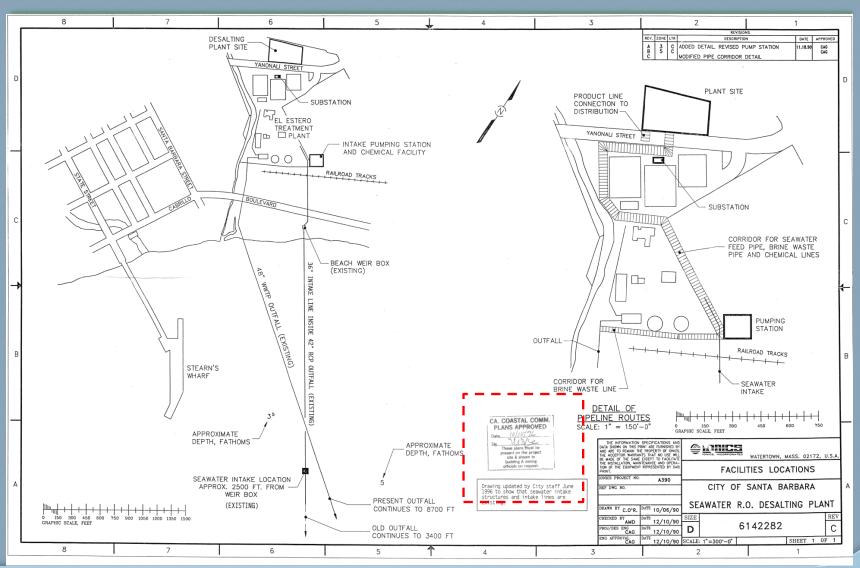
 Screen maintenance, removal & redeployment were analyzed in both 1991 & 1994 FEIRs



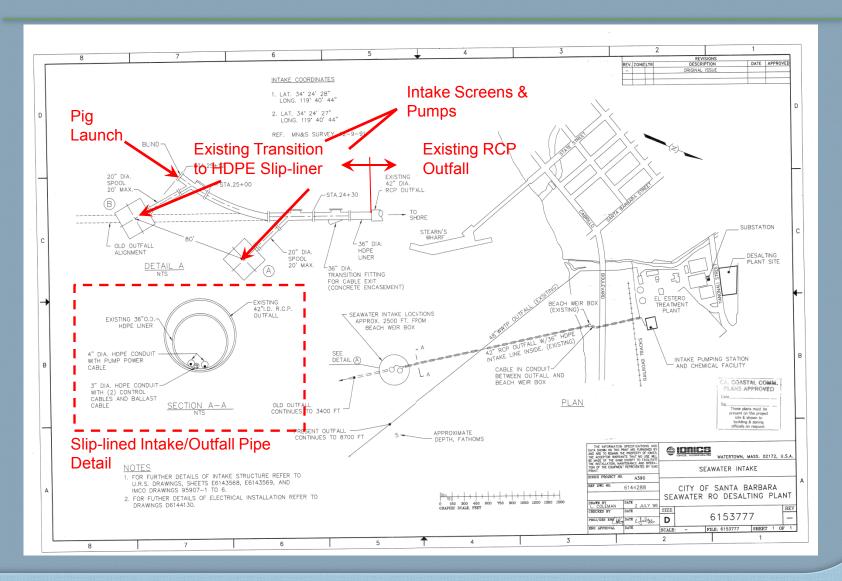
The City has maintained the pumps & check valves as part of its on-going maintenance program.

- Update screen technology to cylindrical wedge wire with 1-mm (0.04-inch) openings
  - 0.375-inch openings allowed by 1994 FEIR

## Intake Plans for Permanent Facility Approved by CCC Oct. 15, 1996



## Two Intakes Located 2,500 Feet Offshore in ~30 Feet of Water



## Summary of Repair & Maintenance Actions - Areas Affected

### Offshore at intake structures

- · Redeployment of intake screens, pump valves & piping
- Installation of chlorination lines inside of existing intake pipeline, day-lighting at offshore intake structures
- Periodic intake screen removal and redeployment
- Periodic intake pipeline cleaning (by chlorination & pigging)

### Offshore at intake structures & onshore at beach weir box

- Redeployment of intake pumps, including pump power & control wires
- Periodic intake pump maintenance: pump removal & redeployment; replacement of pump power & control wires

### Staff Recommendation

- Staff recommends <u>approval</u> subject to 10 Special Conditions
  - "Commission staff believes the project, as conditioned, would conform to applicable Coastal Act policies, and therefore recommends **approval** of coastal development permit application 9-14-1781."

## **Protection of Water Quality**

- Several Special Conditions ensure that the Project will conform to Coastal Act water protection policies and avoid adverse impacts:
  - Turbidity Monitoring Plan (Special Condition 5): Will include measures to reduce turbidity, such as a diver to vacuum sediment generated by project operations in a relatively precise manner and relocate it to a previously selected disposal area
  - Hazardous Material Spill Prevention and Response
    (Special Condition 7): Will provide specific protocols for
    monitoring and minimizing the use of fuel and hazardous materials
    during project operations

## Protection of Biological Resources

- Special Conditions 4, 6, and 8 require measures to protect biological resources and ensure conformance to Coastal Act marine life protection policies:
  - Limit anchoring locations to avoid kelp, seagrasses, and hard bottom substrate
  - Require a Marine Species Monitoring and Mitigation Plan
  - Limit lighting to avoid impacts to marine species
  - Nesting surveys and biological monitoring required before and after work begins
  - Measures to limit noise near nest sites

### Protection of Public Access

- No impacts to public access or recreation will occur as a result of the repair and maintenance activities
- Special Condition 10 requires the City to provide notice to the Coast Guard prior to starting inwater activities
- City proposes to protect access further by imposing:
  - Night time lighting restrictions
  - Work boat speed limits within Santa Barbara Harbor
  - Staging, timing, and signage requirements

### **Protection of Visual Resources**

- Limited scope and duration of repair and maintenance activities, including limitation on offshore work to daylight hours, avoids adverse impacts to scenic and visual qualities of coastal areas
- Staff Report confirms that the Project "as conditioned, will be carried out in a manner that is protective of scenic and visual resources and is therefore consistent with Coastal Act Section 30251."

## Repair and Maintenance Project Benefits

- Repair and maintenance activities subject to the requested CDP offer the following benefits:
  - Mitigate potential biological impacts associated with repair and maintenance activities
  - Monitor and mitigate turbidity during repair and maintenance activities
  - Monitor and mitigate potential impacts to marine mammals, sea turtles, and special-status bird species
  - Anchoring locations that avoid kelp, seagrasses, and hard bottom substrate

## Benefits of Operational Desalination Facility

- An operational desalination facility would offer the following benefits:
  - Provide a reliable water source to Santa Barbara water users, including visitors to the coast
  - Ensure that desalinated water is produced consistent with the original intent of the Commission's approved CDPs for the facility i.e., to augment the City's water supply in times of severe drought or water supply shortage

## Conclusion

- Applicant is supportive of the Staff Recommendation and the analysis in the Staff Report
- Applicant requests <u>approval</u> pursuant to Staff Recommendation

Thank you



### Application No. 9-14-1781 (City of Santa Barbara)

### Jana Zimmer 2/10/15 response:

Thank you. I believe the other point that City Attorney Knecht was going to clarify was whether the City's obligation to perform under the three conditions imposed by the RWQCB remain operative as conditions of the amended permit and the proposed 2015 permit that you discussed, regardless of whether the City goes forward with a contract in June of this year as described. In other words, if the City decides not to go forward this year, does it still perform under the conditions imposed by RWQCB (i.e., feasibility/alternatives study complete and implementation plan submitted to RWQCB by 6/2017).

----Original Message-----From: Susan McCabe

Sent: Tuesday, February 10, 2015 8:35 AM

To: Jana Zimmer

Cc: Tom Luster; Iza, Sara

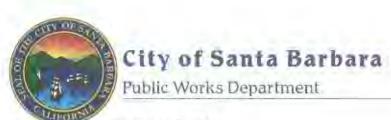
Subject: Response to questions re Santa Barbara desal

#### Hi Jana,

Attached is a letter responding to the questions you raised about the reactivation of the City of Santa Barbara¹s desalination facility in our meeting on February 6. I¹ve copied Tom Luster on this email. Please let me know if you have any further questions we can address.

Best, Susan

Susan McCabe McCabe & Company 122 Voyage Mall Marina del Rey, CA 90292 (310) 821-1004 w (310) 913-0105 c



February 9, 2015

#### Main Office

BBD Garden Street

P.O. Box 1990.

Santa Berdaru, CA

09E = 39 (48)

Jana Zimmer, Vice-Chair California Coastal Commission 45 Freemont Street, Suite 2000 San Francisco, CA 94015

#### Anministration

Tel 905.504.5371

Fax: 805.897 2619

SUBJECT: Additional Information per Ex-Parte Communication Information Request (Permit Application 9-14-1781)

#### Engineering

Tel: 806.584.5383

Fax: 805,564,546T

Dear Commissioner Zimmer:

#### PREMITIES

Tel 806.56/1.54 (5 Fee 305 807 3577

Thank you for providing us the opportunity to meet with you at the City of Santa Barbara on February 6, 2015, to discuss the reactivation of the City's Charles E. Meyer Desalination Facility and the City's pending Coastal Development Permit application for repair and maintenance activities associated with the facility in the Commission's jurisdiction (Permit Application 9-14-1781).

#### Street Labitomice

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As you requested in our meeting, we are providing additional information to the four main questions that remained unresolved after our conversation:

#### Hanshortston

Tel: 805 58 L 6385 Febr: RUS:5601.5467

#### Water Baseringe

lel Himmak half Fex 806,897,2614 What are the Regional Water Quality Control Board's conditions?

The City's amended NPDES Permit includes conditions requiring the City to analyze the feasibility of a range of alternative intakes, including potential alternative supplies (such as potable reuse), and City staff intends to comply with the terms of those conditions.

2. What is the estimated ongoing cost for repair and maintenance?

The City is carrying an allowance of approximately \$560,000 per year for potential ongoing repair and maintenance of the intakes, including the onshore work at the beach weir box. This figure is based upon the various types of potential ongoing maintenance activities that are described in the Repair And Maintenance Permit Application's project description.

What is the life expectancy of the existing HDPE liner that serves as the facility's offshore intake pipeline and the surrounding reinforced concrete host pipe? The life expectancy of both can be in excess of 100 years. Since the HDPE liner intake pipeline was installed in 1991, pursuant to one of the facility's two approved Coastal Development Permits, the possible life expectancy would be until approximately 2091 (and potentially longer). As the reinforced concrete host pipe was installed in 1925, the pipe is anticipated to last beyond 2025. However, the HDPE liner that conveys raw seawater to the City's desalination facility can

February 9, 2015

Page 2

function with or without the reinforced concrete host pipe surrounding it (meaning that if the reinforced concrete host pipe were to fail, it is not anticipated that this would the HDPE liner that is actually used for seawater conveyance). We note that repair and maintenance activities associated with the existing HDPE liner have not been proposed as part of the pending Repair And Maintenance Coastal Development Permit application.

4. Per your request, Figure 1 shows the existing weir box on East Beach, facing southeast.



Figure 1, Existing Weir Box on East Beach, Santa Barbara

Thank you again for your consideration and please let us know if you have any further questions.

Sincerely

Sara Iza, AICP Project Planner

SI/mh

cc: Tom Luster, CCC Staff
Sarah Knecht, Assistant City Attorney III, City of Santa Barbra

### Luster, Tom@Coastal

Luster, 10m@Coastai	
From: Sent: To: Subject: Attachments:	Dettmer, Alison@Coastal Friday, February 06, 2015 7:42 PM Luster, Tom@Coastal FW: ex parte City of Santa Barbara DeSal Susan Jordan Susan Testimony.docx; Untitled attachment 01137.htm; RWB hearing SB desal SHORTER.docx; SBCK Comments on RWB SB Desal Permit Amendment 11-26-2014.pdf; Untitled attachment 01143.htm
Sent: Friday, Februa To: Miller, Vanessa Cc: Dettmer, Alison Subject: ex parte Cit	[zimmerccc@gmail.com] ry 06, 2015 7:31 PM @Coastal; Staben, Jeff@Coastal @Coastal; Pederson, Chris@Coastal y of Santa Barbara DeSal Susan Jordan UNICATION DISCLOSURE FORM
Filed by Commission  1) Name or description	ner: Jana Zimmer on of project: City of Santa Barbara Desalination Plan F 12b
2) Date and time of	receipt of communication: Feb 6, 2015, 4:30-5:00 p.m.
3) Location of comm (If not in person, inc	nunication: telecon lude the means of communication, e.g., telephone, e-mail, etc.)
	(s) initiating communication:Susan Jordan (s) on whose behalf communication was made:

California Coastal Protection Network

6) Identity of persons(s) receiving communication: Jana Zimmer

7) Identity of all person(s) present during the communication: Susan Jordan

Ms. Jordan forwarded certain documents from the hearing before the RWQCB, including transcripts of testimony. (These documents which I have reviewed are attached hereto, in case they are not already part of the CCC staff file) She stated that Kira Redmond of Santa Barbara Channelkeeper has been the lead, but she will be providing a letter on behalf of CCPN in advance of the Commission hearing of 2/13. She has great difficulty with going back to 1996 to define what this work represents. The RWQCB reached back and based on documents from

1996 made findings that the City De Sal plant is not 'new' within the meaning of the Water Code. This is somehow connected to the State's pending policy on open ocean intakes.

Her primary concern is that it is difficult to sort out what issues are before the Coastal Commission for discussion at this time, because this is characterized in the staff report as limited to a 'repair and maintenance permit', and therefore the overall context and specifically the issue of feasibility of subsurface infiltration may not be addressed before the City goes forward with the 'redeployment' of screens and other repairs/replacement of components of the previously used open ocean intake. She was concerned about City testimony at the RWQCB transmitting the opinion of a Poseidon consultant, which she believes mischaracterized the status of the technical review of subsurface intakes for the Poseidon Carlsbad plant, and she does not understand what Poseidon's interest is or would be in the Santa Barbara plant. She inquired how the Commission will determine whether work is categorized as repair and maintenance, or new, for purposes of requiring analysis of the project consistency with Chapter 3 policies.

Feb/ 6, 2015

/s/ Jana Zimmer

### Testimony for RWQCB Hearing on SB Desalination Facility

My name is Susan Jordan, Director of the California Coastal Protection Network.

I want to start by saying that all of us fully understand the constraints and impacts of the current drought situation on CA and on Santa Barbara and we are sympathetic. And, we understand that decision-makers are facing tough decisions on when and how to allow ocean desalination – which uses a public trust resource - to move forward.

But we also understand that the decisions we make NOW will cast our desalination future in stone for decades to come – perhaps in perpetuity. Will we do the right thing and require that desalination facilities adhere to current standards based on scientific data and, in doing so, require that facilities use subsurface intakes and brine diffusers if feasible? Or will we allow desal facilities to use substandard technologies based on the information we had available a quarter of a century ago? That is the question you must answer today and, in doing so, understand that we will **all** bear the responsibility for that decision for decades to come.

As my colleagues have clearly pointed out, the pretzel logic that your staff has engaged in is so contorted as to defy rational thought. It goes something like this:

- We were supposed to do a Section 13142.5(b) analysis in 1991 that would have given us a more accurate understanding of the impacts of the intake pipe on marine life.
- But, oops, we didn't do the analysis as required under the Water Code that was passed in 1977, almost a full fifteen years earlier.
- So, in order to allow this facility to operate without conducting that stringent analysis required under law, we are going to rely on the less stringent analysis in the EIR under CEQA that was written a quarter of a century ago and call it a day.
- And isn't it nice that the applicant is willing to donate \$500,000 to satisfy any mitigation that might be due for the destruction of marine life.
- And, on top of that, the City has directed their staff to 'explore' a range of alternatives, including subsurface intakes and potable reuse options' so that's good enough for us!

First off, this direction to staff is **meaningless** unless **YOU**, as the RWQCB, include it as a condition in your amended permit. Despite educating City staff repeatedly on what these kinds of studies entail, we repeatedly hear "Oh, we can't do that. Those studies will take 10-15 years. And we already know subsurface wells are infeasible because we studied that in 1991."

Nonsense. Poseidon who hopes to build a second 50MGD desalination plant in Huntington Beach is doing those subsurface feasibility studies right now and the first Phase concluded, even for a facility of that magnitude, that subsurface intakes are technically feasible and the studies took **months** not **years**.

We understand the panic and fear that running out of water presents to those who have to make the tough decisions. But we also believe that fear panic and fear lead to poor judgment.

We believe that the RWQCB should reject the amendment as proposed by staff and do the required analysis now based on current information.

But if you are not going to do that, we believe that the board should, at a minimum, require the following:

- If the City declares a Stage 3 Drought Emergency in April or May, that this amended permit be viewed much as the CCC views an "Emergency Permit' with a beginning and a re-opener and that the City be allowed to operate until the emergency subsides based on specific, verifiable criteria.
- That the RWQCB require, as part of this amended permit, that the City conduct a Subsurface Feasibility Study **NOW** to be evaluated within a new Section 13142.5(b) analysis once the drought emergency subsides.
- That the voluntary donation of \$500,000, which is not strictly mitigation in the legal sense of the word, be directed instead to the conducting this Subsurface Feasibility Study. Mitigation is not voluntary. It is a requirement and it can be determined under the new Section 13142.5 analysis once the drought subsides.
- That should the drought continue beyond a specified period of time, that the City and the RWQCB complete the Subsurface Study and the new Section 13142.5(b) Analysis no later than 2020.

What I've outlined is a compromise that none of us will be completely happy with, but which I firmly believe allows all of us to move forward in a manner that ensures that our marine resources will be protected in the long term and that will bring the City into compliance with current technological standards.

For a City that prides itself on its environmental ethic, it should not be sticking its head in the sand. The only thing in the sand should be a subsurface intake.

In closing, a current sitting council member said to me: "I don't think it is so bad for us to do the "bad" thing for a little while and then do the "right" thing. What we want you to do it to require the City to do the "right" thing if you are going to let them do the "bad" thing for a little while.



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November 26, 2014

Peter von Langen Central Coast Regional Water Quality Control Board 895 Aerovista Place, Suite 101 San Luis Obispo, CA 93401-7906

Re: Amended Order No. R3-2010-0011, NPDES Permit No. CA0048143: Waste Discharge Requirements for the El Estero Wastewater Treatment Facility, City of Santa Barbara

Dear Mr. von Langen:

Please accept the following comments on the Draft Proposed Amendment of Waste Discharge Requirements Order No. R3-2010-0011, NPDES Permit No. CA0048143 ("Draft Amendment") for the El Estero Wastewater Treatment Facility in the City of Santa Barbara ("City"), which are hereby submitted by Santa Barbara Channelkeeper. Channelkeeper is a non-profit organization dedicated to protecting and restoring the Santa Barbara Channel and its watersheds, and for the past several months we have been tracking and providing input on the City's effort to reactivate its dismantled desalination plant. We are particularly concerned about the City's attempt to utilize an open ocean intake to draw seawater into the facility in light of the State Water Resources Control Board's move to require desalination facilities in California to utilize subsurface intakes as the preferred technology to minimize the intake and mortality of all forms of marine life through its imminent amendment to the California Ocean Plan.

As noted in Attachment G of the Draft Amendment, the Central Coast Regional Water Quality Control Board ("RWQCB") failed to consider Water Code section 13142.5(b) when it issued the permit that first authorized the brine discharge from the desalination facility in 1991. Water Code section 13142.5(b), which became effective on January 1, 1977, provides as follows:

"For each new or expanded coastal powerplant or other industrial installation using seawater for cooling, heating, or industrial processing, the best available site, design, technology, and mitigation measures feasible shall be used to minimize the intake and mortality of all forms of marine life."

The Draft Amendment states that the RWQCB "issued NPDES Permit No. 91-83, which authorized the *brine discharges* from the Desalination Facility, in September 1991. The Regional Water Board has reissued the NPDES Permit for the El Estero Wastewater Treatment Facility four times since then; each subsequent NPDES Permit has continued to *authorize the discharge of brine* from the Desalination Facility through the El Estero Wastewater Treatment Facility's ocean outfall." The RWQCB acknowledges the omission of a sec. 13142.5(b) analysis during its authorization and subsequent reissuance of the NPDES Permit.

The Draft Amendment states that, based "on a review of all available Regional Water Board records for the permitting of the Desalination Facility, there is no indication that the Regional Water Board considered section 13142.5(b) during the permitting of the Desalination Facility. Thus, the Regional Water Board did not make a formal determination about whether the Desalination Facility complied with sec. 13142.5(b) at the time it first authorized the Desalination Facility's brine discharge in NPDES Permit No. 91-83." If a sec. 13142.5(b) analysis was never conducted, then the City was never permitted to intake seawater.

Any intake conducted by the City when the plant was operational was therefore done illegally, and the City's current request for an amendment to its NPDES Permit to obtain authorization for the intake of seawater for the first time should thus be considered as a request for authorization for a new industrial installation using seawater. As such, pursuant to sec. 13142.5(b), the RWQCB must require the City to use the best available site, design, technology, and mitigation measures feasible for minimizing the intake and mortality of all forms of marine life.

# **Retroactive Determination**

The RWQCB now seeks to make a retroactive determination about the City's compliance with sec. 13142.5(b) based on information that is more than 20 years old. The Draft Amendment seems to rely primarily on an Environmental Impact Report (EIR) analysis of potentially significant impacts to make this retroactive determination. It is important to note that Water Code section 13142.5(b) mandates minimizing the intake and mortality of all forms of marine life -- which is a much stricter mandate than CEQA. Therefore, the attempt to retroactively decide what the RWQCB knew in 1991, and what the RWQCB would have considered and approved at that time, is based on inadequate CEQA analyses and a wholly inadequate justification for approval of a facility that was never permitted for seawater withdrawals in the first place.

As noted above, the Draft Amendment documents that the facility was not adequately analyzed to determine the best available site, design, technology and mitigation measures feasible to minimize the intake and mortality of all forms of marine life in compliance with Water Code section 13142.5(b), and the intake is therefore unpermitted. However, the Draft Amendment seems to simultaneously imply that the permit for the brine discharge, originally permitted in 1991 and subsequently renewed, somehow allows an associated withdrawal of seawater – but only after the RWQCB approves a retroactive analysis of what should have been considered and approved prior to construction and operation of the facility. The facility was constructed and briefly tested without a permit, and there is no justification for this unusual proposed retroactive permitting process. Further, the Draft Amendment cites a statement by the City that it will direct its staff to begin exploring a range of alternatives, including subsurface intakes and potable reuse options, after the City decides whether to issue a Design, Build, Operate contract in the future. Nothing in the Draft Amendment reconciles the contradictory findings that subsurface intakes are considered infeasible (via the proposed retroactive determination that the City complied with sec. 13142.5(b)), yet studies of the feasibility of these alternative intakes will not be conducted until after the permit amendment has been adopted by the RWQCB and the City is thus given license to proceed to operate the facility with a screened open ocean intake. And inexplicably, the Draft Amendment's reference to the City's vague suggestion that it may "begin exploring"

subsurface intakes is not accompanied by any enforceable condition in the amended permit that the City shall actually construct a subsurface intake if it is found to be feasible – much less any condition to ensure that these studies and modifications are completed prior to operation of the facility.

The City cannot make contradictory statements about the adequacy of studies performed 20+ years ago to demonstrate the infeasibility of subsurface intakes and a vague suggestion to explore it in the future, and the RWQCB cannot approve the permit amendment based on these contradictory assertions. Further, it is unacceptable to adopt the permit amendment with findings that the City will conduct a feasibility analysis in the future without requiring the promised studies as part of the analysis of compliance with Water Code 13142.5(b) – which is being considered for the first time in the current permit amendment.

The retroactive review and approval process being attempted in this permit amendment sets a dangerous precedent and invites mischief by future project proponents. As described, adoption of this permit amendment would effectively allow project proponents to build seawater desalination facilities without a permit for an intake system that complies with the Water Code, and then later argue that the facility is not "new or expanded" and thus the RWQCB has no authority to enforce the Water Code. This creates a massive loophole that would entirely undermine the letter and intent of the law – both substantively and procedurally.

We request the RWQCB to conduct a present-day 13142.5(b) analysis to determine the best available site, design, and technology for the City of Santa Barbara's Desalination Facility in order to authorize –for the first time – the City's ability to intake seawater in a way that complies with the Water Code. Most importantly, the RWQCB must require the City to conduct a subsurface feasibility study **before** giving any authorization for the intake of seawater.

# New or Expanded Vs. Existing

The RWQCB's analysis and recommended action to amend the City's permit is unfounded if it relies on the existing physical capacity of the facility to establish that the City's desalination facility is not a "new or expanded" facility. The Draft Amendment inaccurately describes and analyzes the facility in its current state -- either in terms of its physical existence or its permitted existence. The Draft Amendment fails to establish what actual physical capacity currently exists, or whether or not what is now being retroactively approved allows expansion of the current capacity up to a production of 10,000 acre-feet per year (AFY). There is currently a "design" for a 10,000 AFY facility that the RWQCB has never analyzed nor permitted to withdraw seawater, and there is a physically existing shell of a facility that may in the future be capable of producing some unknown quantity of product water after significant re-construction – which, again, has never been permitted to withdraw seawater.

The Draft Amendment states that "The City is not proposing at this time to increase the designed or permitted capacity above 10,000 AFY or make any other changes to the Desalination Facility that could result in higher intake or mortality of marine life, so the resumption of operation of the Desalination Facility would not be considered an "expanded" facility. This is wrong on numerous counts.

The facility as it currently "exists" has zero intake or mortality of marine life because it has been dismantled and is non-operational, which is why the City is preparing to spend \$40 million to reoutfit the facility with the necessary equipment to enable it to operate once again. Operation of the facility with an open ocean screened intake, as the City proposes, will indeed result in higher intake and mortality of marine life than what currently occurs—regardless of what was "designed" or envisioned as a possibility in the past. Moreover, the City is indeed proposing to "make other changes" to the facility, which are articulated in the Draft Amendment, including for example installing a wedgewire screen across the open ocean intake. Therefore, there is absolutely no basis for the finding that the facility is not "new or expanded."

Furthermore, there is a real and legitimate distinction between the actual production capacity of the facility and its permitted capacity. In fact, according to the City's 2011 Long-Term Water Supply Plan, the facility was built at an original capacity of 7,500 AFY, and sale of a portion of the facility reduced the production capacity to a maximum of 3,125 AFY; it never had the actual capacity to produce 10,000 AFY. Therefore, the RWQCB has never previously "permitted" a seawater intake for a 10,000 AFY facility, and there is no physical capacity to produce 10,000 AFY. Consequently, there is no conceivable argument that the facility is not required to meet the mandates of section 13142.5(b) because it is not "new or expanded." It is, in fact, new or expanded and therefore must be fully analyzed for compliance with the substantive mandates of section 13142.5(b).

Finally, the City should clarify that their stated intent to begin exploring potable reuse options, as well as subsurface seawater intakes, is a commitment to implement these preferred alternatives if they are found to be feasible. Furthermore, the permit amendment should include conditions to require implementation of these alternatives if they are feasible.

# SECTION 13142.5(b) ANALYSIS

First, it is important to clarify that the elements of the Water Code section 13142.5(b) analysis are all intended to ensure minimization of the intake and mortality of all forms of marine life. Further, the elements must be read as individual considerations, as well as how they can be effectively combined in a way that results in minimizing the intake and mortality of marine life. For example, it is not adequate to conclude that a "site" is preferable for some reason, and then conclude that a "technology" is not feasible because of some constraints at that given site. "Site" and "technology" must be considered in combination to achieve the goal of minimizing intake and mortality of marine life. The Draft Amendment does not adequately analyze the alternatives for minimizing the intake and mortality of marine life -- neither individually nor in combination.

# **Feasibility of Subsurface Intakes**

The Draft Amendment notes that the City analyzed the feasibility of three seawater intake technologies prior to selecting an open ocean intake and rejected them due to cost or lack of other large-scale applications. Again, this does not satisfy the requirement of sec. 13142.5(b) to use the best available technology to minimize the intake and mortality of all forms of marine life.

When determining the feasibility of the best available technology, cost should not be a factor. In *Entergy Corp. v. Riverkeeper, Inc.* (*Riverkeeper II*), the Supreme Court found that sec. 316(b) of the Clean Water Act ("CWA") authorizes the U.S. EPA to compare costs that are reasonably borne by the industry in determining the best technology available for minimizing environmental impact at cooling water structures. Importantly, however, U.S. EPA is not required to consider costs in conducting this analysis. *Riverkeeper II* held that the use of the term "Best Technology Available" ("BTA") prevents the use of inferior technologies, or what the court referred to as "second best."

Cost should not be a factor when determining the best available technology for Santa Barbara's desalination facility. The *Riverkeeper II* decision held that in "the EPA's determination of BTA, cost-benefit analysis is not consistent with the requirement of sec. 316(b) that cooling water intake structures 'reflect the best technology available for minimizing adverse environmental impact." Most importantly, the court determined that "the statutory language requires that the EPA's selection of BTA be driven by technology, not cost." "The Agency is therefore precluded from undertaking such cost-benefit analysis because the BTA standard represents Congress's conclusion that the costs imposed on industry in adopting the best cooling water intake structure technology available (i.e., the best-performing technology that can be reasonably borne by the industry) are worth the benefits in reducing adverse environmental impacts." In brief, there is no legislative intent to include a cost-benefit analysis in CWA section 316(b), nor is there any such intent evident in the Porter-Cologne Water Quality Control Act sec. 13142.5(b). They are similar and must be enforced similarly.

Regardless of what technologies existed in the early 1990s, the City of Santa Barbara should be required to implement the best technology available today to comply with the Water Code. Subsurface intake technologies have advanced dramatically in the last 25 years – something anticipated and promoted under the CWA. The CWA is a technology-forcing statute, and Congress anticipated that as new technologies are developed they would be required in future permit renewals as part of the iterative process.

Today, subsurface wells and infiltration galleries are internationally accepted as the best management practice for reducing impacts to the marine environment, and provide rate-payers with reduced costs. Subsurface intakes "always produce a higher quality feedwater compared to

<sup>&</sup>lt;sup>1</sup> Entergy Corp. v. Riverkeeper, Inc., <sup>1</sup> 129 S.Ct. 1498 (2009) ("Riverkeeper II").

 $<sup>^{2}</sup>$  Ld

<sup>&</sup>lt;sup>3</sup> *Id.* at 108. Congress's use of the superlative "best" in the statute cannot be read to mean that a facility that achieves the lower end of the ranges, but could do better, has complied with the law. The statutory directive requiring facilities to adopt the *best* technology cannot be construed to permit a facility to take measures that produce second-best results, especially given the technology-forcing imperative behind the Act. *Natural Res. Def. Council v. U.S. Envtl. Prot. Agency*, 822 F.2d 104, 123 (D.C. Cir. 1987). Insofar as U.S. EPA establishes performance standards instead of requiring facilities to adopt particular technologies, it must require facilities to choose the technology that permits them to achieve as much reduction of adverse environmental impacts as is technologically possible. *Riverkeeper II*, 475 F.3d at 108.

<sup>&</sup>lt;sup>4</sup> *Id*.

<sup>&</sup>lt;sup>5</sup> *Id*.

 $<sup>^{6}</sup>$  Id.

conventional open-ocean intakes." Improvements in water quality lead to a reduction in chemical use and power consumption causing a reduction in the carbon footprint and in potential environmental impacts. Elimination of impingement and entrainment impacts on the environment is also an added advantage of using a subsurface intake system. 9

Subsurface wells are currently used on large-scale applications worldwide. The Oman desalination plant (23 MGD capacity) receives 100 percent of its feedwater from subsurface wells – proving subsurface intakes are feasible for large-scale desalination facilities. The design uses 32 wells drilled over a 12.5 acre area to deliver a total of 58 MGD of feedwater to the desalination facility. <sup>10</sup> Monitoring from Oman shows that significant water quality improvements are being achieved by using subsurface intakes instead of open ocean intakes. <sup>11</sup> Recent data from Oman also "demonstrates that subsurface intake systems produce high quality seawater by removing nearly all of the algae, a high percentage of the bacteria, a significant amount of the organic carbon, and a high percentage of the marine biopolymers that are currently believed to facilitate membrane biofouling. <sup>12</sup> The Oman plant's design capacity far exceeds that of the City's proposed intake – clearly exhibiting that subsurface wells today are a well-established technology for large-scale application.

Infiltration galleries are also a well-established technology for large-scale application. The Fukuoka desalination plant (27 MGD capacity) in Japan has constructed a subsurface infiltration gallery to provide the plant's feedwater. The plant has been operating successfully for eight years without the need to clean the offshore gallery and with minimal cleaning of the membranes. Monitoring of the feedwater pumped from the gallery shows a very significant improvement in water quality, which requires less energy and allows Japan to provide cheaper desalinated water to their customers. Galleries are quickly becoming the technology of choice for seawater intakes because they can be built practically anywhere – including the proposed size and site of the City of Santa Barbara's desalination facility.

Regardless of whether a subsurface intake would have been deemed infeasible in the early 1990s, they are feasible now. There has been no showing that a subsurface intake is infeasible at this current time. And given that the City of Santa Barbara currently does not have the authority to intake seawater, now is the time to assess the best available technology for minimizing the intake and mortality of all forms of marine life.

<sup>9</sup> *Id*.

<sup>&</sup>lt;sup>7</sup> Missimer et al., Subsurface Intakes for Seawater Reverse Osmosis Facilities: Capacity Limitation, Water Quality Improvement, and Economics. 322 Desalination 37, 49 (2013); *available at*: http://www.kysq.org/docs/2013% 20Desalination-Subsurface% 20Intakes.pdf.

<sup>&</sup>lt;sup>8</sup> *Id*.

<sup>&</sup>lt;sup>10</sup> *Id*.

<sup>&</sup>lt;sup>11</sup> *Id*.

 $<sup>^{12}</sup>$  *Id* at 46.

<sup>&</sup>lt;sup>13</sup> A. Shimokawa, Fukuoka District desalination system with some unique methods, National Centre of Excellence in Desalination, International Desalination Intakes and Outfalls Workshop Proceedings, Adelaide, South Australia, May 16–17, 2012.

<sup>&</sup>lt;sup>14</sup> Missimer et al., Subsurface Intakes for Seawater Reverse Osmosis Facilities: Capacity Limitation, Water Quality Improvement, and Economics. 322 Desalination 37, 44 (2013); *available at*: http://www.kysq.org/docs/2013%20Desalination-Subsurface%20Intakes.pdf.

Therefore, we request that the RWQCB conduct a proper sec. 13142.5(b) analysis to determine if subsurface intakes are currently feasible at the City's desalination facility <u>before</u> amending the City's permit to authorize the intake of seawater.

#### Site

As noted in the Draft Amendment, the City rejected eight other potential sites for the desalination plant in the 1991 EIR for reasons related to tie-ins to the City's water system, availability of existing facilities for brine discharge and seawater intake, and construction-related environmental impacts. None of these satisfies the requirement of sec. 13142.5(b) to use the best available site to minimize the intake and mortality of all forms of marine life. In fact, it appears the most suitable site for the construction of sub-seafloor intakes in order to minimize the intake and mortality of marine life was not a consideration for selecting the sites for analysis. Therefore, the RWQCB cannot make that determination retroactively now.

#### Design

There is no indication that the City made an effort to consider a design production capacity that was consistent with minimizing the intake and mortality of marine life. The analysis of subsurface intakes at the wastewater treatment plant site found them infeasible for the larger design capacities envisioned. But similar analyses were apparently not conducted for alternative design capacities at that site – much less a determination that a design capacity consistent with what a subsurface intake would supply was not feasible.

Again, the overriding mandate of the Water Code is to minimize the intake and mortality of marine life. The City never adequately analyzed different sites and designs for compliance with that mandate.

### **Mitigation Funding**

In an EIR in 1994, the City based its estimates of plankton volume and mortality on plankton data collected offshore of Ormond Beach – approximately 40 miles away from the actual intake – between 1982-1984. An analysis of plankton mortality needs to be made based on data collected at the location of the actual intake, not 40 miles away, and within a time horizon far closer to the time the facility intends to be operated.

The Draft Amendment notes that the City has offered to pay \$500,000 as mitigation for the intake and mortality of aquatic life that will occur through the operation of the desalination facility. However, neither the City nor the RWQCB have provided any explanation of how this mitigation fee was calculated. Mitigation fees should be calculated using an area of production foregone (APF) model and acceptable calculations for converting the APF into a restoration project that will fully replace that estimated marine life mortality, or suitable monetary payments to ensure full replacement.

As noted above, the entrainment and impingement estimates were not properly based on sampling at the site – but instead relied on irrelevant data from a power plant seawater intake that is likely outside or near the edge of any Source Water Body for the proposed facility. And the CEQA analysis apparently used Adult Equivalency Loss (AEL) and/or Fecundity Hindcasting (FH) models to estimate impact. As noted in detail in the draft Ocean Plan amendment for

desalination, the scientific community does not consider these models the best science available for estimating impact, nor for estimating a mitigation fee.

Finally, the Draft Amendment fails to specify the maximum capacity of seawater they are proposing to permit the City to withdraw through the intake, which is standard practice for other desalination facility permits and clearly necessary. Without any estimation whatsoever as to the amount of seawater the City plans to withdraw through its open ocean intake, no realistic estimation of appropriate mitigation can be made.

Given these inadequacies in the sampling, modeling and calculations, the City's offer of \$500,000 in mitigation fees is entirely arbitrary and unsupported. The RWQCB cannot approve a first-time permit for the intake based on such a flawed analysis, or what is effectively the absence of any support for the notion that the mitigation fee will result in any benefits approaching full replacement of the marine life lost to the screened open ocean intake.

# **In-Lieu Mitigation**

Paying a mitigation fee in lieu of implementing the best available technology is illegal. The Draft Amendment states that "the City has agreed to provide for new mitigation funding prior to placing the Desalination Facility back into production mode." This mitigation funding will be used to mitigate for the marine life mortality caused by an open ocean screened intake – a subpar technology compared to the best available technology of subsurface intakes, which, as noted above, are feasible. Therefore, the City's obligation to pay mitigation fees in lieu of constructing subsurface intakes should be found to be illegal.

A plain reading of Water Code sec. 13142.5(b), like that of CWA sec. 316(b), precludes interpreting the term "mitigation" as synonymous with, or inclusive of, restorative measures. The language in the Porter-Cologne Water Quality Control Act provides that all four elements – site, design, technology and mitigation — whether read holistically or individually — must "…minimize the intake and mortality of all forms of marine life." The *Riverkeeper* court's decision is instructive to interpreting sec. 13142.5(b): "restoration measures substitute after-the-fact compensation for adverse environmental impacts that have already occurred for the minimization of those impacts in the first instance." In like fashion, restorative measures, by definition, do nothing to "mitigate" the intake and mortality of all marine life in the first instance. The mere use of the term "mitigation" is not sufficient to justify an interpretation of section 13142.5(b) that is inconsistent with *Riverkeeper* and the Once Through Cooling Policy.

The use of a screened open ocean intake in conjunction with a mitigation fee is illegal when subsurface intakes are feasible. The RWQCB should conduct a proper subsurface intake feasibility analysis before permitting the intake of seawater with an open ocean intake and mitigation fees.

#### **Updated Screens**

In order to reduce entrainment of aquatic life, the City apparently plans to install screens with a 1.0 mm or smaller slot size, and the Draft Amendment states that these are consistent with the currently proposed technology standards for screens for ocean intakes. This is in fact at the high

<sup>&</sup>lt;sup>15</sup> 475 F.3d at 110 (citing Riverkeeper I, 358 F.3d at 189).

end of the possible screen size requirements being contemplated in the draft Ocean Plan Amendment and, moreover, this technology standard was challenged in public comment and that challenge has not been resolved by the State Water Board. Thus, the adequacy of small-mesh screens for minimizing the intake and mortality of all forms of marine life is questionable at best, and the RWQCB cannot make a permit amendment authorizing such technology when no such standard yet exists.

Further, the purported benefits of fine mesh screens for minimizing the intake and mortality of marine life are associated with "cylindrical wedgewire screen" assemblies. In other words, the purported benefits are not just from the slot size, but from the design of the screen housing.

We do not agree that cylindrical wedgewire screens with small slot sizes have been shown to minimize intake and mortality of aquatic life in the marine environment similar to the area serving this facility – these screens were initially designed for use in rivers and other areas with strong single-direction currents well above the intake velocity. But fine mesh screens that are not housed in cylindrical housings raise even greater concerns.

The Draft Amendment for the intake inadequately describes the screens and housing, and fails to cite any studies suggesting the undefined screens will have any benefits to minimizing the intake and mortality of marine life. If the City is suggesting a modification to cylindrical wedgewire screens, then there must be a more detailed analysis of how the screens will function. But in any case, the permit amendment must be denied until there is more definition and scientific support for the proposed modification – including time for review and comment by the public.

#### **Future Intake Analysis**

The Draft Amendment notes that the Santa Barbara City Council has directed staff to return to City Council after the contract decision is made in April to begin exploring a range of alternatives, including subsurface intake and potable reuse options, and that the City will share the results of this analysis with the RWQCB by June 30, 2017. This has absolutely no bearing on the Draft Amendment and in no way binds the City to do anything, and is thus inappropriate to include in the permit, much less to use as a basis for making an unprecedented and unfounded retroactive determination of compliance with sec. 13142.5(b).

What should be included in the permit, however, is a condition that the City conduct an analysis of the feasibility of a subsurface intake NOW as required by sec. 13142.5(b), and if that analysis demonstrates that a subsurface intake is in fact feasible, a condition that the City's desalination facility install and utilize it as the best available technology feasible as is required by law – prior to operation of the facility.

# **Dilution**

The permit must set a technology based performance standard for the brine dilution. Properly designed spray brine diffusers are considered the best technology available for rapid dilution. And the experts convened by the State Water Resources Control Board recommended the discharge "shall not exceed 2 parts per thousand (ppt) above natural background salinity, to be measured as total dissolved solids (TDS) no more than 100 meters (328 ft) horizontally from the

discharge." This permit must include a similar or more protective standard.

The Draft Amendment has some discussion of predictable varying volumes of fresh water discharged and available for brine dilution. Apparently there are predictable times when the fresh water discharge will be minimal – primarily during dry weather periods. The Draft Amendment does not adequately discuss even greater potential reductions in discharge volumes from the wastewater treatment facility as a result of greater indoor water conservation efforts by the City – especially during dry weather periods. Nor does it explain how the desalination facility will operate at greater production capacity at the same times (dry weather) – producing more brine with less available fresh water for dilution.

Further, there is some discussion of improvements made to the existing diffusers. And in a separate section, there is some discussion about ambient currents and seasonal changes in current velocities and direction. However, there is no discussion of whether the diffuser improvements were designed for brine dilution, nor whether the design factored the changing velocities and direction of the ocean currents around the diffusers.

The permit amendment should include a discussion of all the technological and natural variables, and how the City will ensure rapid dilution in the water column to minimize all adverse impacts to marine life and benthic habitat.

Finally, Attachment G includes a vague statement that the City may begin to explore potable reuse options in the future. It is not clear if this would be an alternative to the proposed seawater desalination facility or an additional facility at the site or elsewhere. Regardless, however, the Draft Amendment does not address what effect any such wastewater recycling facility might have on the availability of fresh water for brine dilution.

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It is abundantly clear that mistakes were made in the original permit for this facility and the subsequent renewals. The facility should not have been constructed without a permit to withdraw seawater based on a full analysis showing compliance with Water Code section 13142.5(b), and temporary test operations of the facility without a permit to withdraw seawater were clearly illegal.

Despite these errors and omissions, however, the RWQCB cannot manufacture a procedure for a retroactive sec. 13142.5(b) compliance determination.

At a minimum, the RWQCB must make findings that:

- the withdrawal of seawater for operation of the desalination facility was never permitted by the RWQCB;
- any past operation of the facility was an illegal operation without an adequate NPDES/WDR permit;
- the proposed seawater intake "site, design, technology and mitigation" is being considered for the first time in this proposed permit amendment, and thus the facility is

- "new or expanded" and must be consistent with the mandates of Water Code section 13142.5(b);
- the analysis of section 13142.5(b) must be based on best science and technology available today, and the alternatives cannot be constrained by what was proposed and considered in 1991, and;
- the discharge approval must be updated to ensure compliance through best available technology in today's standards.

Only after having made these findings can the RWQCB consider alternatives for amending the City's permit to include allowances for a seawater intake and updated brine discharge.

Because the RWQCB is considering a permit amendment to allow the withdrawal of seawater for the first time, it is mandatory that the RWQCB to do a full analysis to ensure compliance with the Water Code. This analysis requires, in part, a thorough analysis of whether subsurface intakes are feasible for the requested design capacity, or other design capacities. Until that analysis is provided by the City, the application is incomplete and should be denied.

Thank you for the opportunity to provide comments on the proposed amendment the City of Santa Barbara's NPDES permit for the El Estero Wastewater Treatment Plant. Please do not hesitate to contact me if you have any questions regarding these comments.

Sincerely,

Kira Redmond Executive Director I've been an environmental policy advocate for 22 years, and I've seen some ill-conceived policy-making in my time, but this one really takes the cake. It seems as though your staff thinks they have a time machine and can go back to 1991 to fix the mistake of failing to determine that Santa Barbara complied with sec 13142.5(b) of the Water Code when the desal plant's brine discharge was first permitted. But there's no such thing as a time machine, and unfortunately the proposed "fix" doesn't fix the mistake at all AND makes a far worse one. You can't contrive a retroactive determination of compliance now, based on information that is 24 years old. The implications of such a decision will occur not 24 years ago but for decades to come. Desal technology has changed, as has our knowledge of the harmful impacts of open ocean intakes on the marine environment, and as such, state policy to address those impacts.

We recognize that Santa Barbara is in panic mode and rushing headlong into desal in a scramble to meet projected water supply shortfalls. And the Water Boards want "the Santa Barbara problem" to go away before the Ocean Plan amendment is enacted so that the City doesn't sue and delay the amendment, since Santa Barbara's desal plant is considered "new" in the current draft and would have to comply with sec 13142.5(b). Nobody wants Santa Barbara to derail the state policy. But we don't want to be the sacrificial lamb either. You're trying to sweep us under the rug with this fatally flawed retroactive 13142.5(b) analysis which would leave us stuck with an open ocean intake that is clearly NOT the best available technology and will cause substantial harm to marine life in the Santa Barbara Channel.

There is no legal precedent for what is being proposed. You can't pretend to know what would have occurred had the proper analysis been done in '91. And trying to fabricate a retroactive analysis is preposterous.

But let's pretend for a moment that we accept the notion that you could feign water code compliance today as if it were 1991. Even so, the proposed analysis doesn't come close to proving that the City used the best available site, design, technology and mitigation measures feasible to minimize the intake and mortality of marine life in '91 as the water code requires.

The draft amendment says various other sites were examined and rejected in the City's '91 EIR. But the city did not examine the best available site feasible to minimize the intake and mortality of marine life, because CEQA does not require it. Sec 13142.5(b), however, does.

It says the '91 EIR examined the best available design feasible. Again, a CEQA document is inappropriate and not equivalent to what's required under the Water Code.

In terms of technology, the draft amendment cites studies prepared for '91 EIR and findings made by the Coastal Commission in determining compliance with the Coastal Act. CEQA and the Coastal Act do not require the use of best available technology feasible to minimize the intake and mortality of marine life. The EIR concluded a screened intake would not result in a significant depletion of certain marine organisms, but again, this is not the appropriate standard. The staff report cites a plankton mortality study using data from Ormond Beach in the early '80s which concluded that no mitigation was required. However, the Water Code REQUIRES the best available mitigation feasible to minimize the intake and

mortality of ALL FORMS of marine life. Not only did the city not look at ALL FORMS of marine life (just plankton), but it did not do ANY mitigation. Clearly NO mitigation is not the best mitigation feasible. Moreover, there are scientific and policy guidelines for determining appropriate mitigation. The mitigation proposed by the City has no relation whatsoever to the actual mortality which will occur from the city's use of the open ocean intake.

Not only did the City not comply with each of the four individual elements required under 13142.5(b), but it also didn't analyze what combination of site, design, technology and mitigation would minimize intake and mortality as required.

Further evidence of the inadequacy of what's being proposed can be found in the SD RB's permit for the Carlsbad desal plant. While we don't think that permit is adequate, it nonetheless provides an example of what a real 13142.5(b) analysis looks like. The SD RB required Poseidon to submit a Flow, Entrainment and Minimization Plan to address EACH of the requirements of sec 13142.5(b) both separately and together, and required several revisions before approving the NPDES permit. They required restoration of 55.4 acres of wetlands as mitigation DESPITE the fact that the project's EIR found the facility would not cause significant adverse environmental impacts. The minimization plan and the RB's order both contain extensive analyses of the feasibility of alternatives to the proposed site, design and technology. The SD RB did a 236-page responsiveness SUMMARY with separate chapters for each of the four pillars of 13142.5(b), and conducted several public hearings before approving the permit. The paltry 6 pages put forward here obviously pales in comparison.

We understand why Santa Barbara is pushing so hard for this. We don't agree with their aggressive pursuit of desal before exhausting other less expensive and environmentally harmful supply and demand management alternatives. But we get their dilemma and, unless it rains a lot really soon, we have no choice but to swallow the desal pill. Which is why SBCK reasonably asked the city to include a subsurface intake feasibility analysis in its Request for Proposals for the contract to design, build and operate the desal plant. City council voted unanimously NOT to do so. They did however make a token, non-committal gesture to direct their staff to "begin exploring" the possibility later. So they know it's the right thing to do. They just need to be bound to do it. Simply asking the City to share their findings with you 2.5 years from now, as the proposed amendment does, is not enough.

We get that Santa Barbara is a unique situation and presents a quandary for you and the State Board. One could argue that Santa Barbara's desal plant is "existing" because you can point to a physical structure. But one could more convincingly argue that spending \$40M to turn it back on and produce any quantity of water constitutes an "expansion" from its current, zero production. Whether the plant was designed 25 years ago to potentially produce up to 10,000 AFY, or has a 20-year old CDP or a permit to discharge brine is irrelevant. It is not fair to the people who care about healthy marine resources in the Santa Barbara Channel, whose livelihood depends on them, and who work hard to protect them, to excuse Santa Barbara from doing what the State Board is set to require of every other desal plant in California based on a highly tenuous pretense that would allow them to use outdated and environmentally harmful technology and inadequate mitigation. To adopt the amendment as currently drafted is, simply

put, downright bad policy. It would set a dangerous precedent for the future, and begs a legal challenge, which would cost everyone a lot of precious time and money. We offer a multi-part solution to avoid that.

First, we urge you to reject the proposed amendment and instead amend the City's permit to authorize the temporary operation of the desal plant with an open ocean intake ONLY as a drought emergency measure, to be rescinded as soon as the drought emergency is lifted. The City intends to continue operating the facility at some level after this drought is over and requested the amendment so it can move ahead with reactivating its desal facility quickly as a drought response measure so this should be acceptable. Second, ask the city today to voluntarily accept the addition of a condition to the permit binding them to begin a subsurface intake feasibility analysis NOW. The City has already expressed its intention to "begin exploring" it this spring. We believe that it is your responsibility to require them to do so, and that the City, in a show of good faith, should voluntarily accept such a requirement as condition of this permit. Third, direct your staff to work with the city to conduct a thorough present-day 13142.5(b) analysis based on best site, design, technology and mitigation available TODAY as required by the Water Code. We would then expect future actions to require the city to implement the best available measures found feasible thru that analysis. We think this is an extremely reasonable compromise solution to the "SB problem" that everyone could live with, and we hope you proceed as such. Thank you.

#### EX PARTE COMMUNICATION DISCLOSURE FORM

Filed by Commissioner: Jana Zimmer

- 1) Name or description of project: City of Santa Barbara Desalination Plan F 12b 9-14-1781 (City of Santa Barbara desal)
- 2) Date and time of receipt of communication: Feb 5 2015, 11:-12:30 pm
- 3) Location of communication: City of SB Garden Street offices

(If not in person, include the means of communication, e.g., telephone, e-mail, etc.)

- 4) Identity of person(s) initiating communication: Anne Blemker/Bettie Wiess
- 5) Identity of person(s) on whose behalf communication was made: City of SB
- 6) Identity of persons(s) receiving communication: Jana Zimmer
- 7) Identity of all person(s) present during the communication:

Bettie Wiess, Kelley Dyer, Sara Iza, Linda Sumansky, representatives of City Public Works, Water Resources and Planning Departments;

Sara Knecht, City Atttorney's office, Joe Monaco (by phone) Dudek;

D.J. Moore, Latham & Watkins, special counsel to City,

Susan McCabe, McCabe & Co., Anne Blemker McCabe & Co, by phone.

#### Content:

They presented their Briefing book, previously submitted to CCC Staff. This is for a repair and maintenance permit for portions of the project within the Coastal Commission's original permit jurisdiction, to restart the SB Desalination Plant, which was approved by CDP in 1996. They stated that they are vested to that CDP, and there will be no new impacts to coastal resources; it is still the R/O processing, not within ESHA or setback,still zoned OM-1, and is an allowed use with a CDP.

The project is currently estimated to cost \$40,000,000. Of that, they estimate approximately \$3,000,000 is attributable to the components under the CDP within CCC original permit jurisdiction, but the bulk of the expenditure is to the plant itself.

We discussed specific components of the Repair permit, per slide 4: redeployment of intake screens, maintenance and repair of pumps and check valves, etc. They are not performing any repair or replacement of the outfall and intake pipe. The pipes have been there since the 1970's and earlier, and the old outfall pipe was repurposed as intake. They have sleeved through the old pipe in the 1990's. This CDP for repair is not covering any repair of these

pipes. We talked about the useful life of those pipes, and they were unclear at this point. But they stressed that this CDP for repair does not propose repair or replacement of these pipes.

D.J. Moore, Latham & Watkins stepped in at this point to comment that a lot of the questions about the useful life of the outfall/intake components would be addressed in the study the City has promised (and now has as a condition on their amended NPDES permit that they obtained from RWQCB on Jan 30) on the feasibility of alternatives to open ocean intake.

The outfall is commingled with the WWTP and no activities are proposed at the outfall. They redid the brine modeling for the RWQCB, and do not need additional brine diffusers to meet the NPDES requirements. RWQCB did not have any issue with the brine modeling, they were within bounds of the original assessment.

They clarified that the approval they received on January 30 was an amendment to their current NPDES permit, to 'retroactively' make findings that were not made back in 1991-6 under the Water Code. The 'amended permit' expires in May, 2015. They are filing a new application but they expect that the conditions the City agreed to (the feasibility study, the screen size, and the contribution to the restoration project at Devereux slough) would 'carry over', and that the new permit would be approved per an administrative extension by RWQCB staff, with no additional public hearing.

Regarding capacity, they are proposing 3125 AF for the current design/build. But their total capacity under the 1996 permit is 10,000. If they go up to that, the pumping velocity would not increase, but the time of operation would increase. They discussed their normal water portfolio and how desalination fits in as a last resort- it is very expensive. The \$40 million is for capital costs, and it is about \$6 million per year to operate. They went through their stepped response to the stages of drought. Increased groundwater pumping within the City, state water imports, conservation, drought based water rates.

The current status of the 'trigger' events to go forward are that they have statements of quals from three pre selected design, build / operate "consortia". They are IDE/Kiewit/Poseidon, Acciona Agua/Filanc (a Spanish company), and AE Com/Veolia. The City Council would be letting a contract in June.

In order to delay/defer the commitment to this contract, Gibraltar Dam would have to spill, but it is currently at only 20% of capacity. Even if that were to occur, the drought would not be over. It was unclear whether their commitment to RWQCB to study feasibility of alternatives is tied to letting of the contract to proceed, or is required as a term of their existing permit, regardless. They (City Attorney) will check on this. Under their commitment to the RWQCB they will produce a work plan by end of summer, with the results and the City's implementation actions by 6/2017. We discussed what implementation actions will realistically be available to the City if they go forward now with the contract for open ocean intake improvements, spend the \$40 million, and then determine another technology is feasible for the site. D.J. Moore stated that this would come down to a political question for the stakeholders. They did state that the majority of the investment (\$37M) is for the onshore component, so regardless of method of intake.

They don't necessarily agree that subsurface is an environmentally superior technology either generally or specifically for this site. They assert that the site specific testing, etc. that will have to occur will take up to two years. They did not have any guess as to how expensive it would be for the five acres of ocean bottom that would be involved, these questions would all be answered in the feasibility studies for the RWQCB.

Joe Monaco, Dudek, discussed the basis for the \$500,000 contribution to the restoration project at Devereux, which is upcoast about 10 miles and is under the management of UCSB, and the formula that the water boards' staff were involved in drafting. The theory is that providing estuarine habitat for larva is superior to trying to provide open water habitat. He stated that the Poseidon Carlsbad project findings were that estuarine mitigation is more effective on a 10:1 ratio.

Feb 5, 2015

/s/ Jana Zimmer

## EX PARTE COMMUNICATION DISCLOSURE FORM

Filed by Commissioner: Carole Groom

1) Name or description of project:

Application 9-14-1781 (Santa Barbara Charles Meyer Desalination Facility)

2) Date and time of receipt of communication:

Feb. 2, 2015 at 2:00pm

3) Location of communication:

Telephone

(If not in person, include the means of communication, e.g., telephone, e-mail, etc.)

4) Identity of person(s) initiating communication:

Anne Blemker

5) Identity of person(s) on whose behalf communication was made:

City of Santa Barbara

6) Identity of persons(s) receiving communication:

Carole Groom

7) Identity of all person(s) present during the communication:

Sara Iza, Linda Sumansky, DJ Moore, Susan McCabe, Anne Blemker

Complete, comprehensive description of communication content (attach complete set of any text or graphic material presented):

I received a briefing from City of Santa Barbara staff and representatives of the City in which they went through an electronic briefing booklet that was previously provided to staff (titled "Repair and Maintenance Activities at the Charles Meyer Desalination Facility, City of Santa Barbara" and dated February 13, 2015"). They described the City's proposed repair and maintenance of the existing Charles Meyer Desalination Facility at the offshore intake structure southeast of Stearns Wharf. The facility was originally approved by the Coastal Commission in 1991 and was placed on stand-by in recent years. As described by City representatives, the facility is now needed to meet water demand caused by the current drought. The representatives indicated that the scope of the current project involves redeploying existing pumps and check valves and redeploying screens and that the City has incorporated measures to avoid or minimize impacts to water quality, biological resources, public access and visual resources. As described by the representatives, an operational desalination facility will provide a reliable water source to Santa Barbara water users, including visitors to the coast, and ensure that desalinated water is produced consistent with the original intent of the Commission's approved CDPs for the facility.

<u>City representatives stated that they are in agreement with the staff recommendation and request</u> approval by the Commission.

Tel 4 2015	CAnole grows
Date	Signature of Commissioner

# EX PARTE COMMUNICATION DISCLOSURE FORM

Filed by Commissioner: Greg Cox

1) Name or description of project:

Application 9-14-1781 (Santa Barbara Charles Meyer Desalination Facility)

2) Date and time of receipt of communication:

Feb. 5, 2015 at 2:30pm

3) Location of communication:

Telephone

(If not in person, include the means of communication, e.g., telephone, e-mail, etc.)

4) Identity of person(s) initiating communication:

Anne Blemker

5) Identity of person(s) on whose behalf communication was made: City of Santa Barbara

6) Identity of persons(s) receiving communication:

**Greg Cox** 

7) Identity of all person(s) present during the communication: Sara Iza, Linda Sumansky, DJ Moore, Joe Monaco, Susan McCabe, Greg Murphy

Complete, comprehensive description of communication content (attach complete set of any text or graphic material presented):

I received a briefing from City of Santa Barbara staff and City representatives in which they went through an electronic briefing booklet that was previously provided to staff. They described the City's proposed repair and maintenance of the existing Charles Meyer Desalination Facility at the offshore intake structures southeast of Stearns Wharf and at the beach weir box. The facility was originally approved by the Coastal Commission as a temporary facility to provide water to relieve drought conditions in 1991, and then as a permanent facility in 1996. The City previously placed the facility on stand-by, and continued to pay for and maintain the facility. As the City representatives described, the facility is now needed to meet water demand caused by the current drought. The current project's scope involves redeploying existing pumps and check valves, redeploying screens that are consistent with the draft Ocean Plan Desalination Amendment, installing chlorination lines, pump power and control wires, and conducting ongoing periodic maintenance activities (including screen and pipeline cleaning). The City has incorporated measures to avoid or minimize impacts to water quality, biological resources, public access and visual resources. As described by the representatives, an operational desalination facility will provide a reliable water source to Santa Barbara water users, including visitors to the coast, and ensure that desalinated water is produced consistent with the original intent of the Commission's approved CDPs for the facility.

City representatives stated that they are in agreement with the staff recommendation and

request approval by the Commission.

2/6/15

Signature of Commissioner

# EX PARTE COMMUNICATION DISCLOSURE FORM Filed by Commissioner: 1) Name or description of project: 2) Date and time of receipt of communication: 3) Location of communication: (If not in person, include the means of communication, e.g., telephone, e-mail, etc.) 4) Identity of person(s) initiating communication: 5) Identity of person(s) on whose behalf communication was made: 6) Identity of persons(s) receiving communication: 7) Identity of all person(s) present during the communication: Complete, comprehensive description of communication content (attach complete set of any text or graphic material presented):

# **EX PARTE COMMUNICATION DISCLOSURE FORM**

0 0

Filed by Commissioner: _ culta Doch Co
1) Name or description of project: App 9-14-178/ (SBDeSa)
2) Date and time of receipt of communication: 3/15 4pm
3) Location of communication:
(If not in person, include the means of communication, e.g., telephone, e-mail, etc.)
4) Identity of person(s) initiating communication: (lung blanker)
5) Identity of person(s) on whose behalf communication was made:
6) Identity of persons(s) receiving communication:
7) Identity of all person(s) present during the communication Susan M Cat- pe Mona (o) Josh Haggmark, D) Mone
Complete, comprehensive description of communication content (attach complete set of any text or graphic material presented):
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Date' / Signature of Commissioner

# 9-14-1781

City of Santa Barbara

• CORRESPONDENCE

Date: February 9, 2015

To: The California Coastal Commission

Dear Esteemed Members of the California Coastal Commission,

I'm a retired landscape architect who has served on City's Parks & Recreation Commission for the past five years. I'm also a UCCE Master Gardener in SB County and our organization has partnered with the City of SB to develop and present free public workshops that help educate our community on water saving practices for the home gardener. High attendance at these workshops is testimony to our residents' commitment to reduce their water usage.

As you all know, Santa Barbara has rich architectural and horticultural heritage with stunning geography and a great climate. It's a combination of all these things that make it a beautiful place to live, work and play. These attributes also contribute to its attractiveness as a destination for visitors and thus significantly underpin our economic vitality.

While our parks, landscaped parkways, and tree-lined streets contribute to the City's beauty, they also provide immeasurable health benefits for our community. Our trees, including our historic and specimen trees, provide pleasant walking and cycling environments with shade protection and carbon sequestration, and our parks provide comfortable and safe places to recreate, relax, and play.

In 2014, City Council adopted our Urban Forest Management Plan and implementation has progressed to protect and preserve one of our precious resources — our public trees. As well, we have a thoughtful, professional long-term water supply plan and the City and community have stepped up and met aggressive conservation goals with over a 20% reduction to date.

To complement these successes, the desalinization plant is a critical component moving forward and in planning for the inevitable future drought cycles. Our community needs assurances that we'll have a reliable water supply without having to make potentially devastating cutbacks. That includes a reliable supply for our parks, public spaces, and our trees. Without the desalinization plant, we could sustain permanent damage to some important civic and horticultural treasures in the community.

I urge the California Coastal Commission to take the necessary steps to permit restarting our desalinization plant without delay. Thank you for your consideration.

Sincerely,

Lesley Wiscomb 1930 El Camino de la Luz Santa Barbara, CA 93109 DJ Moore Direct Dial: +1.213.891.7758 dj.moore@lw.com

LATHAM & WATKINS LLP

RECEIVED

FEB 0 9 2015

CALIFORNIA COASTAL COMMISSION

February 6, 2015

Re:

Agenda Item F12h

**BY EMAIL** 

Chair Kinsey and Honorable Commissioners California Coastal Commission 45 Fremont Street, Suite 2000 San Francisco, California 94105 355 South Grand Avenue
Los Angeles, California 90071-1560
Tel: +1.213.485.1234 Fax: +1.213.891.8763

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London Singapore
Los Angeles Tokyo

Madrid Washington, D.C.

Application No. 9-14-1781 (Repair and Maintenance at Charles E. Meyer Desalination Facility)

Dear Chair Kinsey and Honorable Commissioners:

On behalf of the City of Santa Barbara ("City"), we write regarding the Commission's consideration of the City's Coastal Development Permit ("CDP") application to conduct repair and maintenance activities at the portion of the Charles E. Meyer Desalination Facility within the Commission's retained jurisdiction (the "Project"). The Commission will consider the CDP application at its February 13, 2015, meeting.

The City supports the recommendations of Commission staff in the Staff Report, and appreciates the detailed analysis of the Project that the Staff Report presents. In addition, the City has discussed with Commission staff modifying the timing of certain Special Conditions to more appropriately align with the City's repair and maintenance work program. The City understands that Commission staff has agreed to these modification requests, and that the revised Special Conditions will be presented to the Commissioners in an Addendum to the Staff Report for consideration.

Consistent with Commission staff's recommendations in the Staff Report, the City agrees that as proposed, conditioned, and analyzed in the Staff Report, the Project will be fully consistent with all applicable Coastal Act policies and will not have any significant and unavoidable environmental impacts under the California Environmental Quality Act.

As described in the Staff Report, the scope of the Project under the Commission's consideration is **limited to repair and maintenance of the existing Charles E. Meyer Desalination Facility within the parameters of Coastal Act section 30610**. This scope of review is appropriate, and consistent with the City's CDP application, because the Commission has already approved two CDPs allowing the construction, long-term use, and maintenance of the Desalination Facility. Specifically, during a severe drought the Commission approved a CDP for a five-year temporary Desalination Facility and associated infrastructure in 1991 (CDP #5-91-18), and in 1996, approved a CDP allowing conversion of that temporary facility and

#### LATHAM & WATKINS LIP

infrastructure into permanent facilities (CDP #4-96-119). As the Staff Report recognizes, those CDPs remain valid and in effect. Moreover, since the Desalination Facility was put into long-term stand-by mode in the mid-1990s, the City has spent over \$2.3 million in reliance on those CDPs to conduct on-going maintenance of equipment and related infrastructure to ensure the Facility would be available to augment the City's water supply in the event of another severe drought or water supply shortage.

The Desalination Facility remains a critical component of the City's Long-Term Water Supply Plan, which has projected the need for desalinated water to meet the City's water demand by the Fall of 2016 due to the current, severe drought. The City currently estimates that it will take more than a year of work for the Desalination Facility to produce water again, and therefore believes it is essential that repair and maintenance activities be commenced as soon as possible to help alleviate the City's projected water shortage in 2016.

We also note that the City has actively maintained the National Pollution Discharge Elimination System ("NPDES") permit for the Desalination Facility from the Regional Water Quality Control Board since the Facility was first approved in 1991. As part of the Regional Board's recent evaluation of an amendment to the NPDES permit that applies to the Facility, the City voluntarily proposed several conditions related to the future evaluation of potential alternative intakes and other water supply options, as well as intake screen size. Last Friday, the Regional Board included those conditions in the City's NPDES permit amendment, which include (1) requiring intake screens with a 1.0 mm (0.04 in) or smaller slot size to be consistent with the currently proposed technology standards for ocean intakes under the State Water Board's draft Desalination Amendment to the California Ocean Plan (July 3, 2014 Draft Staff Report, page 49); and (2) requiring the City to submit a feasibility study workplan for potential alternatives by August 31, 2015, and the results of the alternatives analysis and the City's intended implementation actions by June 30, 2017. While the existing Desalination Facility and its intakes are not currently before the Commission, the City's alternatives analysis will be publicly available to the Commission for future consideration.

Again, we appreciate Staff's detailed review and analysis of the current repair and maintenance Project, and we request that the Commission approve the City's requested CDP at the February 13 meeting.

Duncan Joseph Moore

of LATHAM & WATKINS LLP

cc: Sarah Knecht, City of Santa Barbara
Tom Luster, California Coastal Commission (BY EMAIL AND FEDEX)



February 4, 2015

RECEIVED

FEB 0 9 2015

CALIFORNIA COASTAL COMMISSION

Mr. Tom Luster California Coastal Commission 45 Fremont, Suite 2000 San Francisco, CA 94105-2219

Subject:

Application No. 9-14-1781 – Letter of Support for City of Santa

**Barbara Desalination Facility** 

Dear Mr. Luster:

**Board of Directors** 

President Darlene Bierig

Vice President Jan E. Abel

Samuel Frye W. Douglas Morgan Richard Shaikewitz

General Manager and Secretary

Thomas R. Mosby

The Montecito Water District submits for your consideration this letter of support for the City of Santa Barbara's desalination project. The City's foresight and leadership on the south coast has led to the building of a vibrant and charming community that is a proud home to many and a destination for travelers from all over the world. The ambience, attraction, and health of Santa Barbara is dependent on having reliable water supplies to meet daily public health and safety needs.

The City's water supplies, as those of Montecito Water District, rely primarily on local regional surface water and are threatened during periods of extended drought. We are in the midst of another crippling drought which has reached emergency levels, affecting water supplies statewide. Such droughts may become more the norm than the exception. In planning for its future, the City recognized that desalination would be an important and necessary component of its water supply portfolio, and in the early 1990s, along with Montecito and Goleta Water Districts, built a regional desalination facility. Even with the arrival of State Water to the south coast in 1997, the City has continued to maintain and identify this water supply in its long term water supply planning, although Montecito and Goleta discontinued participation in the facility.

Water supply planning also includes an aggressive conservation program and the City's success cannot be overstated as current City water demand levels are 20% lower than water demand in the late 1980s. The City's pursuit of a long-term, reliable, environmentally sound, and drought-proof water supply through a permanent desalination facility is vital in upholding the value of this south coast community. With the south coast water agencies sharing in the regional water supplies available to our communities, having the desalination facility in operation will also provide a regional benefit during periods of water shortages.

583 San Ysidro Road Santa Barbara, CA 93108-2124

Ph 805.969.2271 Fax 805.969.7261

This is recycled paper. Each ton of recycled paper saves 7,000 gellons of water. Montecito Water District requests that you affirm and approve the City's permitted desalination plant as a permanent water supply facility, recognizing that its planned use will provide for future water supply security and offset the continuing degradation and unreliability of previously dependable surface water supplies, which benefits people, agriculture, and fisheries alike.

Please feel free to contact Tom Mosby, District General Manager, via phone at (805) 969-2271 or email at <a href="mailto:tom@montecitowater.com">tom@montecitowater.com</a> should you have any questions regarding the District's support of the City's desalination project.

Sincerely,

Øarlene Bierig Board President

# Luster, Tom@Coastal

From:

Tom Mosby <tom@montecitowater.com>

Sent:

Thursday, February 05, 2015 8:52 AM

To:

Luster, Tom@Coastal

Cc:

Darlene Bierig

Subject:

Application 9-14-1781 - City of Santa Barbara Desalination Facility

Attachments:

20150204182100.pdf

Tom Luster,

Please find attached a letter from the Board President of the Montecito Water District voicing its support for the City of Santa Barbara desalination facility that will be before the Coastal Commission at its meeting of February 13, 2015. We ask that you add this letter of support to the administrative record prior to the hearing and please do not hesitate to contact us if we can be of further assistance in advancing the City's permitting process with your agency.

Tom Mosby
General Manager
Montecito Water District



February 4, 2015

Mr. Tom Luster California Coastal Commission 45 Fremont, Suite 2000 San Francisco, CA 94105-2219

Subject:

needs.

Application No. 9-14-1781 – Letter of Support for City of Santa

**Barbara Desalination Facility** 

Dear Mr. Luster:

The Montecito Water District submits for your consideration this letter of support for the City of Santa Barbara's desalination project. The City's foresight and leadership on the south coast has led to the building of a vibrant and charming community that is a proud home to many and a destination for travelers from all over the world. The ambience, attraction, and health of Santa Barbara is dependent on having reliable water supplies to meet daily public health and safety

The City's water supplies, as those of Montecito Water District, rely primarily on local regional surface water and are threatened during periods of extended drought. We are in the midst of another crippling drought which has reached emergency levels, affecting water supplies statewide. Such droughts may become more the norm than the exception. In planning for its future, the City recognized that desalination would be an important and necessary component of its water supply portfolio, and in the early 1990s, along with Montecito and Goleta Water Districts, built a regional desalination facility. Even with the arrival of State Water to the south coast in 1997, the City has continued to maintain and identify this water supply in its long term water supply planning, although Montecito and Goleta discontinued participation in the facility.

Water supply planning also includes an aggressive conservation program and the City's success cannot be overstated as current City water demand levels are 20% lower than water demand in the late 1980s. The City's pursuit of a long-term, reliable, environmentally sound, and drought-proof water supply through a permanent desalination facility is vital in upholding the value of this south coast community. With the south coast water agencies sharing in the regional water supplies available to our communities, having the desalination facility in operation will also provide a regional benefit during periods of water shortages.

Board of Directors

President Dariene Bierig

Vice President Jan E. Abel

Samuel Frye W. Douglas Morgan Richard Shaikewitz

General Manager and Secretary

Thomas R. Mosby

583 San Ysidro Road Santa Barbara, CA 93108-2124

Ph 805.969.2271 Fax 805.969.7261

This is recycled paper. Each ton of recycled paper saves 7,000 gallons of water. Montecito Water District requests that you affirm and approve the City's permitted desalination plant as a permanent water supply facility, recognizing that its planned use will provide for future water supply security and offset the continuing degradation and unreliability of previously dependable surface water supplies, which benefits people, agriculture, and fisheries alike.

Please feel free to contact Tom Mosby, District General Manager, via phone at (805) 969-2271 or email at <a href="mailto:tom@montecitowater.com">tom@montecitowater.com</a> should you have any questions regarding the District's support of the City's desalination project.

Sincerely,

Darlene-Bierig

Board President

# Kate Rees 1666 Las Canoas Road Santa Barbara, CA 93105-2345 <u>Katerees13@gmail.com</u> 805.680,7170

February 3, 2015

RECEIVED

FEB 0 9 2015

Mr. Tom Luster California Coastal Commission Ocean and Energy Resources 45 Fremont Street, Suite 2000 San Francisco, CA 94105-2219 CALIFORNIA COASTAL COMMISSION

RE: A

Application Number: 9-14-1781

Applicant: City of Santa Barbara Desalination Plant

Project Description: Recommissioning of intakes for City of Santa Barbara's Charles

E. Meyer Desalination Facility

Dear Mr. Luster:

My name is Kate Rees, and I am the former General Manager of both the Cachuma Operation and Maintenance Board (COMB) and the Cachuma Conservation Release Board (CCRB). COMB is primarily responsible for the operation and maintenance of the water delivery system from Lake Cachuma on the Santa Ynez River, through the Tecolote Tunnel, to its member agencies along the south coast of Santa Barbara via the South Coast Conduit. It is also responsible for implementation of the Fisheries Management Program on the lower Santa Ynez River per the terms of the Cachuma Project Biological Opinion for endangered steelhead trout.

CCRB is responsible for the protection of its member agencies' Cachuma Project water rights with the State Water Resources Control Board, and fully supports development of supplemental water supply sources, as the Cachuma Project is unable to provide sufficient water to meet demand during drought. CCRB is also responsible for negotiating a new Biological Opinion with the National Marine Fisheries Service.

All of these activities affect water supply and must be managed and coordinated carefully to maximize water for people and agriculture, while balancing the needs of the endangered species that are also dependent on water from the Santa Ynez River. The City of Santa Barbara is a member agency of both COMB and CCRB, and has been a leader in accomplishing these parallel goals. However, as a result of the most severe drought in our history, Gibraltar Reservoir and Lake Cachuma have been severely depleted, and alternate water sources must be considered to meet demand, even with the exemplary water conservation already achieved.

I also served on the City's Water Commission for 10 years, and during that time witnessed first hand how carefully water supply planning was done. During my time on the Water Commission, I participated in development of a Long Term Water Supply Plan, annual water supply planning, rate re-structuring to properly maintain the water delivery system and encourage water conservation, a water recycling system, and rehabilitation of the city's ground water wells. In addition, huge improvements were made to the City's water and wastewater treatment facilities.

At the time of the last major drought cycle in the late 1980s and early 1990s, the City's water sources consisted of Gibraltar Reservoir, Lake Cachuma, and groundwater, with the heaviest reliance on its Cachuma entitlement. Since then, the City has greatly diversified its water supply portfolio. To assure that there would be sufficient water during the next major drought, the City added recycled water, state water, additional water purchases, water banking, and a desalination plant to be used in times of emergency. It has one of the most comprehensive and successful water conservation programs in the state, and an ongoing maintenance program to minimize leakage in its delivery system and increase reliability of its ground water wells. However, die the severity of the current drought, even with all of these additional water supply sources, there is currently not enough water to meet even a much-reduced demand without reactivation of the desalination plant.

All of the City's water sources are part of the City's long-term water supply planning. However, due to the very high cost of operating the desalination plant, it has always been considered an emergency supply. We are now in the fourth year of major drought, with no apparent break in the near future. To prevent substantial water supply shortages in 2015 and 2016, reactivation of the desalination plant is not only warranted, but necessary. It will give the City a reliable additional source of water in the event this drought continues and for future acute water shortages.

The City proposes to recommission equipment needed to reactivate the desalination facility, which includes intake screens, pumps, and valves at the two existing concrete intake structures offshore; electrical, communication, and chlorination lines within an existing intake pipe previously installed within an abandoned concrete outfall line; and associated equipment and connections located inside an existing weir on the beach. All of these activities constitute repair and maintenance of the existing facility.

Therefore, I urge the Coastal Commission to accept its staff recommendation to approve coastal development permit application 9-14-1781 in favor of the City of Santa Barbara.

Thank you for your consideration,

Kate Rees

cc:

Former General Manager of Cachuma Operation and Maintenance Board and Cachuma Conservation Release Board.

Rebecca Bjork, Public Works Director, City of Santa Barbara

Sheila Lodge \* 1303 Las Alturas Road \* Santa Barbara \* California \* 93103-1609

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February 3, 2015

California Coastal Commission Attn: Tom Luster 45 Fremont Street San Francisco, CA 94105

RE: Friday, February 13, 2015 agenda Item # 12 b. <u>Application No. 9-14-1781 (City of Santa Barbara)</u>

Dear Chair Kinsey and Commissioners:

I was mayor of the City of Santa Barbara during the previous drought -1985 to 1992. During that drought water use was cut back by an amazing 45%. The City gave \$80 rebates for each toilet replaced. We gave out free low flow shower heads and everything else we could think of to reduce water use. People competed with themselves to see how little water they could use.

These efforts resulted in a *permanent* reduction in water use by about 2,000 acre feet per year (afy) despite a larger population. (Pre-drought use was about 16,500 afy; current use is under 14,500 afy.) This permanent reduction makes it harder to make further cutbacks, but water use has been reduced by an additional 20% during this current drought.

The City's Long Term Water Supply Program shows declining water use with state-wide requirements for efficiencies in plumbing and water fixtures and appliances, even with increasing population into the future. However, the city has very limited water supplies, all of them dependent on rain.

Desalinated water is the only source *not* dependent on rain. 2014 was the warmest year in California's since records have been kept. We are possibly facing a permanent change in climate with less rain than in the past. These conditions makes it ever more essential for Santa Barbara's desalination plant to be back on line. It is the only source that will be there no matter what – unless the ocean dries up. It is a source entirely under the city's control, a source to be used only when needed.

A large part of Santa Barbara's economy revolves around tourism. If the City can't maintain its urban forest, already affected by the drought, dying and dead trees will certainly not invite tourists to come. Our residents will no longer have the benefits of cleaner air, cleaner run-off, less need for energy for cooling that mature trees provide.

The previous drought was less severe than the current one. Then the March miracle of 1991 occurred. The now not needed desalination plant was under construction and completed in 1992. We ran it for six weeks to make sure everything worked.

We need another March miracle, but the odds are it won't happen. This January, the heart of the rainy season, had less than 1.5" of rain. One forecast predicts no rainfall for this area until

February 3, 2015 California Coastal Commission Page 2

Feb. 19, and that storm is expected to produce no more than .01 inch.

The city must have the ability to put the desalination plant back in operation. I urge you to concur with the staff recommendation and enable the City of Santa Barbara to do so.

Thank you for your consideration.

Sincerely,

Sheila Lodge

Mayor, City of Santa Barbara, 1981 - 1993



February 2, 2015

Dear Mr. Luster:

California Coastal Commission Ocean and Energy Resources Attn: Tom Luster 45 Fremont Street San Francisco, CA 94105-2218

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CALIFORNIA COASTAL COMMISSION

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City of Buellton

Carpinteria Valley Water District

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City of Santa Barbara

City of Santa Maria

Goleta Water District

Montecito Water District

Santa Ynez River Water Conservation District, Improvement District #1

Associate Member

La Cumbre Mutual Water Company I am writing to you as the Executive Director for the Central Coast Water Authority (CCWA); the agency responsible for the treating and delivering water from the California State Water Project to 13 cities, water districts and other entities in Santa Barbara County. Specifically, I am writing to encourage you to support the approve the maintenance and repair permit to allow the City of Santa Barbara's to request to restart its desalination plant in a timely manner to meet its water supply needs in the midst of this severe drought.

The City of Santa Barbara is one of the cities served by CCWA and the State Water Project. As a member agency of CCWA, the City of Santa Barbara has taken steps in prior years to maximize the use of its available State Water supplies. With a contract amount of 3,300 acre-feet per year from the State Water Project, the City has been in a position to store State water that was considered to be in excess of its current year needs. For example, in calendar year 2013, the City was able to utilize its other local sources of water to meet the 2013 delivery demands which enabled the City to store approximately 2,600 acre-feet of its 2013 water for use in calendar year 2014. Similarly, the city has banked almost 1,500 acre-feet in earlier years with other State Water Project contractors which may be able to drawn upon to meet its needs in calendar year 2015.

In 2014, the City requested that CCWA find additional water supplies to supplement the 2,600 acre-feet of water it had stored from 2013. We were successful in acquiring almost 3,100 acre-feet on behalf of the City. While these supplemental water purchases were essential in enabling the City to meet its water needs in 2014 and 2015, over the long term, purchases of supplemental water delivered through the CCWA facilities will not be sufficient to meet the City's needs. That is because CCWA's ability to deliver water to the south coast CCWA project participants is limited to around 15,000 acre feet per year in total for the City of Santa Barbara, Carpinteria Valley Water District, Montecito Water District, Goleta Water District and La Cumbre Mutual Water Company. Santa Barbara's annual demand is around 14,000 acre-feet per year, and its guaranteed share of the 15,000 acre feet annual pumping capacity from CCWA is about 3,000 acre feet per year. Only if other south coast CCWA project participants elect not to use their available pumping capacity, are we able to deliver more than the 3,000 acre-feet per year to the City of Santa Barbara. But again, that additional pumping capacity is not quaranteed.

Also, while we have been successful in acquiring supplemental water supplies for the City of Santa Barbara and other CCWA project participants, there is no guarantee that these supplemental water supply sources will be available in the future.

255 Industrial Way Buellton, CA 93427-9565 (805) 688-2292 FAX: (805) 686-4700 As another component in the City's water supply portfolio, the proposed desalinization plant appears to be wise and prudent to ensure the city of Santa Barbara may draw upon a dedicated and reliable source of water to meet its needs into the future.

Sincerely,

Ray A. Stokes
Executive Director

**RAS** 

cc: Rebecca Bjork, City of Santa Barbara

### CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000 SAN FRANCISCO, CA 94105-2219 VOICE (415) 904-5200 FAX (415) 904-5400 TDD (415) 597-5885



# **F12b**

Date Filed: January 16, 2015 180<sup>th</sup> Day: July 15, 2015 Staff: T. Luster-SF Staff Report: January 30, 2015 Hearing Date: February 13, 2015

## STAFF REPORT: REGULAR CALENDAR

**Application No.:** 9-14-1781

Applicant: City of Santa Barbara

**Agents:** See Appendix B

**Location:** Beach and offshore areas of Santa Barbara Harbor, south of

Cabrillo Boulevard near Santa Barbara Street

Santa Barbara, CA (APN #17-191-03)

**Project Description:** Recommissioning of intakes for City of Santa Barbara's

Charles E. Meyer Desalination Facility, on the beach and

offshore of City of Santa Barbara, County of Santa

Barbara.

**Staff Recommendation:** Approval with Conditions

## SUMMARY OF STAFF RECOMMENDATION

The City of Santa Barbara ("the City") proposes to recommission its previously-permitted Charles E. Meyer Desalination Facility. Although the City operated the plant for only three months during a 1992 drought, it has since kept the onshore and offshore portions of the facility in a "caretaker" status and identified in its adopted Long Term Water Supply Program the option of restarting the plant. Portions of the facility on the beach and in offshore waters are within the

Commission's coastal development permit ("CDP") jurisdiction. The City proposes to recommission within the Commission's retained jurisdiction equipment needed to reactivate the facility, which includes intake screens, pumps, and valves at the two existing concrete intake structures located offshore, electrical, communication, and chlorination lines within an existing intake pipe that was previously installed within an existing abandoned concrete outfall line, and associated equipment and connections inside an approximately 10-foot by 20-foot weir box located on the beach. As these types of activities would be required for repair and maintenance of any desalination facility, the staff believes the proposed activities constitute repair and maintenance of an existing facility under Section 30610 of the Coastal Act. Although some repair and maintenance activities are exempt from CDP requirements, Section 13252(a) of the Commission's regulations requires a CDP for repair and maintenance activities, such as these, that involve the use of mechanized equipment in or adjacent to coastal waters or that involve placing materials within coastal waters. The Commission reviews the development associated with the proposed repair and maintenance for Coastal Act policy consistency, but not the underlying existing and previously-approved development.

The project would involve work on the beach and in coastal waters that could adversely affect coastal water quality, various marine species, and sensitive benthic habitat types. Use of vessels anchored offshore and heavy equipment working on the beach could result in spills or releases of fuel or other hazardous materials. The work would occur on a heavily-used public beach and in coastal waters used for recreation and fishing.

The Commission staff is recommending Special Conditions that include requirements to submit for approval and then implement (a) Anchoring Plans that avoid impacts to sensitive benthic habitat; b) a Turbidity Monitoring Plan that includes measures to minimize turbidity impacts to marine waters and nearby sensitive habitats; c) a Sensitive Marine Species Monitoring Plan to help ensure project activities do not adversely affect marine mammals or other protected wildlife; d) a Hazardous Material Spill Prevention and Response Plan that describes all measures that will be implemented to protect against or respond to spills; and e) a Nest Survey Plan to protect nearby nesting and breeding Western Snowy Plover and other avian species.

**Recommendation:** Commission staff believes the project, as conditioned, would conform to applicable Coastal Act policies, and therefore recommends **approval** of coastal development permit application 9-14-1781.

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# **APPENDICES**

**Appendix A** – Substantive File Documents **Appendix B** – Applicant's Agents

# **EXHIBITS**

Exhibit 1 – Location Map

Exhibit 2 – Site Plan

Exhibit 3 – Proposed Screen Configurations
Exhibit 4 – City's Proposed Mitigation Measures

## I. MOTION & RESOLUTION

#### **Motion:**

I move that the Commission approve Coastal Development Permit No. 9-14-1781 pursuant to the staff recommendation.

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

#### **Resolution:**

The Commission hereby approves the coastal development permit and adopts the findings set forth below on grounds that the development, as conditioned, will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment.

## II. STANDARD CONDITIONS

This permit is subject to the following standard conditions:

- 1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the Permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. **Expiration**. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- 3. **Interpretation**. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
- 4. **Assignment**. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- 5. **Terms and Conditions Run with the Land**. These terms and conditions shall be perpetual, and it is the intention of the Commission and the Permittee to bind all future owners and possessors of the subject property to the terms and conditions.

## III. SPECIAL CONDITIONS

1. **Other Approvals.** PRIOR TO PERMIT ISSUANCE, the Permittee shall provide to the Executive Director a copy of the following permits and approvals or evidence that the permits or approvals are not needed: (i) from the City of Santa Barbara, an approved coastal development permit or Substantial Compliance Determination; and, (b) from the Central Coast Regional Water Quality Control Board, an approved National Pollutant Discharge Elimination System ("NPDES") permit and Section 401 Water Quality Certification.

In addition, and PRIOR TO STARTING CONSTRUCTION ACTIVITIES, the Permittee shall provide to the Executive Director a copy of the project's General Construction Activity Stormwater Permit as issued by the Regional Water Quality Control Board.

The Permittee shall inform the Executive Director of any changes to the project required by these permits or approvals. Such changes shall not be incorporated into the project until the Permittee obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

- 2. **Assumption of Risk, Waiver of Liability and Indemnity.** By acceptance of this permit, the Permittee acknowledges and agrees:
  - a. That the site may be subject to hazards from coastal erosion, storm conditions, wave uprush, and tsunami runup;
  - b. To assume the risks to the Permittee and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development;
  - c. To unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and,
  - d. To indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.
- 3. **Anchoring Plan Initial Repair and Maintenance Activities.** PRIOR TO PERMIT ISSUANCE, the Permittee shall submit, for Executive Director review and approval, a revised Offshore Anchoring Plan that is consistent with the submitted *Utility Work Boat Anchoring Locations Subtidal Biological Survey Report*, dated September 30, 2014, but with the following modifications:
  - a. Clarify that offshore anchoring will be conducted at one location using a four-point anchoring system.

- b. Incorporate results of a seafloor survey conducted no less than 60 days prior to Plan submittal.
- c. Identify all areas of kelp, seagrasses, and hard substrate found within the survey area, including the bathymetric relief of all identified hard substrate. The Plan shall identify proposed anchor locations that will avoid kelp, seagrasses, and hard substrate and will avoid the possibility of dragging anchor lines or cables across those areas.
- d. Identify the owner/operator of the active pipeline located within the anchor survey area and identify measures the Permittee will implement to contact the pipeline owner/operator prior to and during times the Permittee will be conducting offshore work.

If anchoring cannot avoid kelp, seagrasses, or hard substrate, or if the Permittee proposes to change the method of anchoring, it shall seek an amendment to this permit to address the changed conditions or methods. The Permittee shall implement the revised Offshore Anchoring Plan as approved by the Executive Director. Any proposed changes to the approved Plan, including those resulting from a use of different vessels or equipment than originally proposed, shall be reported to the Executive Director. No changes to the approved Plan shall occur without a Commission approved amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

4. **Anchoring Plans – Ongoing Repair and Maintenance Activities:** At least 45 days prior to future offshore repair and maintenance activities that will involve anchoring, the Permittee shall submit, for Executive Director review and approval, an updated Anchoring Plan that includes measures consistent with those in the Anchoring Plan approved pursuant to **Special Condition 3**, but that has been modified to include updated information based on seafloor surveys conducted no less than 60 days prior to submittal of each updated Plan. The updated Plans shall include proposed anchoring locations that avoid kelp, seagrasses, and hard bottom substrate as identified during the most recent seafloor survey.

If anchoring cannot avoid kelp, seagrasses, or hard substrate, or if the Permittee proposes to change the method of anchoring, it shall seek an amendment to this permit to address the changed conditions or methods. The Permittee shall implement the revised Offshore Anchoring Plan as approved by the Executive Director. Any proposed changes to the approved Plan, including those resulting from a use of different vessels or equipment than originally proposed, shall be reported to the Executive Director. No changes to the approved Plan shall occur without a Commission approved amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

- 5. **Turbidity Minimization and Monitoring.** PRIOR TO PERMIT ISSUANCE, the Permittee shall submit, for Executive Director review and approval, a Turbidity Minimization and Monitoring Plan that includes the following:
  - a. Names of qualified observers who will be present at the offshore project site to monitor for turbidity during repair and maintenance activities. The submittal shall include the qualifications each observer;
  - b. Maximum allowable waste discharge and turbidity levels as provided by the California Ocean Plan and all measures the Permittee will implement to remain within those levels:
  - c. The type of equipment to be used to conduct pressurized cleaning of offshore structures. Flow rates on any hydraulic pumping system shall be set as low as is practicable in order to minimize the generation of a suspended sediment plume during the disposal of dredged sediment; and,
  - d. Identification of proposed nearby locations where discharged material will be deposited where it will not adversely affect hard substrate, kelp beds, or other sensitive habitat areas.

The Permittee shall implement the Plan as approved by the Executive Director. Any proposed changes to the approved Plan, including those resulting from a use of different vessels or equipment than originally proposed, shall be reported to the Executive Director. No changes to the approved Plan shall occur without a Commission approved amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

- 6. **Sensitive Marine Species Monitoring and Mitigation Plan.** PRIOR TO PERMIT ISSUANCE, the Permittee shall submit, for Executive Director review and approval, a Sensitive Marine Species Monitoring Plan. At a minimum, the Plan shall include the following:
  - a. Names of qualified biologists who will be present at the project site during all project activities. The submittal shall include the qualifications and proposed role of each biologist during monitoring activities. The selected biologists shall be able to identify the various marine mammals, sea turtle and special-status marine bird species that have the potential to occur in the project area, and will have knowledge of the ecology and behavior of these species.
  - b. Procedures to be followed and measures to be taken should marine mammals, sea turtles or special-status bird species be sited in the project area during active operations. At a minimum, the biological monitor shall be granted the authority to temporarily halt project activities if those activities pose a threat to individuals of a special-status species, and to suspend project activities until the animals have left the area.

c. Within 30 days of the last day of each offshore work period that require onboard monitors, the Permittee shall submit to the Executive Director a marine wildlife monitoring report prepared by the approved monitors that includes: (i) an evaluation of the effectiveness of monitoring protocols and procedures; (ii) reporting of all marine mammal, sea turtle, and other wildlife sightings (including species and numbers); (iii) any wildlife behavioral changes that may be attributed to project operations; and (iv) all project changes (e.g., delays, work stoppages, etc.) due to the presence in the area of marine wildlife species.

Project work involving the movement or positioning of vessels, use of heavy equipment, and attachment or removal of project components shall occur during daylight hours only. Artificial lighting associated with this work shall be limited to head-lamps or hand-held devices used by the divers, and necessary running or deck lights on diver support vessels. Night lighting of project vessels remaining on site shall be limited to that necessary to maintain navigational safety and to serve the nighttime site monitors who may be present on project vessels.

The Permittee shall implement the Plan as approved by the Executive Director. Any proposed changes to the approved Plan, including those resulting from a use of different vessels or equipment than originally proposed, shall be reported to the Executive Director. No changes to the approved Plan shall occur without a Commission approved amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

## 7. Hazardous Material Spill Prevention and Response.

- a. PRIOR TO STARTING PROJECT ACTIVITIES, the Permittee shall submit for Executive Director review and approval a project-specific Hazardous Materials Spill Prevention and Response Plan for all vessels and vehicles to be used for project activities. The Plan shall include:
  - a list of all fuels and hazardous materials that will be used or might be used during the proposed project, together with Material Safety Data Sheets for each of these materials;
  - specific protocols for monitoring and minimizing the use of fuel and hazardous materials during project operations, including Best Management Practices that will be implemented to ensure minimal impacts to the environment;
  - an estimate of a reasonable worst case release of fuel or other hazardous materials on the project site or into coastal waters resulting from project repair or maintenance activities;
  - all identified locations within the project footprint of known or suspected buried hazardous materials, including current or former pipelines, underground storage tanks, and the like;
  - a list of all spill prevention and response equipment that will be maintained on-site;
  - the designation of the onsite person who will have responsibility for implementing the plan;
  - a detailed response and clean-up plan in the event of a spill or accidental discharge or release of fuel or hazardous materials; and,

• a telephone contact list of all regulatory and public trustee agencies, including Coastal Commission staff, having authority over the development and/or the project site and its resources to be notified in the event of a spill or material release.

The Permittee shall ensure that all onsite project personnel participate in a training program that describes the approved Plan, identifies the Plan's requirements for implementing Best Management Practices to prevent spills or releases, specifies the location of all clean-up materials and equipment available on site, and specifies the measures that are to be taken should a spill or release occur.

- b. No less than 10 days prior to conducting offshore repair or maintenance activities, the Permittee shall notify the owner(s)/operator(s) of active pipelines within 500 feet of offshore project activities and shall identify the proposed type and timing of offshore work.
- c. In the event that a spill or accidental discharge of fuel or hazardous materials occurs during project construction or operations, all non-essential project construction and/or operation shall cease and the Permittee shall implement spill response measures of the approved Plan, including notification of Commission staff. Project construction and/or operation shall not start again until authorized by Commission staff.
- d. If project construction or operations result in a spill or accidental discharge that causes adverse effects to coastal water quality or other coastal resources, the Permittee shall submit an application to amend this permit, unless the Executive Director determines no amendment is required. The application shall identify proposed measures to prevent future spills or releases and shall include a proposed restoration plan for any coastal resources adversely affected by the spill or release.

The Permittee shall implement the Plan as approved by the Executive Director. Any proposed changes to the approved Plan, including those resulting from a use of different vessels or equipment than originally proposed, shall be reported to the Executive Director. No changes to the approved Plan shall occur without a Commission approved amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

- 8. **Protection of Onshore Avian Species.** PRIOR TO PERMIT ISSUANCE, the Permittee shall submit, for Executive Director review and approval, a Nest Survey Plan that includes the protocols described below and identifies measures to be implemented that will avoid and reduce project-related effects on breeding or nesting birds. One or more qualified biologists, approved by the Executive Director, shall prepare a Plan that provides, at a minimum:
  - a. Prior to starting project-related activities between March 1 and September 1 of any year, the biologist(s) shall conduct at least two breeding behavior and nesting surveys for birds protected by the Fish and Game Code, the Migratory Bird Treaty Act, and any birds that are included on state or federal lists of threatened or endangered species. The first survey shall take place no more than 30 days before the start of construction

activity. The second survey shall take place at least 10 days after the first survey and within 14 days of the start of construction. The surveys shall encompass all environmentally sensitive habitat areas, wetlands, and other areas of potential nesting habitat within 300 feet of project-related activities.

- b. Follow-up surveys are to be conducted by the approved biologist(s) if there is a period of construction inactivity of three weeks or more between March 1 and September 1 of any year.
- c. No project activities shall occur within 100 feet of an occupied nest. In addition, if occupied nests are identified in the survey area, the Permittee shall implement all measures necessary to ensure that noise levels resulting from project-related activity do not exceed 60 dB peak at the nest sites until the approved biologist(s) certifies that the nest is vacated, juveniles have fledged, left the area, and are no longer being fed by the parents, and there is no longer any evidence of a second attempt at nesting. Project activities shall be postponed if available measures do not allow a reduction in noise levels to below 60 dB peak during the active nesting and fledging period.
- d. The Plan shall specify that results of the breeding behavior and nesting surveys and the monitoring surveys will be provided to Coastal Commission staff upon request.

The Permittee shall undertake development in accordance with the approved Plan. Any proposed changes to the approved Plan shall be reported to the Executive Director. No changes to the approved Plan shall occur without a Commission approved amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

- 9. **Protecting Public Access, Recreation, and Fishing in Coastal Waters.** At least 15 days prior to starting any inwater activities for project repair or maintenance, the Permittee shall provide to the Executive Director documentation showing that the Permittee has submitted to the U.S. Coast Guard information required for a *Notice to Mariners* describing the location and timing of expected inwater work.
- 10. **Visual Resources.** All lighting used for project activities shall be directed downward and away from offsite areas to the extent allowed pursuant to applicable human health and safety requirements.

## IV. FINDINGS & DECLARATIONS

#### A. PROJECT DESCRIPTION AND PURPOSE

The City of Santa Barbara ("the City") is proposing to recommission its previously permitted desalination facility after several years of non-use. To reactivate the facility, the City is proposing to recommission equipment that has been in storage or install other equipment needed for facility operations. The City proposes to operate the facility under any of several previously-approved operating scenarios (see Background & History below).

Onshore components of the desalination facility are within the City's Local Coastal Program ("LCP") jurisdiction and are located at 525 East Yanonali Street and 420 Quinientos Street in downtown Santa Barbara (see Exhibit 1—Location Map). Project components within the Commission's retained jurisdiction in coastal waters and on the beach below the mean high tide line include a dual offshore intake structure, a water intake pipeline, and an onshore weir box on the City's East Beach (see Exhibit 2 – Site Plan). Project components to be placed within the Commission's retained jurisdiction include intake screens, pumps, and valves at the two concrete intake structures located about 2500 feet offshore, electrical, communication, and chlorination lines within an existing 36-inch diameter and approximately 2500-foot long High-Density Polyethylene ("HDPE") intake pipe that was previously installed within an existing abandoned concrete outfall line, and associated equipment and connections inside an approximately 10-foot by 20-foot weir box located on the beach. The new equipment will be similar in size and design to the original equipment. Along with recommissioning, the City proposes to conduct ongoing repair and maintenance activities for the facility, as described below. The facility would discharge brine to an existing outfall shared with the City's El Estero Wastewater Treatment Facility, though no changes are proposed to the discharge line or outfall structure.

## **Background & History**

In the late 1980s, during an extended statewide drought, the City started investigating seawater desalination as a potential method to provide part of the City's water supply. In 1991, the City and the Commission approved coastal development permits ("CDPs") allowing construction of a temporary desalination facility that would operate for up to five years. At the time, the City anticipated that the facility would produce between 2,500 and 10,000 acre-feet per year for up to five years, with any production over 5,000 acre-feet per year meant to replace regional water supplies that had been lost due to the drought.

In March 1992, the City completed construction and operated the facility for about three months. However, this coincided with the end of the drought and with the City's acquisition of other water. In 1993, the City removed much of the equipment and deactivated the facility, though in 1994, the City adopted its Long Term Water Supply Program ("LTWSP") that identified the

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<sup>&</sup>lt;sup>1</sup> In March 1991, the City approved coastal development permit ("CDP") #91-CDA-06 for the onshore portions of the facility, and in May 1991, the Commission approved CDP #4-91-18 for portions of the facility within its retained jurisdiction on the beach and in offshore water.

<sup>&</sup>lt;sup>2</sup> An acre-foot equals about 326,000 gallons, which, at Santa Barbara's current rates of water use per capita, is enough to support about two or three households per year.

facility as part of the City's long-term water portfolio. The LTWSP identified four main operating scenarios in which the facility would provide between 3,125 and 10,000 acre-feet per year under different drought or water supply conditions:

- <u>Scenario 1</u>: Intermittent operation (i.e., during periods of drought) at a level of up to 3,125 acre-feet per year to meet the City's drought needs.
- <u>Scenario 2</u>: Intermittent operation at up to 7,500 acre-feet per year to meet regional drought needs of the City and of the Goleta and Montecito Water Districts.
- <u>Scenario 3</u>: Baseload operation (i.e., during both drought and non-drought periods) at up to 7,500 acre-feet per year to meet regional needs during drought and to produce water for exchange with other water purveyors during non-drought periods.
- <u>Scenario 4</u>: Intermittent operations at up to 10,000 acre-feet per year for maximum plant capacity during drought.

In 1995 and 1996, the City and Commission approved CDPs for the long-term use of the facility.<sup>3</sup> The City has not operated the facility since 1992, but has maintained the remaining equipment and the NPDES permit needed for facility operations. Additionally, the growth and water planning described in the City's 2010 General Plan Final Environmental Impact Report and its updated 2011 LTWSP are based on the facility being available during periods of extended drought.

## **Proposed Project Activities**

The project involves two main categories of activities –reinstallation of equipment, and ongoing maintenance and repair. The City will initially attach new screens, screen support structures, and refurbished pumps to the two existing offshore concrete bases, each of which is about 19 feet in diameter and extend about seven feet above the seafloor. The originally permitted facility used flat panel screens with a 3/8-inch mesh; however, the City now plans to use cylindrical wedgewire screens with openings of 1 millimeter or less, which will be attached in either of two configurations (see Exhibit 3 – Proposed Screen Configurations). One configuration would include two 19-foot long and four-and-one-half-foot diameter screens attached to opposite sides of the two concrete intake supports (for a total of four cylindrical screens), while the other would include four ten-foot long and three-and-one-half-foot diameter screens attached to each of the four sides of the two concrete bases (for a total of eight cylindrical screens). The new screens are expected to slightly reduce the facility's entrainment rates as compared to the screens used previously. The City will also place electrical, communication, and chlorination lines extending from the intake structures to the shoreline within the existing outfall and attach refurbished pumps and valves within the intake structures, and will re-connect those structures to the existing intake pipe that runs inside the outfall. On the beach, the City will conduct any necessary connections at the weir box between the offshore intake components to the onshore facility.

The City plans to attach the offshore equipment from a utility workboat to be anchored near the intake structures. Before connecting the equipment, the City will first clean marine growth from

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<sup>&</sup>lt;sup>3</sup> In December 1995, the City approved CDP 95-0045 for onshore portions of the facility, and in October 1996, the Commission approved CDP 4-96-119 for portions of the facility within its jurisdiction.

the two concrete structures using high-pressure water and removal by hand, and will clear the existing intake line by pigging. Access to the onshore work area will be from the East Beach parking lot, along the beach on a public bikeway, and across the Laguna Channel bridge to the weir box. The City expects initial work for connecting these offshore components to take about three weeks, with work on the beach expected to take up to about two weeks.

Once the necessary equipment is in place and the facility is recommissioned, the City proposes to conduct several types of ongoing maintenance:

- <u>Periodic screen cleaning</u>: The City would use any of several methods to clean the intake screens. It may occasionally pressure wash the screens in place, use compressed air to do "air burst" cleaning, or may occasionally remove the screens for cleaning. All three methods would be conducted from a utility workboat, with each pressure wash or removal expected to take up to six days and each air burst cleaning expected to take about a day.
- <u>Periodic screen removal and replacement</u>: During times when the desalination facility is in short- or long-term standby, or during periods of inclement weather, the City may entirely remove the screens and store them on land. Removal and replacement would be done using a utility workboat anchored near the intakes.
- <u>Chlorination</u>: The chlorination lines will allow the City to clear the facility's intake line using less frequent pigging events. The chlorination lines would run from onshore through the intake line and would release chlorine within the offshore intake structures. To avoid the release of chlorine into the surrounding ocean water, the City would conduct chlorination only when the offshore seawater pumps are providing flow from the intake structures to the onshore facility. Chlorination could occur for up to one hour on a daily, weekly, or monthly period, as determined necessary by the facility operators.
- <u>Pigging</u>: The City will initially pig the intake line as part of preparing the intake structure for re-use, but will also do pigging on an as-needed basis during facility operations. Pigging would be conducted from a utility workboat, where a pig and flexible piping would be placed within the 36-inch HDPE pipeline and pushed onshore. Materials collected from inside the pipe would be removed at the weir box and disposed of in a landfill.
- Periodic maintenance and/or replacement of pumps, valves, and wiring: The offshore pumps and valves and the electrical, communication, and chlorination lines may require periodic maintenance, with timing dependent on offshore conditions, rate of use, and other factors. Pump and valve removal, repair, or replacement would be done from a workboat and would take up to about four days per event. Line replacement may involve work at both the offshore and onshore ends of the intake structures using vessels and a truck-mounted winch.

Most proposed offshore repair and maintenance activities would be done from a vessel and would require anchoring near the intake structure. Work on the beach would be done using both mechanized equipment and handtools. Access to the weir box for repair and maintenance would involve driving vehicles through the beach parking lot, across the Laguna Channel bridge, and across about 600 feet of public beach.

As part of the project, the City has included several mitigation measures meant to avoid or reduce potential project-related adverse effects on coastal resources (see **Exhibit 4 – City's Proposed Mitigation Measures**). These include conducting worker training about the site's biological resources, conducting biological surveys to identify specific habitats or species to be avoided during work activities, and other measures that are described in the Findings below.

#### **B.** COMMISSION JURISDICTION

Project components below the mean high tide line and within the Commission's retained jurisdiction include the intake structure located within coastal waters, the weir box located on the beach, and the beach accessway. The standard of review is Chapter 3 of the Coastal Act.

The City's proposed recommissioning of the facility is a continuation of the project the Commission approved previously though CDPs 4-91-18 and 4-96-119. The City would operate the project in a manner similar to that which was previously approved. Each of the project components that the City would place within Commission jurisdiction are components of a desalination facility that generally require regular repair and maintenance and that would have needed repair or maintenance over time if the plant had been operating, rather than in long-term standby; therefore the proposed activities are considered "repair and maintenance" pursuant to Coastal Act Section 30610.<sup>4</sup> Additionally, although the project has not operated since the early 1990s, the City has continued to maintain the existing site and equipment at an average cost of more than \$100,000 per year and has continued to obtain from the Central Coast Regional Water Quality Control Board a Waste Discharge Permit and NPDES permit for the facility every five years, as required pursuant to state and federal water quality laws. Further, and as noted above, the City in 1994 identified the project as part of its Long Term Water Supply Program, which the Commission acknowledged in its 1996 approval of CDP 4-96-119.

Nonetheless, although these activities are considered repair and maintenance, they would involve the use of mechanized equipment within or adjacent to coastal waters and would involve placing materials within coastal waters. Therefore, the proposed activities require a CDP pursuant to the Commission's regulations at Section 13252(a).<sup>5</sup>

Notwithstanding any other provision of this division, no coastal development permit shall be required pursuant to this chapter for the following types of development and in the following areas: ...

For purposes of Public Resources Code Section 30610(d), the following extraordinary methods of repair and maintenance shall require a coastal development permit because they involve a risk of substantial adverse environmental impact:

<sup>&</sup>lt;sup>4</sup> Coastal Act Section 30610 states, in relevant part:

<sup>(</sup>d) Repair or maintenance activities that do not result in an addition to, or enlargement or expansion of, the object of those repair or maintenance activities; provided, however, that if the commission determines that certain extraordinary methods of repair and maintenance involve a risk of substantial adverse environmental impact, it shall, by regulation, require that a permit be obtained pursuant to this chapter.

<sup>&</sup>lt;sup>5</sup> Section 13252(a) states, in relevant part:

<sup>(1)</sup> Any method of repair or maintenance of a seawall revetment, bluff retaining wall, breakwater, groin, culvert, outfall, or similar shoreline work that involves:

<sup>(</sup>A) Repair or maintenance involving substantial alteration of the foundation of the protective work including pilings and other surface or subsurface structures;

#### C. OTHER AGENCY APPROVALS & CONSULTATIONS

The project is additionally subject to permits and approvals from the following:

- <u>Central Coast Regional Water Quality Control Board</u>: The project is subject to a modified NPDES Permit, Section 401 Water Quality Certification, and General Construction Activity Stormwater Permit from the Regional Board.
- <u>City of Santa Barbara</u>: Substantial Conformance Determination. As noted above, the City proposes to reactivate and operate the facility consistent with the conditions and requirements of the CDPs approved in the 1990s.

The project is within an area of State tidelands that were granted in trust to the City and therefore does not require a lease from the State Lands Commission.

**Special Condition 1** requires that the City submit proof that it has obtained the above permits and approvals or documentation from the agencies that a permit is not needed. The project will also be subject to a Section 404 permit from the U.S. Army Corps of Engineers, due to placement of fill in coastal waters. The Commission's approval of this CDP serves as the Commission's consistency certification for the Corps permit.

#### D. PROTECTION OF COASTAL WATERS AND SPECIES

#### Coastal Act Section 30230 states:

Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

#### Coastal Act Section 30231 states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine

<sup>(</sup>B) The placement, whether temporary or permanent, of rip-rap, artificial berms of sand or other beach materials, or any other forms of solid materials, on a beach or in coastal waters, streams, wetlands, estuaries and lakes or on a shoreline protective work except for agricultural dikes within enclosed bays or estuaries;

<sup>(</sup>C) The replacement of 20 percent or more of the materials of an existing structure with materials of a different kind; or

<sup>(</sup>D) The presence, whether temporary or permanent, of mechanized construction equipment or construction materials on any sand area, bluff, or environmentally sensitive habitat area, or within 20 feet of coastal waters or streams...

<sup>(3)</sup> Any repair or maintenance to facilities or structures or work located in an environmentally sensitive habitat area, any sand area, within 50 feet of the edge of a coastal bluff or environmentally sensitive habitat area, or within 20 feet of coastal waters or streams that include:

<sup>(</sup>A) The placement or removal, whether temporary or permanent, of rip-rap, rocks, sand or other beach materials or any other forms of solid materials;

<sup>(</sup>B) The presence, whether temporary or permanent, of mechanized equipment or construction materials.

organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

#### Coastal Act Section 30232 states:

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

These Coastal Act policies require generally that development be conducted in a manner that protects coastal waters, does not result in adverse effects to those waters and their associated coastal resources, and protects against spills of hazardous substances into coastal waters. Proposed project activities that could affect coastal waters, habitats, and species include construction, repair, and maintenance activities in and adjacent to coastal waters, which could cause any of several adverse effects, such as those associated with anchoring a work barge near areas of sensitive benthic habitat offshore, increased turbidity caused by inwater work, potential releases of oil, fuel, or other hazardous materials into offshore waters or onto the beach, and potential disturbance or "take" of marine mammals, bird species, or other protected species in the area of project activities.

The project's offshore components include a water intake pipeline that extends about 2500 feet from shore to two intake structures on the seafloor at a depth of about 30 feet. The waters offshore of the City provide a mix of habitat, including open water, kelp beds, seagrasses (including native eelgrasses *Zostera marina* and *Z. pacifica*, and surfgrasses *Phylospadix torreyi* and *P. scouleri*) and several types of hard bottom substrate. The hard bottom substrate – mostly rocky reef or cobble – are more sensitive to disturbance than the surrounding sandy bottom areas and support a diversity of species not commonly found in the soft bottom areas. Similarly, kelp beds and areas of seagrass are considered a more sensitive resource supporting a diversity of species not found in other nearby habitats. These coastal waters also serve as habitat for numerous marine species, including several types of marine mammals. Pursuant to the federal Magnuson-Stevens Fishery Conservation and Management Act, the offshore waters are designated as Essential Fish Habitat for several dozen species, including a number that are important for commercial and recreational fishing.

Onshore project components include an existing weir box on the City's East Beach, which is the site of extensive public access and recreation, and also serves as designated critical habitat for the federally-endangered Western snowy plover (*Charadrius nivosus nivosus*). The site is also adjacent to designated critical habitat for the federally-endangered tidewater goby (*Eucyclogobius newberryi*), which is found in the nearby Laguna Creek estuary.

The project site is subject to coastal erosion, wave uprush, and other coastal hazards. **Special Condition 2** requires the City to acknowledge the existence of these hazards and to indemnify the Commission for any damages or liability resulting from such hazards.

Proposed activities that could affect coastal waters and species include anchoring one or more work boats near the intake structure, cleaning the intake structures and pipeline, and repairing and maintaining the offshore project components. The type and size of materials that would be placed within coastal waters are similar to those that were previously approved pursuant to the two CDPs issued for the project in the 1990s.

Anchoring: The intake structure is located on the seafloor in an area with a mix of soft and hard bottom substrate, with low to moderate concentrations of aquatic vegetation. The initial recommissioning activities would require anchoring a workboat for up to about three weeks near the offshore intake site. Ongoing repair and maintenance activities at the offshore intake are also expected to be done from an anchored workboat, though for shorter periods. The City proposes to use a four-point anchoring system to ensure vessel stability.

In September 2014, the City conducted a seafloor survey to identify benthic habitat types in the area of the intakes and to locate areas of primarily sandy bottom habitat (i.e., less than 10% hard substrate) where anchors could be placed during offshore work. The survey evaluated eight sites, each about 40 feet in diameter, and found that all were almost entirely sandy or soft sediment, though with scattered, low-relief hard substrate nearby. The survey noted no seagrasses in the area but identified areas of other aquatic vegetation, including various red algae species, with an occasional individual giant kelp plant (*Macrocystis pyrifera*) or giant sea palm (*Pterygophora california*) growing on the hard substrate. The survey also identified an active pipeline within about 50 feet of the intake structures, along with a number of abandoned pipe sections. The City had initially proposed anchoring the workboat at two sites – one for each intake structure, with a total of eight anchoring sites – but results of the survey showed it could conduct work at both structures using a single set of four locations for its proposed four-point anchoring system. All would be located within areas of sandy, soft bottom habitat.

To ensure the anchoring required for the proposed repair and maintenance activities avoids or minimizes effects on the more sensitive hard substrate areas and on sensitive vegetation, **Special Conditions 3 and 4** require the City to submit an anchoring plan prior to each work event that requires anchoring and to include results from a seafloor survey done within 60 days of submittal. Each plan is to identify areas of soft bottom habitat where anchors could be placed without disturbing hard bottom substrate and where anchors and anchor lines and cables can be positioned so as not to scrape across hard bottom areas or affect kelp or seagrasses. Each plan is to also identify measures the City will implement to avoid contact with the active pipeline in the intake area, including providing notification to the pipeline operator of the type and timing of proposed activities.

<u>Turbidity</u>: Before initially connecting equipment to the intake, the City would use a high-pressure water spray and hand removal to remove growth from the concrete structures. Any ongoing repair and maintenance activities would require similar cleaning of the inwater structures. To reduce potential turbidity-related impacts, the City has proposed cleaning only

those surfaces needed to attach equipment to the structures or needed for access to accomplish such repair and maintenance. It has proposed implementing a Turbidity Minimization Plan ("TMP") that will include measures such as vacuuming sediment and biological material collected during the cleaning process, monitoring to ensure low levels of turbidity, and reducing the rate or extent of cleaning if turbidity levels exceed certain thresholds. To ensure this TMP avoids and minimizes adverse turbidity effects on nearby species and habitats, **Special**Condition 5 requires the City to provide a copy of its proposed TMP for Executive Director review and approval. The Plan is to specify the type and flow rate of equipment to be used, all measures that the City will implement to ensure turbidity does not exceed levels allowed by the California Ocean Plan, and the location(s) of disposal areas that will not cause adverse effects on hard bottom substrate or kelp.

Marine Mammal Protection: Marine mammals can be found year round in the waters offshore of Santa Barbara. Some pass through during annual migrations, such as gray whales (*Eschrichtius robustus*) during December through April each year and humpback whales (*Megaptera novaeangliae*) in May through September each year. Others, including harbor seals (*Phoca vitulina*) are year-round residents. All these marine mammals are protected under the federal Marine Mammal Protection Act, which prohibits "take," harm, and harassment of these species.

The City has proposed as part of its project several mitigation measures meant to avoid or reduce potential adverse effects on marine mammals. It will limit vessel speeds to no more than five miles per hour during all offshore repair and maintenance activities and will conduct marine mammal surveys and monitoring before and during these activities. Surveys and monitoring will be conducted by a City-approved biologist, who will also have the authority to slow or stop work if marine mammals are observed close to the work area (within 300 feet) or if the marine mammals exhibit evasive or defensive behaviors during the activities. The biologist(s) will conduct an initial survey within 24 hours of starting project activities and another within one hour of vessels leaving the harbor to go to the offshore work site. Each vessel used will have two National Oceanic and Atmospheric Administration-approved marine mammal monitors on board to conduct monitoring. The monitors will establish a monitoring zone of at least 500 feet around the work site, and will note the presence of any marine mammals observed within that zone. Should marine mammals approach to within 200 feet of the work area, the monitors will order work to stop until the mammal(s) move away.

To further reduce potential effects, **Special Condition 6** requires the City to submit a Marine Mammal Monitoring Plan for Executive Director review and approval that identifies qualified biologists to implement measures of the Plan, describes all proposed avoidance and mitigation measures, including those noted above, and provides for documentation of all observations of marine mammals, sea turtles, and other wildlife, along with an evaluation of the effectiveness of the monitoring protocols.

<u>Spill Prevention and Response</u>: Project activities would occur directly above, within, and adjacent to coastal waters, and could result in spills of fuel, oil, or other similar hazardous materials. The City has also proposed implementing a Spill Response Plan that would include a U.S. Coast Guard-approved Shipboard Oil Pollution Emergency Plan ("SOPEP") for the primary project vessel along with general response protocols for any support vessels that would be part of

the project activities. However, the City has not yet submitted a proposed spill prevention and response plan, in part because it does not yet know which vessels it will use to conduct project activities. In addition to spill potential from vessels, some of the project activities would involve the use of mechanized equipment on the beach adjacent to coastal waters, which also creates the potential for spills into coastal waters and the need for measures to avoid and minimize possible effects of spills.

To ensure all project activities on or adjacent to coastal waters provide adequate protection against spills and allow for the necessary response should spills occur, **Special Condition 7** requires the City to submit a Hazardous Material Spill Prevention and Response Plan for all vessels and vehicles to be used during project activities. That Plan is to identify maximum spill potential during project activities, identify specific protocols to monitor and minimize the use of fuel and hazardous materials during those activities, identify all spill response equipment that will be immediately available to respond to any spills, a notification list of responsible agencies to be contacted in the event of any spills or releases, and other similar measures meant to avoid and minimize potential spills.

Onshore Repair and Maintenance: Work on the beach would involve the occasional transport and use of heavy equipment that could result in spills or could disturb nearby sensitive marine and avian wildlife. The City has included several mitigation measures as part of its project. For example, it will provide worker education about avoiding effects on nearby sensitive species and implementing measures to avoid spills or releases of materials during project activities. The City will use an existing bikeway along the beach to access the work area near the weir box. Before conducting the necessary repair and maintenance activities, the City will install temporary fencing around the weir box area to delineate the area needed for project work.

Several components of the **Special Conditions** described above will also help to avoid or minimize potential project-related impacts. For example, required measures of the Spill Prevention and Response Plan will apply both to offshore vessels and to equipment used onshore. Additional measures described below will further reduce the potential for project-caused adverse effects on species likely to be present at or near the site.

<u>Protection of Avian Species – Nest Surveys</u>: The weir box on the beach is within federally-designated critical habitat for the Western snowy plover, and work on the beach has the potential to disturb breeding or nesting birds in the area. There is little suitable habitat available at this beach, due in part to its heavy use by the public; however, the City has proposed conducting pre-activity nest surveys before conducting any repair or maintenance activities during the plover's March through August nesting season each year. If active nests are found within 300 feet of proposed project activities, the City will postpone or halt the activities until nests are vacated and any juveniles have fledged. The City will also have an authorized biological monitor present at the work area during all repair and maintenance activities to ensure compliance with all mitigation measures.

To further avoid adverse effects to protected avian species, **Special Condition 8** requires the City to submit a Nest Survey Plan that describes all measures that will be implemented to identify the presence of nearby nests and to reduce potential impacts to active nests. These measures include surveys, noise reduction measures, and prohibition of project activities if nests are within a specified physical or noise-related distance to those activities.

Grunion: The California grunion (*Leuresthes tenuis*) spawns in nearby coastal waters during particular tides between February and September, with peak spawning occurring in April and May each year. Spawning events are associated with night high tides during periods of full and new moons. The City has proposed to avoid conducting project maintenance activities during key spawning events by conducting surveys before high tide periods identified as likely times for grunion spawning. If grunion are observed, the City will not conduct maintenance until after a survey during the next high tide series shows that no spawning grunion are observed.

Based on the above, the Commission finds that the project, as conditioned, conforms to the relevant marine life and coastal water protection policies of the Coastal Act.

## E. PUBLIC ACCESS, RECREATION, AND FISHING

#### Coastal Act Section 30211 states:

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

## Coastal Act Section 30212(a) states:

Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) It is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) Adequate access exists nearby, or, (3) Agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

## Coastal Act Section 30214 states, in relevant part:

- (a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:
  - (1) Topographic and geologic site characteristics.
  - (2) The capacity of the site to sustain use and at what level of intensity.
  - (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.

(4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

#### Coastal Act Section 30221 states:

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

#### Coastal Act Section 30234.5 states:

The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.

Coastal Act policies require generally that development located adjacent to the shoreline in an area with ongoing public use not interfere with that use and provide access to the shoreline. The policies also require protection of fishing activities in coastal waters. Proposed project activities would occur on a beach and in coastal waters used for public recreation and would result in short-term adverse effects to public access, recreation, and fishing.

Activities on the beach include the movement and use of mechanized equipment to connect, repair, or maintain equipment at the weir box. The City estimates initial recommissioning will take up to about two weeks and require a work footprint of up to several hundred square feet. Similar future repair and maintenance activities could require approximately the same footprint and amount of time.

The City has included several measures meant to minimize the effects of these activities on public access and recreation. It will conduct its staging activities away from the beach at the inland location of the desalination facility, and will conduct repair and maintenance activities for no more than ten hours per day on weekdays only, which will minimize interference with heavier use of the beach by the public on weekends. During these activities, the City will install temporary fencing to demarcate the area needed for project activities and to provide for public safety. Project vehicles will access the weir box area by using an existing public bikeway along the beach. This will result in minor and short-term reductions of public access, but will also reduce potential effects on nearby sensitive species, as described above in Section IV.D.

Inwater activities will be conducted by anchored vessels located about 2500 feet offshore. To ensure these offshore activities minimize any potential adverse effects on public access, recreation, or fishing, **Special Condition 9** requires the City, prior to starting any offshore activities, to provide information to the U.S. Coast Guard describing the location, vessel type(s), and work schedule for inclusion in a Coast Guard "Notice to Mariners."

Based on the above, the Commission finds that the project, as conditioned, conforms to the relevant public access and recreation policies of the Coastal Act.

#### F. VISUAL RESOURCES

Coastal Act Section 30251 states, in relevant part:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas...

The Coastal Act generally requires that permitted development protect views to and along the coast. The proposed activities will cause some temporary visual impacts due to the presence of large construction equipment offshore and on the beach, though these impacts are expected to be relatively temporary and minor. The initial expected work offshore includes anchoring a work barge about 2500 feet offshore of the beach for up to about three weeks and the onshore work includes using heavy equipment on a public beach for up to about two weeks. This area of the beach is used for recreation and access to the water.

The City plans to conduct the recommissioning, repair, and maintenance activities during daylight hours only, which will reduce the need for project-related lighting. Any night lighting used on the anchored workboat will be the minimum required for navigation and safety purposes. To further reduce the potential effects of lighting, **Special Condition 10** requires that all project-related lighting be directed downward and inward towards the work areas to the extent feasible.

For the reasons described above, the Commission finds that the proposed project, as conditioned, will be carried out in a manner that is protective of scenic and visual resources and is therefore consistent with Coastal Act Section 30251.

# V. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096(a) of the Commission's administrative regulations requires Commission approval of coastal development permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The proposed project has the potential to result in significant adverse environmental impacts to a number of coastal resources. The Commission has identified and adopted ten special conditions necessary to avoid, minimize, or mitigate these impacts. With the inclusion of these special conditions, the Commission finds that, within the meaning of the California Environmental Quality Act of 1970, there are no further feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the proposed project may have on the environment. Therefore, the proposed project, as conditioned, has been adequately mitigated and is determined to be consistent with CEQA.

## **APPENDICES**

# **Appendix A – Substantive File Documents**

California Coastal Commission, *Coastal Development Permit #4-91-18*, issued to the City of Santa Barbara for temporary operation (up to 5 years) of the Charles E. Meyer Desalination Facility, May 9, 1991.

California Coastal Commission, *Coastal Development Permit #4-96-119*, issued to the City of Santa Barbara for long-term operation of the Charles E. Meyer Desalination Facility, October 11, 1996.

City of Santa Barbara, *Coastal Development Permit Application #9-14-1781*, and associated submittals, March through December 2014.

City of Santa Barbara, Section 404 Application to the Corps of Engineers, and associated submittals, January 2015.

City of Santa Barbara, Long Term Water Supply Program Final Environmental Impact Report (SCH #91121020), May 24, 1994.

City of Santa Barbara, *Temporary Emergency Desalination Project Final Environmental Impact Report (SCH #9010859)*, March 1991.

**Appendix B – Applicant's Agents:** see attached.

# **Appendix B - Applicant's Agents**

# <u>Individuals Who Will Communicate On Behalf of the Applicant for Compensation</u>

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**Appendix B - Applicant's Agents** 

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**Figure 1**. Map showing general location of the project site offshore from the City of Santa Barbara.

9-14-1781 EXHIBIT 1 Location Map

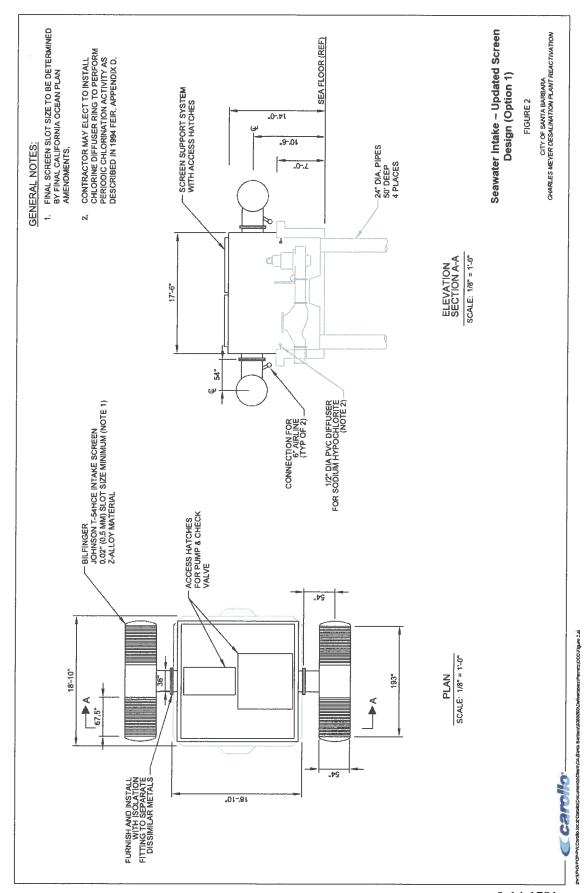


## **Desalination Facilities Site Plan**

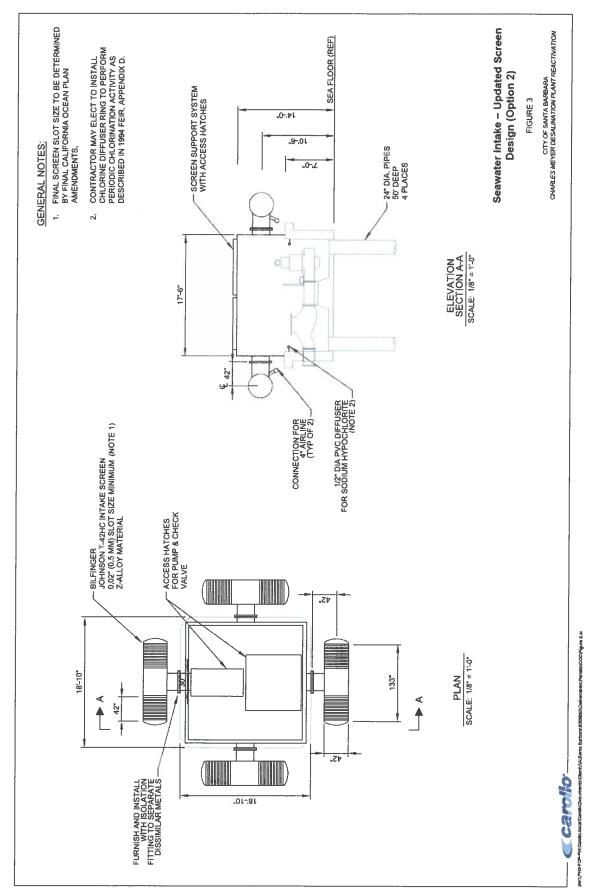
FIGURE 1

CITY OF SANTA BARBARA
CHARLES MEYER DESALINATION PLANT REACTIVATION





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## 6.0 AVOIDANCE AND MINIMIZATION MEASURES

Based on this biological assessment, no potential adverse effects to western snowy plover habitat (breeding, non-breeding, or critical habitat) and/or impacts to individuals are anticipated; and no potential adverse effects to tidewater goby habitat and/or individuals are anticipated. Although western snowy plovers are expected to breed in Santa Barbara County, such breeding activities would be less likely in locations near the Action Area. Nevertheless, implementation of the recommended avoidance measures would further ensure no impacts would occur to breeding western snowy plovers. The measures will also result in avoidance of impacts to nesting western snowy plover. All avoidance measures are to be developed and implemented in coordination with USFWS.

## 6.1 General Avoidance Measures

- Workers Educational Training. Prior to the initiation of any maintenance activities, all personnel associated with the proposed Project should attend a worker education training program (program) conducted by a qualified biologist. In general, it is recommended that the program discuss the western snowy plover and tidewater goby habitat preference(s), occupied habitat in the area, life histories, law and regulations, as well as potential impacts and protection measures, and Action Area limits. Protections and regulations federally-listed species should also be included in the program. It is recommended that a species and habitat fact sheet also be developed prior to the training program and distributed at the training program to all contractors, employers and other personnel involved with maintenance activities at the weir box. Specifically, the program should also include:
  - A. Measures to prevent indirect impacts during maintenance activities should be covered, including delivery, storage, and usage of materials and chemicals as they relate to the protection of adjacent aquatic habitat.
  - B. Training materials should include laws and regulations that protect federally-listed species and their habitats, the consequences of non-compliance with laws and regulations and a contact person (i.e. maintenance activity manager, biological monitor, and City's Project manager) in the event that protected biological resources are affected.

The City should notify the qualified biologist in advance of the kick-off meeting and any subsequent meetings that may take place if additional contractors are employed during additional maintenance activities at the weir box. A sign in sheet will be circulated for signatures to all personal that attend the workers educational

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- training to confirm that program materials were received and that they understand information presented.
- BIO-2 <u>Establish temporary fencing</u>. Temporary fencing will be installed around the perimeter of the weir box on the beach to prevent inadvertent encroachment by crews and equipment to the surrounding beach area.
- Weir box access. Access from the public bike trail to the weir box will occur along the least disturbing route feasible. This will include keeping all personnel and equipment directly adjacent to or within the iceplant bordering the northern portion of beach.
- Personnel restrictions. Maintenance personnel will be prohibited from harming, harassing, or feeding wildlife and/or collecting special-status plant or wildlife species; bringing pets on the Action Area; littering on the Action Area; or exceeding normal daytime operational noise or nighttime lighting.
- Night-time Lighting restrictions. Night-time lighting shall be the minimum necessary for personnel safety and execution of maintenance activities shall they expend past standard working hours. Lighting shall directed/shielded downward to minimize lighting along the beach.

# 6.2 Avoidance of Breeding Western Snowy Plover

- Conduct pre-activity nesting bird surveys. If maintenance work must occur during the BIO-6 western snowy plover nesting season (March through August), the applicant shall have pre-Action nesting surveys conducted by a qualified biologist to determine whether active nests of this species are present in the Action Area or within 300 feet of the Action Area (buffer to be established in coordination with the USFWS). If active nests are found, repair and maintenance activities within 300 feet of the nest shall be postponed or halted, at the discretion of the biologist in consultation with CDFW and USFWS, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. In addition, the maintenance worker access route to the weir box will be re-routed to avoid disrupting nesting behaviors. This new access route will be established in coordination with the USFWS. A biological monitor shall be present during those periods when Actions will occur near active nest areas to ensure that no inadvertent impacts to these nests occur. Results of the surveys shall be provided to CDFW and USFWS.
- BIO-7 <u>Conduct biological activity monitoring during Actions</u>. An authorized biological monitor must be present in the Action Area during all repair/maintenance activities. The monitor shall survey the activity site (i.e., weir box) and surrounding area for compliance with all

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avoidance measures. Weekly biological monitoring reports shall be prepared and submitted to the appropriate permitting and responsible agencies through the duration of the repair/maintenance activities. Monthly biological monitoring reports shall be prepared and submitted through the duration of maintenance activities to document compliance with avoidance measures.

#### 6.3 Avoidance of Wintering Snowy Plover

BIO-8 Conduct pre-activity bird surveys. Biological surveys for sensitive bird species will be conducted by an authorized biologist prior to weir box maintenance activities. If present, maintenance will be delayed until the sensitive bird species have vacated the work area.

#### 6.4 Minimization of Effects to Snowy Plover Critical Habitat

- BIO-9 Pre-activity evaluation. Prior to conducting maintenance activities, a habitat assessment and evaluation will be assessed and approved by an approved biologist. This measure will ensure that avoidance measures have been provided to ensure the avoidance of western snowy plovers.
- **BIO-10** Beach sand maintenance or replacement. During the Actions, all efforts will be made to not disturb sand substrates more than is required for access to the weir box and activities within the fenced work areas. During the Actions, beach sand paths uses to access the weir box will be maintained or piled and replaced after activities are completed. After the Actions are completed at the weir box, the disturbed sand (both around the weir box and paths used to access the work area) will be replaced. The replacement of sand will include raking and leveling the sand back to pre-activity condition or replacing any sand that was piled during work activities.

#### 6.5 Avoidance of Nesting Birds under the Migratory Bird Treaty Act of 1918

- **BIO-11** Pre-Action Nesting Bird Survey. A pre-Action survey for nesting birds should be conducted by a qualified biologist to determine if active nests of special-status birds, or common bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code, are present within 300 feet of the maintenance/repair zone. The survey should be conducted within one week prior to initiation of Actions that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically March 1 through August 30).
- **BIO-12** Nesting Bird Buffers and Requirements. If active nests are found, a no activity buffer shall be established at a minimum of 100-foot (this distance may be greater

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depending on the bird species and activity, as determined by the biologist) around the nest site where it overlaps with work areas. Activities within no-maintenance buffer shall be postponed or halted, at the discretion of the biologist, until the nest is vacated, juveniles have fledged, and there is no evidence of a second attempt at nesting. In addition, all active nests shall be mapped with a GPS unit and nest locations with 100-foot buffers overlain on aerial photographs to provide regular updated maps to inform the Project manager/engineer and maintenance crew of areas to avoid. The City-appointed biologist should also serve as a compliance monitor during the breeding season to ensure that there are no inadvertent impacts to nesting birds.

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