

OTAY WATER DISTRICT  
DESALINATION PROJECT COMMITTEE MEETING  
and  
SPECIAL MEETING OF THE BOARD OF DIRECTORS

2554 SWEETWATER SPRINGS BOULEVARD  
SPRING VALLEY, CALIFORNIA  
Boardroom

**THURSDAY**  
**October 9, 2014**  
**12:00 P.M.**

This is a District Committee meeting. This meeting is being posted as a special meeting in order to comply with the Brown Act (Government Code Section §54954.2) in the event that a quorum of the Board is present. Items will be deliberated, however, no formal board actions will be taken at this meeting. The committee makes recommendations to the full board for its consideration and formal action.

**AGENDA**

1. ROLL CALL
2. PUBLIC PARTICIPATION – OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO SPEAK TO THE BOARD ON ANY SUBJECT MATTER WITHIN THE BOARD'S JURISDICTION BUT NOT AN ITEM ON TODAY'S AGENDA

**DISCUSSION ITEMS**

3. INFORMATIONAL UPDATE FOR THE ROSARITO DESALINATION PLANT AND CONVEYANCE AND THE OTAY MESA CONVEYANCE AND DISINFECTION SYSTEM PROJECTS (KENNEDY)
4. ADJOURNMENT

**BOARD MEMBERS ATTENDING:**

Jose Lopez, Chair  
Mitch Thompson



# AGENDA ITEM 3



## STAFF REPORT

|               |   |               |                  |          |     |
|---------------|---|---------------|------------------|----------|-----|
| TYPE MEETING: | Desalination Committee  | MEETING DATE: | October 9, 2014  |          |     |
| SUBMITTED BY: | Bob Kennedy<br>Engineering Manager  | CIP./G.F. NO: | P2451-<br>001101 | DIV. NO. | ALL |
| APPROVED BY:  | <input checked="" type="checkbox"/> Rod Posada, Chief, Engineering<br><input checked="" type="checkbox"/> German Alvarez, Assistant General Manager<br><input checked="" type="checkbox"/> Mark Watton, General Manager |               |                  |          |     |
| SUBJECT:      | Informational Update for the Rosarito Desalination Plant and the Otay Mesa Conveyance and Disinfection System Projects  |               |                  |          |     |

### **GENERAL MANAGER'S RECOMMENDATION:**

No recommendation. This is an informational item only.

### **COMMITTEE ACTION:**

Please see Attachment A.

### **PURPOSE:**

To update the Otay Water District (District) Board of Directors (Board) on the progress of the Rosarito Desalination Plant and the Otay Mesa Conveyance and Disinfection System Projects (Project) (see Exhibit A for Project location).

### **ANALYSIS:**

This item was last presented to the Desalination Committee (Committee) at a meeting held on July 15, 2014. The updates or significant milestones that have been reached since the last update to the Committee include:

### **Rosarito Beach Desal Project in the News**

The drought has been a constant topic in the national, state, and local news. Projects that provide a new supply of water have been mentioned including the Rosarito Beach Desalination project. The San Diego Union-Tribune and the San Diego Daily

Transcript have mentioned this project in the following two articles (see Exhibits B & C):

- "One Desal Plant, Two Countries?", San Diego Union-Tribune, 8/24/2014
- "Otay Makes Plans to Use Water from Proposed Desal Plant in Baja", San Diego Daily Transcript, 8/27/2014

Please also see a cartoon published recently in the Arizona Star News (Exhibit D).

### **Public Outreach Efforts**

NSC Agua retained Galileo Branding for their public outreach program and the District retained (W)right on Communications for District public outreach efforts. On August 27, 2014, staff met with the public outreach teams from both NSC Agua and the District to coordinate the message being presented to business organizations, government and opinion leaders.

Galileo and NSC Agua also presented proposed changes to the nscagua.com website that will be implemented soon including a Frequently Asked Question section (see Exhibit E).

(W)right on Communications is likewise preparing the District's Public Outreach Program that in the near future will be shared with NSC Agua for implementation. For now, (W)right on Communications has prepared a presentation about the project in Spanish.

### **NSC Agua Environmental Report**

On September 2, 2014, NSC Agua submitted to SEMARNAT the third and last environmental report for the Project in Mexico. This report covers the conveyance project from El Florido to the U.S./Mexico border.

### **Division of Drinking Water (DDW) Permitting (formerly CDPH)**

On July 1, 2014, the Drinking Water Program transferred from California Department of Health to the State Water Resources Control Board. The DDW transfer to the State Water Resources Control Board aligns the state's drinking water and water quality programs in an integrated organizational structure to best position the State to both effectively protect water quality and the public health as it relates to water quality, while meeting current needs and future demands on water supplies.

NSC Agua started source water testing at the power plant intake and outlet structures on September 18, 2014. This was an important milestone. The water samples were brought to this side of the Border. Even though some minor issues arose with Border Patrol, the samples were finally delivered to the lab. The results will be posted with DDW. A meeting has been set for October 28, 2014 to review comments on the "White Paper" submitted to DDW back in February 2014 and to review testing results of the source water testing.

To better coordinate the preparation of the Sanitary Surveys, as required in the DDW permit, the District is organizing a work group with attendance of NSC Agua, District staff, and consultants for both parties on October 9<sup>th</sup>.

### **Presidential Permit**

The State Department has indicated that they would not be opposed to having CILA instead of SEMARNAT as the project sponsor in Mexico. The State Department requires that there be coordination with a Mexican Federal Agency for the Presidential Permit Process and to review the associated environmental documents and had initially suggested SEMARNAT as that agency.

At the request of the State Department, staff has prepared for Board consideration the removal of design services during construction from AECOM's contract. This amounts to a deduction of \$364,774 and was approved by the Board at the meeting held on October 1, 2014. Since these services will no longer be included in AECOM's contract, they will be included in the scope of work for the project's Construction Management contract. The State Department has signed the Memorandum of Understanding (MOU) between the District and the State Department for the preparation of the project's CEQA/NEPA document based on the understanding that the Board will approve the deletion of the design services during construction from AECOM's contract. The MOU and State Department letter are attached as Exhibit F. The execution of this MOU means that the CEQA/NEPA process associated with the project and the Presidential Permit can begin. The first step in the process will be the publication of the Notice of Preparation/Notice of Intent and the scheduling of the scoping meeting for the CEQA/NEPA document in early 2015.

### **Binational Affairs**

With the assistance of the Diputado Jaime Bonilla's staff, the District is seeking a meeting with the Governor of Baja California on October 10, 2014 in Tijuana. Staff is organizing a meeting with the CILA Commissioner in the near future.

The District, in agreement with Hector Mares-Cossio, Binational Affairs Consultant, decided to terminate their contract, effective September 15, 2014. Hector has been a consultant to the project for many years and we greatly appreciate his contributions. His present schedule, future demands on his time, and the current status of the desalination project made the timing right for ending the consulting contract.

**CONAGUA Work Group:**

Staff will make a presentation to the Mexican Congress Northern Border Affairs Commission about the progress of the Mexican Federal Standards for desalination intakes, outfalls, and brine discharges. The Northern Border Affairs Commission is chaired by Diputado Bonilla (see Exhibit G).

**FISCAL IMPACT:**     Joe Beachem, Chief Financial Officer

No fiscal impact as this is an informational item only. (See Attachment B - Budget Detail).

**STRATEGIC GOAL:**

This Project supports the District's Mission statement, "To provide high value water and wastewater services to the customers of the Otay Water District in a professional, effective, and efficient manner" and the General Manager's Vision, "A District that is at the forefront in innovations to provide water services at affordable rates, with a reputation for outstanding customer service."

**LEGAL IMPACT:**

None.

BK/RP:jf

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Attachments:    Attachment A - Committee Action  
                  Attachment B - Budget Detail  
                  Exhibit A - Location Map  
                  Exhibit B - "One Desal Plant, Two Countries?,"  
                                  San Diego Union-Tribune, 8/24/2014  
                  Exhibit C - "Otay Makes Plans to Use Water from  
                                  Proposed Desal Plant in Baja," San  
                                  Diego Daily Transcript, 8/27/2014  
                  Exhibit D - David Fitzsimmons, The Arizona Daily  
                                  Star 2014 Cartoon

Exhibit E - NSC Agua Frequently Asked Questions

Exhibit F - State Department Letter and  
Memorandum of Understanding

Exhibit G - Presentación a la Comisión Asuntos  
Frontera Norte - LXII Legislatura  
Cámara de Diputados Republica Mexicana



## ATTACHMENT A

|   |  |
|---|--|
| <b>SUBJECT/PROJECT:</b><br>P2451-001101 | Informational Update for the Rosarito Desalination Plant and the Otay Mesa Conveyance and Disinfection System Projects |
|---|--|

### **COMMITTEE ACTION:**

This item was presented to the Desalination Committee (Committee) at a meeting held on October 9, 2014. The Committee supported presentation to the full Board.

### **NOTE:**

The "Committee Action" is written in anticipation of the Committee moving the item forward for Board approval. This report will be sent to the Board as a Committee approved item, or modified to reflect any discussion or changes as directed from the Committee prior to presentation to the full Board.



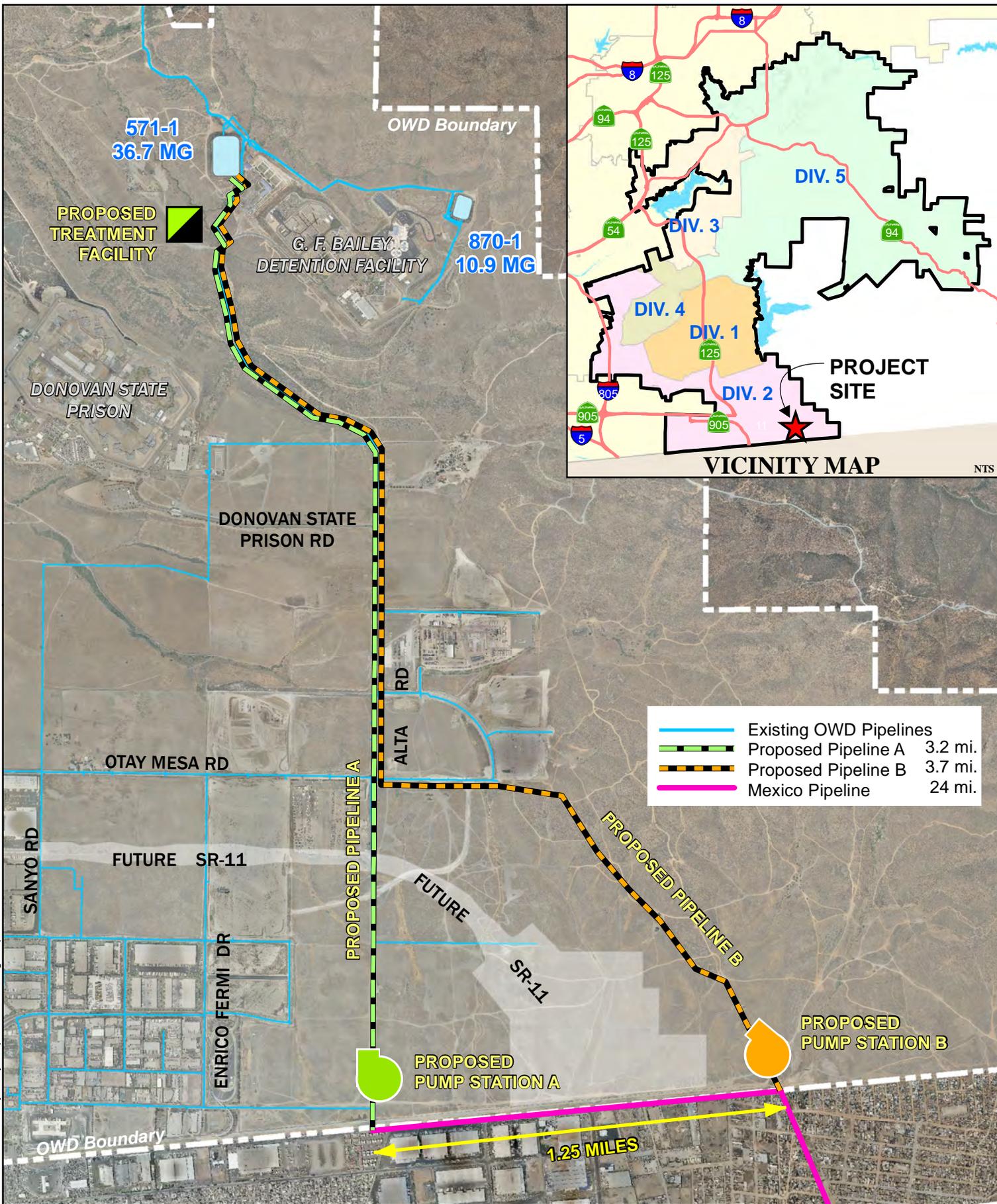
## ATTACHMENT B

|                         |  |
|-------------------------|--|
| <b>SUBJECT/PROJECT:</b> | Informational Update for the Rosarito Desalination Plant and the Otay Mesa Conveyance and Disinfection System Projects |
| P2451-001101            |  |

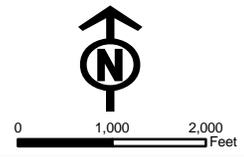
| Level             | Title1               | Committed            | Expenditures   | Outstanding Commitment | Projected Final Cost | Vendor                        |                        |
|-------------------|----------------------|----------------------|----------------|------------------------|----------------------|-------------------------------|------------------------|
| Planning          | Consultant Contracts | \$98,577.34          | \$98,577.34    |                        | \$98,577.34          | CAMP DRESSER & MCKEE INC      |                        |
|                   |                      | \$13,311.19          | \$13,311.19    |                        | \$13,311.19          | CPM PARTNERS INC              |                        |
|                   |                      | \$71,529.59          | \$71,529.59    |                        | \$71,529.59          | MARSTON+MARSTON INC           |                        |
|                   |                      | \$437,200.00         | \$371,200.00   | \$66,000.00            | \$437,200.00         | HECTOR I MARES-COSSIO         |                        |
|                   |                      | \$26,700.00          | \$26,700.00    |                        | \$26,700.00          | REA & PARKER RESEARCH         |                        |
|                   |                      | \$4,172.90           | \$4,172.90     |                        | \$4,172.90           | SALVADOR LOPEZ-CORDOVA        |                        |
|                   |                      | \$267,066.00         | \$160,355.05   | \$106,710.95           | \$267,066.00         | SILVA SILVA INTERNATIONAL     |                        |
|                   | Travel               | \$20,046.35          | \$20,046.35    |                        | \$20,046.35          | STAFF                         |                        |
|                   | Printing             | \$60.59              | \$60.59        |                        | \$60.59              | MAIL MANAGEMENT GROUP INC     |                        |
|                   | Legal Fees           | \$162,041.07         | \$162,041.07   |                        | \$162,041.07         | GARCIA CALDERON & RUIZ LLP    |                        |
|                   |                      | \$43,174.50          | \$43,174.50    |                        | \$43,174.50          | SOLORZANO CARVAJAL GONZALEZ Y |                        |
|                   |                      | \$16,609.76          | \$16,609.76    |                        | \$16,609.76          | STUTZ ARTIANO SHINOFF         |                        |
|                   | Service Contracts    | \$500.00             | \$500.00       |                        | \$500.00             | REBECA SOTURA NICKERSON       |                        |
|                   |                      | \$105.50             | \$105.50       |                        | \$105.50             | SAN DIEGO DAILY TRANSCRIPT    |                        |
|                   |                      | \$17,500.00          | \$17,500.00    |                        | \$17,500.00          | BUSTAMANTE & ASSOCIATES LLC   |                        |
|                   |                      | \$32,340.00          | \$32,340.00    |                        | \$32,340.00          | BROWNSTEIN HYATT FARBER       |                        |
|                   | Standard Salaries    | \$909,497.19         | \$909,497.19   |                        | \$909,497.19         |                               |                        |
|                   | Total                |                      | \$2,120,431.98 | \$1,947,721.03         | \$172,710.95         | \$2,120,431.98                |                        |
|                   | Design               | Consultant Contracts | \$5,108.75     | \$5,108.75             |                      | \$5,108.75                    | MARSTON+MARSTON INC    |
|                   |                      |                      | \$120,520.00   | \$22,320.00            | \$98,200.00          | \$120,520.00                  | MICHAEL R WELCH PHD PE |
| \$8,818.00        |                      |                      | \$8,818.00     |                        | \$8,818.00           | CPM PARTNERS INC              |                        |
| \$5,000.00        |                      |                      | \$5,000.00     |                        | \$5,000.00           | ATKINS                        |                        |
| \$3,681,932.00    |                      |                      | \$862,634.03   | \$2,819,297.97         | \$3,681,932.00       | AECOM TECHNICAL SERVICES INC  |                        |
| Legal Fees        |                      | \$7,761.19           | \$7,761.19     |                        | \$7,761.19           | STUTZ ARTIANO SHINOFF         |                        |
| Travel            |                      | \$3,174.39           | \$3,174.39     |                        | \$3,174.39           | STAFF                         |                        |
| Service Contracts |                      | \$342.80             | \$342.80       |                        | \$342.80             | SAN DIEGO UNION-TRIBUNE LLC   |                        |
|                   |                      | \$114.08             | \$114.08       |                        | \$114.08             | REPROHAUS CORP                |                        |
| Standard Salaries |                      | \$113,002.94         | \$113,002.94   |                        | \$113,002.94         |                               |                        |
| Total             |                      | \$3,945,774.15       | \$1,028,276.18 | \$2,917,497.97         | \$3,945,774.15       |                               |                        |
| Construction      | Standard Salaries    | \$329.48             | \$329.48       |                        | \$329.48             |                               |                        |
|                   | Total                | \$329.48             | \$329.48       |                        | \$329.48             |                               |                        |
| Budget            | \$30,000,000.00      |                      |                |                        |                      |                               |                        |
| Total             |                      | \$6,066,535.61       | \$2,976,326.69 | \$3,090,208.92         | \$6,066,535.61       |                               |                        |

March 23, 2005 through August 30, 2014

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**OTAY WATER DISTRICT**  
 Otay Mesa Conveyance and  
 Disinfection Facility Project  
**EXHIBIT A**



# One desal plant, two countries?

## Private proposal for a plant in Rosarito Beach moves forward

By [Sandra Dibble \(/staff/sandra-dibble/\)](#) 5 p.m. Aug. 24, 2014



The Presidente Juarez thermoelectric plant in Rosarito Beach, a key component in proposals to build a seawater desalination plant that would supply both sides of the border. — *San Diego County Water Authority*

Could water flowing through San Diego taps one day come from across the border in Mexico?

The answer is yes, if proposals to desalinate seawater in Rosarito Beach and pipe it to the United States become a reality.

"Power, gas, commerce, families, everything moves back and forth," said Mark Watton, general manager of the Otay Water District. "Why not water?"

Watton envisions the day when two-thirds of the district's water supply — about 20,000 acre-feet per year — comes from a privately operated desalination facility next to a federally operated thermoelectric plant in Rosarito Beach.

Behind the project is NSC Agua, the Mexican subsidiary of Cayman Islands-based Consolidated Water Co. The company's proposal for a plant with the capacity to convert up to 100 million gallons a day, or 112,000 acre-feet per year — twice the amount of a desalination plant under construction in Carlsbad — has been moving forward in recent months after years of delay. The estimated cost would be more than \$500 million.

On a parallel track, the San Diego County Water Authority is participating in discussions with Mexican water agencies on the possibility of a publicly owned binational desalination plant in Rosarito Beach. "We know that a plant can be built," said Dan Denham, the authority's Colorado River program manager. "The question is, what size the plant will be, is it going to meet just Mexican demands or broader U.S. demands, and how is the water going to get across the border."

This is not the first binational a water supply project proposed for the region. In the 1990s, the San Diego County Water Authority was in discussions with the Baja California government over the possibility of building a joint aqueduct to carry Colorado River water. The project never moved forward, but it set the stage for another idea — a binational desalination plant.

A 2005 study by the water authority considered locations on both sides of the border, including Rosarito Beach. A preliminary feasibility study in 2010 "determined that yes, it would be feasible to have a desalination plant in Rosarito Beach," said Sally Spener, spokeswoman for the U.S. International Boundary and Water Commission. "The big questions are, how much would it cost, and who would pay for it."

Now drought and growing demands on the Colorado River are adding urgency to these questions. A 2012 U.S.-Mexico agreement on the Colorado River known as Minute 319 listed a binational desalination plant in Rosarito Beach as a potential new source of water.

"We are studying the complex mosaic," of alternatives, said Roberto Espinosa, head of the Tijuana office of Mexico's Comisión Internacional de Límites y Aguas. The commission and its counterpart, the BWC, are leading the binational discussion on the potential of a plant.

On the table are questions such as costs, environmental impacts, whether a future plant would be financed public, privately or with a combination of the two, and whether it should be binational or exclusively Mexican, Espinosa said.

By working together, "we could take advantage of factors such as economies of scale where both countries participate in the project and both are able to benefit," he said.

One alternative on the table would not entail pipelines at all — but rather an "exchange" consisting of U.S. water agencies agreeing to fund a desalination plant in Mexico, in return for Mexico's agreement to lease some of its allocation of Colorado River water.

But to date there have been no such agreements. To support a Mexican plant, "we need Mexico to have a clear path," said "Bill Hasencamp, Colorado River program manager for the Metropolitan Water District, a consortium of 26 cities and water districts in southern California. "We have to be able to say, 'here is the path where we could potentially get some water if we partner with them."

Baja California's first utility-scale desalination plant is scheduled for completion in 2016: a plant in Ensenada that would produce 5.7 million gallons daily.

Though Baja California's strategic plan for 2013-2019 also lists a desalination plant in Rosarito Beach, "nothing has been determined, everything is on the table in an analysis stage," said Enrique Ruelas, head of the State Water Commission in Baja California, the agency responsible for planning the state's future water supply. For Mexico, "the attraction of a binational plant is that significant amounts of the funding could be generated by sources in the United States," said Paul Ganster, director of the Institute for Regional Studies of the Californias at San Diego State University. Investors favor a Mexico location "because the whole permit process tends to move along quicker," Ganster said.

Critics contend that locating south of the border opens the door for laxer environmental regulation. Ganster said environmental groups on both sides of the border are likely to keep a close watch on any environmental damage caused by the plant to marine life.

"It would not fly," he said. "U.S. activists and others would stir up a ruckus to make sure we're not importing water produced by substandard methods."

Locating the desalination plant next to the Presidente Juárez thermoelectric plant in Rosarito Beach offers the advantage not only of proximity to an adequate power supply, but access to existing power plant outfall and intake systems, which would serve to substantially reduce construction costs.

Mexican authorities have parcels identified near the plant as potential locations for a public plant, according to Denham of the San Diego County Water Authority. But the private effort at this point appears farther along, with NSC Agua finalizing the purchase in May of two plots totaling 50 acres south of the Rosarito Beach facility at a cost of \$20 million.

"We believe the site we have purchased represents the best possible location for a northern Baja California desalination plant as it is adjacent to a pre-existing source of feed water for the plant and is of sufficient size to accommodate a 100 million gallon per day facility," Frederick McTaggart, Consolidated Water Co.'s president, stated in a news release.

To move forward, the NSC Agua project would need to be sure it has clients on both sides of the border, and to have a "good contract" with the government of Baja California or Mexico's federal government, said Watton of the Otay Water District.

Watton's district, which supplies some 211,000 residents in southeast San Diego County, would be the chief U.S. customer. On Nov. 20, 2012, the Otay district signed a nonbinding letter of intent for NSC Agua to deliver between 20 million and 40 million gallons per day to the water district at the border — expanding water deliveries as the district's needs grow.

Last November, the Otay Water District applied to the U.S. State Department for a Presidential Permit for a cross-border pipeline to convey the water into San Diego County at a location near the planned Otay Mesa East toll crossing.

NSC Agua has announced other steps in recent weeks, including the submission to Mexican federal authorities of environmental impact statements for the plant and aqueduct in Mexico. But hurdles remain on both sides of the border and the project can't move forward without the nod from municipal, state and federal officials in Mexico. To date, Mexico's National Water Commission, "has not been officially notified of the existence of any type of final plans," said Noé Rivera Domínguez, administrative director for the agency in Baja California.

Watton said McTaggart "thinks he would have something running by late 2016," but Watton estimates it will be closer to 2018 before any water crosses the border. "Delivery to us would take a little longer, because of the health department regulations and the testing that would have to be done."

August 27, 2014

San Diego Daily Transcript

## **Otay Makes Plans to Use Water from Proposed Desal Plant in Baja By Carlos Rico**

The Otay Water District is in the process of getting final permitting and an environmental impact review approved to construct a new pipeline system to receive water from a future desalination plant in Mexico.

The \$27 million project the Otay Water District is embarking on involves building and installing new water pipelines that will run from its network in San Diego and underneath the U.S.-Mexico border to connect with pipelines coming from a proposed desalination plant in Rosarito, Baja California.

The Otay Water District plans to purchase desalinated water from the plant once it is completed.

“The water situation is almost identical in the Tijuana region as it is in San Diego County,” said Mark Watton, general manager of the Otay Water District. “This could be half of our water supply in the future.”

So far, the Otay Water District has received approvals including the presidential permit, and is now working on the environmental study.

The desalination plant is being built by Consolidated Water Co., a Caribbean firm that supplies water to various parts of the world.

In May, Consolidated Water finalized the purchase of 20.02 acres (or 81,000 square meters) for a privately owned, 100-million-gallon-per-day seawater reverse osmosis desalination plant.

The proposed plant will purify seawater for drinking and feed it to a pipeline to deliver water to both Mexico and the United States.

Ruben Sanchez, project manager for Consolidated Water, said right now they are waiting on the approval of environmental documents and permits so that they can get loans from banks and private investors.

“We are also working on basic engineering for the plant and its aqueducts,” Sanchez added.

The company is hoping to break ground on the \$700 million project by mid-2015.

The plan is to construct the project in three phases and complete it in 30 months. Sanchez said the timeline will all depend on what the Mexican government says after they receive the final permitting necessary to start construction.

“We think the government might want the project completed in one phase, but we will see,” Sanchez explained.

The Planta Desalinizadora de Rosarito will operate 365 days a year with approximately 80 to 90 full-time workers, Sanchez said. Roughly 500 construction workers are slated to build the project.

Sanchez said the desalination plant is in-line to be a fully private investment, unless the Mexican government deems otherwise in the future and would like to invest, as well.

Rosarito, Baja California was chosen as the best location for the desalination plant based on the Pacific Ocean and to a power plant. “There is a very large infrastructure savings when you can use the inland and outlet structures already in place,” Sanchez said.

Consolidated Water Co. has an agreement in principal to sell roughly 1 kilometers of water per second to the Otay Water District, according to Sanchez, and that they are also in discussions to sell water to Ensenada, Baja California.

The Treaty of February 3, 1944, allows for water distribution and transportation between United States and Mexico. It was originally signed to allow water utilization for the Colorado and Tijuana Rivers and the Rio Grande.

The Otay Water District provides water to customers within 125.5 square miles of southeastern San Diego County. Potable water delivered by the district is purchased from the San Diego County Water Authority or the Helix Water District. Imported water is a mix from the Colorado River and Northern California.

Sanchez said the company would like to sell desalinated water to other private and public entities, but no contracts have been finalized.

“Once we have all of our permits and contracts finalized, then we can talk to other agencies in full,” Sanchez said.

Once construction is complete, there will still be land available on the property if Consolidated Water Co. feels the need to expand, Sanchez said.

The plan to build a desalination plant in Rosarito and new water pipelines in the area surfaced in 2005, after a study commissioned by government agencies on both sides of the border revealed the region’s future water needs.

“We saw that both sides were going through similar water shortages due to rise in residential and commercial development and lack of rain,” Watton said. These factors started talks with Consolidated Water Co., Watton added.

Tijuana is heavily dependent on the Colorado River, so Consolidated Water Co. saw an opportunity to build a desalination plant and sell water to the region.

The Otay Water Authority is planning to apply for grants and use its reserves that come out of rate payer funds to pay its new water pipeline system, according to Watton.

Watton believes Consolidated Water Co. will get a return on their investment because he said a desalination plant will not be lacking in interest.

“San Diego and Baja California have good economies and they are linked so that will create interest from investors from around the world,” Watton said.

# EXHIBIT D

I'LL HAVE A GLASS  
OF YOUR LAKE MEAD 2007  
AND SHE'LL HAVE A GLASS OF YOUR  
ARIZONA VINTAGE AQUIFER.  
AND BRING US A BOTTLE OF  
YOUR FINEST RECYCLED  
EFFLUENT 2020.

OF COURSE...  
COULD I  
INTEREST YOU IN  
A GLASS OF OUR  
DESALINATED  
PACIFIC  
2018?



Source: David Fitzsimmons, The Arizona Daily Star, 2014

### ¿Cuál es la inversión del proyecto?

La inversión en la planta será cercana a \$500 millones de dólares más alrededor de \$200 más en el acueducto. La planta se construirá en etapas. Una vez terminada será la planta desalinizadora más grande de América.

### ¿Quién es la empresa promotora del proyecto?

La empresa promotora del proyecto es Consolidated Water. Esta empresa tiene más de 40 años de experiencia en el manejo y operación de plantas desalinizadoras en todo el mundo.

### ¿Cuál es la capacidad de la planta?

La capacidad total de la planta será de 4,400 litros por segundo, es decir, aproximadamente 380,000 M<sup>3</sup>/día y se conectará a la red de distribución de CESPT quien hará la entrega del agua a los usuarios finales. La planta estará ubicada en un terreno propiedad de la empresa, a un costado de la CT Presidente Juárez en Rosarito. El método de desalinización es el de ósmosis inversa, que es una tecnología muy probada en todo el mundo y es la indicada para una planta de estas características.

### ¿Cuándo inicia la construcción?

El inicio de construcción está estimado para el segundo trimestre del 2015 y la primera etapa iniciará producción a mediados de 2017.

### ¿Como se verá afectado el precio del agua para el usuario?

El precio del agua al usuario final será una decisión de CESPT. Nosotros ofreceremos el agua potable al CESPT a un precio competitivo.

### ¿Qué características tiene el agua que proveerá la planta?

El agua que entregaremos al CESPT tendrá mucha mejor calidad que el agua que actualmente viene del Río Colorado, por lo que se podrá emplear para cualquier actividad humana e industrial.

### ¿Cuál es una de las principales ventajas del proyecto?

Contar con un flujo adicional de agua potable permitirá aliviar el abasto de agua en toda la región.

## Infraestructura de Agua de Baja California

La región norte de Baja California, así como el suroeste de Estados Unidos tienen un clima semiárido, con escasas precipitaciones y limitados suministros naturales de agua dulce. Tijuana y Rosarito reciben en promedio 313,000 M<sup>3</sup>/día de agua que son trasladados 120 millas con un gran costo energético. El principal conducto de agua a Tijuana y Rosarito es el Canal Reforma y el Acueducto Río Colorado-Tijuana (ARCT). El Canal Reforma fue dañado severamente en el 2010 a causa de un terremoto, que generó una falta de agua en la región y sigue sujeto a futuros daños sísmicos. Tijuana y Rosarito están excediendo su concesión y están tomando agua prestada de otras zonas.



## El proyecto

La planta desalinizadora de Rosarito será diseñada, construida y operada por el consorcio internacional encabezado por NSC Agua, compañía privada mexicana afiliada a Consolidated Water Co. Ltd. La planta desalinizadora convertirá el agua de mar que utiliza CFE para el enfriamiento de los condensadores de la planta Termoelectrica Presidente Juárez,

en agua potable. La planta será construida en etapas y cuando esté operando a su máxima capacidad será la planta desalinizadora más grande de América.

CESPT utilizará dicha agua para complementar la del Acueducto con lo que cubrirá la demanda. El exceso de agua desalinizada podría ser entregada a Otay Water District en California, E.E.U.U. en la frontera internacional.



*Un ducto seguro conducirá el agua a Tijuana; y el exceso de agua a la frontera internacional.*

## Proyecto de Desalinización en Rosarito

- Terreno de 20.3 hectáreas para el proyecto actual y expansiones futuras ubicado contiguo a la planta termoelectrica de CFE Presidente Juárez.
- El acceso a la planta desalinizadora será por la calle de CFE, evitando inconvenientes a los vecinos.
- La planta desalinizadora cumplirá con las condiciones de calidad y control más rigurosas a nivel internacional.
- Se construirá un acueducto con las especificaciones técnicas más estrictas para evitar fugas y cualquier contaminación del agua

## Indicadores clave del proyecto

- Planta desalinizadora con capacidad de 380,000 M<sup>3</sup> al día.
- Costo estimado del proyecto:
  - Planta desalinizadora: \$500 MDD.
  - Acueducto: \$200 MDD.
- Creación de 500 empleos directos durante la construcción y 80 en la etapa de operación.
- Financiado con capital privado y deuda bancaria.
- Tarifa de agua comparable al costo de las fuentes actuales.
- Fecha estimada de inicio de operación: Junio de 2017.
- La operación y mantenimiento de la planta será por una subsidiaria de Consolidated Water Co. Ltd.

## ¿Quién se beneficia?

### Municipal

- Población de Tijuana 2010: 1.8 millones de habitantes.
- Población de San Diego 2010: 3.1 millones de habitantes.
- La población total proyectada a 2030 es de 8.3 millones (68% aumento).

### Agrícola

- Valle de Mexicali.
- Valle de Guadalupe.

### Ambiental

- Delta del Río Colorado.
- Proporciona agua para el crecimiento económico de la región.
- Diversifica el suministro regional de agua y aumenta la confiabilidad y calidad.
- Reduce el riesgo de escasez de agua debido al daño sísmico.
- A prueba de sequías.
- No es dependiente de foráneos y es operado de manera local.



**EXHIBIT F**  
**United States Department of State**

*Bureau of Oceans and International  
Environmental and Scientific Affairs*

*Washington, D.C. 20520*

Ms. Lisa Coburn-Boyd

Otay Water District

2554 Sweetwater Springs Blvd.

Spring Valley, CA 91978-2004

10 Sept. 2014

Dear Ms. Coburn-Boyd,

Attached please find a counter-signed copy of the *Memorandum of Understanding Between the United States Department of State and Otay Water District for the Preparation of a Joint Environmental Impact Statement/Environmental Impact Report for the Otay Mesa Water Conveyance and Disinfection Project* (the MOU). I have been able to sign this document, and particularly to accept the statement in section 3(c) of the MOU that “Otay Water has hired a contractor with appropriate expertise and acceptable to the Participants” (emphasis added), because I understand that on October 1, 2014, the Board of Directors of the Otay Water District will be considering an amendment to Otay Water District’s contract with AECOM Technical Services, Inc., that covers the development of the Environmental Impact Report/Environmental Impact Statement for the project described in the MOU. I further understand that that amendment will fully remove from the contract the services described in Task 20, Construction Phase Services. Should the Board of Directors fail to approve that amendment, or should the amendment fail to be executed for some other reason, then the Department of State would need to evaluate further whether AECOM remains acceptable to the Department.

Thanks and Best Regards,

A handwritten signature in red ink that reads "Mary D. Hassell".

Mary D. Hassell  
NEPA Coordinator

MEMORANDUM OF UNDERSTANDING  
BETWEEN THE  
UNITED STATES DEPARTMENT OF STATE  
AND  
OTAY WATER DISTRICT  
FOR THE  
PREPARATION OF A JOINT ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT  
FOR THE OTAY MESA WATER CONVEYANCE AND DISINFECTION PROJECT

The Otay Water District (Otay Water), a California special district formed and existing under state law, and the United States Department of State (State) (each individually referred to as a "Participant", collectively referred to herein as the "Participants") have reached the following understandings, as recorded in this Memorandum of Understanding (MOU) effective 11 Sept., 2014.

**1. Introduction**

The purpose of this MOU is to confirm the commitments among the Participants to work collaboratively in preparation of the Environmental Impact Report/ Environmental Impact Statement (EIR/EIS) for purposes of supporting State's Presidential Permitting process by conducting a review consistent with the National Environmental Policy Act (NEPA), and of meeting Otay Water's obligations under the California Environmental Quality Act (CEQA) for the Otay Mesa Conveyance and Disinfection Project (Project). This MOU is intended to clarify and define the roles and responsibilities of State and Otay Water as joint lead agencies in the preparation of the Project EIR/EIS. While each Participant expects to assist the other, and any other agencies involved, to the best extent possible, it is ultimately the responsibility of State to ensure consistency with NEPA and the responsibility of Otay Water to comply with CEQA. As described further below, the Participants intend to conduct a single environmental review process which meets applicable legal requirements.

**2. Purpose and Benefits**

This MOU facilitates a joint environmental review process for the proposed Project between Otay Water and State that benefits the public and advances the goals and missions of both agencies. The Participants plan to prepare the joint environmental analysis and EIR/EIS document consistent with NEPA and pursuant to CEQA and all applicable laws, Executive Orders, regulations, directions, and guidelines. This cooperation benefits the Participants and the public by sharing staff expertise and information; avoiding duplication of resources (including staff effort); promoting intergovernmental coordination at the local, state, and federal levels; and facilitating public review by providing a single joint Environmental Impact document and a more efficient environmental review process.

**3. Project Environmental Review - Roles and Responsibilities**

**a) Principal Points of Contact for the Joint Effort**

Each Participant has a designated Point of Contact (POC) to coordinate the communications and exchange of information between the Participants, and to ensure consistency on the Project.

The Otay Water POC is Otay Water's Environmental Compliance Specialist and State's POC is State's NEPA Coordinator, unless either POC designates otherwise.

**b) Timeframes and Milestones**

The Participants cannot presently predict the precise period of time needed to prepare, consider and circulate the EIS/EIR document contemplated by this MOU. However, the Participants commit to work as expeditiously as possible and to make best efforts to meet any subsequently scheduled milestones and timeframes, including those for various submissions that one Participant may owe the other as part of the environmental review process, and reviews of the other Participant's submissions.

**c) Early Planning and Scoping Efforts**

Otay Water, with assistance from State, is responsible for identifying the environmental resources and related issues that may be affected by the Project, and responsible for the preparation of the technical reports for the environmental impacts associated with the implementation of the proposed Project. Otay Water has hired a contractor with appropriate expertise and acceptable to the Participants to do the initial drafting and preparation of the technical reports needed for the EIS/EIR, and to draft the EIS/EIR document using that information, all under the supervision of the Participants. Otay Water's POC is expected to facilitate any communication necessary between State and the contractor. State commits to provide input as appropriate into the review of the EIS/EIR and associated technical reports.

Otay Water, with State's input, is expected to identify affected stakeholders for the Project and manage the outreach to the stakeholders and the general public. Otay Water, with State's input and guidance, is responsible for managing the distribution list for NEPA/CEQA scoping and for the distribution of materials, information and the environmental review document. Otay Water expects to prepare all scoping materials including notices and presentation materials for public meetings consistent with NEPA and CEQA. State is responsible for the publication of all notices for the EIS/EIR in the Federal Register. State commits to review all scoping materials and stakeholder lists and to provide timely input.

State further commits to provide guidance on the federal agencies that would be part of the environmental review process, and to coordinate directly with those agencies as appropriate. Otay Water is responsible for coordination of the review by any California state agencies.

**d) Preparing the Document**

Otay Water is responsible for the day-to-day work of managing the contractor and preparing the Draft Project EIS/EIR document. Ensuring the quality and adequacy of the Draft EIS/EIR document is a joint responsibility of both Otay Water and State. State commits to provide information and analysis specific to NEPA and to provide a timely review of all sections of the document with particular emphasis on the NEPA-specific sections. Otay Water commits to incorporate all State review comments into the Draft EIS/EIR and prepare the document for distribution to stakeholders and the general public. The document will be distributed, as described in this Memorandum, only after it has received final approval by State.

Otay Water intends to gather public comments following publication of the Draft EIS/EIR and ensure that all comments are available to State. State and Otay Water intend to review all comments received from the public and jointly prepare responses to comments in order to ensure that all relevant issues are addressed in a manner consistent with NEPA and CEQA. Otay Water is responsible for the distribution of the jointly-prepared responses.

Otay Water also intends to maintain the administrative record for the project and to provide a copy to State at the conclusion of the project.

Otay Water is primarily responsible for communications related to the Project EIS/EIR, including, but not limited to, media releases, hand-outs for public distribution, presentation materials, and a Project internet website. All such communications must be reviewed and approved by State before being disseminated.

**4. Post NEPA/CEQA Collaboration and Cooperation**

Otay Water is responsible for implementing any mitigation, monitoring and reporting (MMR) requirements for the Project. The reports required for any MMR elements are to be sent to State for its review to ensure consistency with NEPA and other necessary statutes.

**5. Confidentiality**

The Participants commit to hold in confidence (not as a national security classification) and protect from public disclosure, to the extent allowed by law, any and all documents related to the Project Draft and Final EIR/EIS until such time as the Participants determine their suitability for public review or release. Such determination is to be made jointly by the Participants, and may be made for any reason, including pursuant to the provisions of the Federal Freedom of Information Act (FOIA) and/or the California Public Records Act.

**6. Resolution of Disputes**

If a dispute should develop between the Participants concerning the implementation of this Memorandum, the POC's of the Participants intend to use their best efforts to resolve the issue in good faith in a manner agreeable to both Participants. If disagreements on the findings, conclusions, impacts, or resource conditions in the joint environmental analysis cannot be resolved, each Participant should provide an explanation of assumptions used to reach its conclusions, including reasons for the differing conclusions, for insertion in separate NEPA/CEQA sections of the document.

**7. Additional Provisions**

**a) Effect of the MOU**

This MOU becomes effective on the date of the last signature below.

**b) Amendment of the MOU**

This MOU may be revised through written consent of both Participants.

**c) Termination of the MOU**

This MOU is intended to cease when the NEPA Record of Decision is issued on the Project EIR/EIS and any MMR elements that are required for the Project by the EIS/EIR are complete and have been shared; or for good cause upon thirty (30) days prior written notice from either Participant. Good cause includes, but is not limited to, withdrawal of the proposed action by Otay Water.

**d) Authorities not Altered**

Nothing in this MOU alters, limits, or supersedes the authorities or responsibilities of either Participant in any manner within their respective jurisdictions. This MOU is not intended to be legally binding and nothing in it requires the Participants to perform actions beyond their respective authorities.

**e) Financial Obligations**

Nothing in this MOU requires the Participants to assume any obligation or expend any sum or funds in excess of available authorized appropriations. The Participants represent and commit that each intends to be sufficiently funded to carry out fully any and all understandings set forth in this MOU.

**f) Immunity and Defenses Retained**

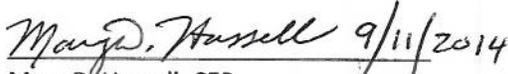
This MOU is not intended to give rise to any private or public cause of action. Each Participant retains all immunities and defenses provided by law with respect to any action attempted that is based on or occurs as a result of this MOU and cooperative work on the Project EIR/EIS.

**g) Conflict of Interest**

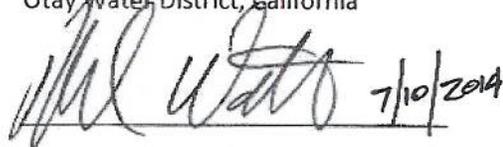
The Participants commit not to utilize any individual or entity for purposes of EIR/EIS development, environmental analyses, or representation, including officials, employees, or third party contractors, having a financial interest in the outcome of the Project EIR/EIS.

United States Department of State

Otay Water District, California

  
Mary D. Hassell, CEP

Signature and Date

  
7/10/2014

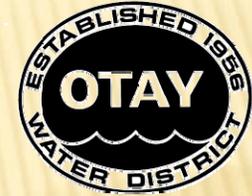
Signature and Date

APPROVED AS TO FORM



District Counsel

## EXHIBIT G



# PRESENTACIÓN A LA COMISIÓN ASUNTOS FRONTERA NORTE – LXII LEGISLATURA CÁMARA DE DIPUTADOS REPUBLICA MEXICANA

ANTEPROYECTO DE NOM-XXX-CONAGUA/SEMARNAT-2014  
QUE ESTABLECE LOS REQUISITOS PARA LAS OBRAS DE TOMA Y  
DESCARGA, QUE DEBEN CUMPLIR LAS PLANTAS DESALINIZADORAS

MEXICO, D.F. OCTUBRE, 2014



# OBJETIVOS

- Grupo de Trabajo (G.T.) para desarrollar la NOM-Anteproyecto-CONAGUA-2014.
- Convocado por CONAGUA en octubre 2013.
- Reuniones mensuales desde noviembre 2013.
- Se espera conclusiones noviembre 2014 cuando la NOM-Anteproyecto-XXX-CONAGUA 2014 se firma por los integrantes del G.T.
- El grupo GT es conformado por 36 personas representando a:
  - Conagua, IMTA, CMIC, ANEAS, UABC, Hydranautics, Avista Technologies, W Cap Water, SEMARNAT, CAFN, Concamin, AHLC, NSC Agua, Otay Water District, y otros organismos del agua y entidades privadas.
- El promedio de asistencia al G.T.: 30 representativos.
- El primer borrador de la NOM-Anteproyecto-CONAGUA-2014 fue escrito por representantes de la Subdirección de Normas de la CONAGUA.

# NORMA

- Puntos Principales:
  1. Objetivo
  2. Campo de Aplicación
  3. Referencias
  4. Definiciones
  5. Especificaciones Generales
  6. Procedimiento para la evaluación de la conformidad
  7. Vigilancia
  8. Bibliografía
  9. Concordancia con normas internacionales
  
- Evolución de la Norma en los puntos principales:
  1. Objetivo:

Reescrito en su totalidad para dar más énfasis en la mitigación de impactos ambientales.
  
  2. Campo de Aplicación:

Reescrito en su totalidad con énfasis en plantas desalinizadoras públicas y privadas que descarguen al ambiente costero, marino y continental.

# NORMA

## 3. Referencias:

NOM-127-SSA1-1994

NOM-Anteproyecto 250-2014

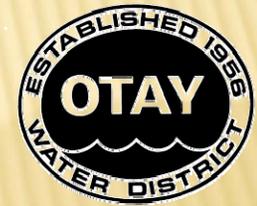
## 4. Definiciones:

Algunas reescritas. Especialmente la definición de aguas de rechazo con énfasis en aguas que tengan mayor concentración de sólidos disueltos totales (SDT) con respecto a la agua de alimentación.

## 5. Especificaciones Generales:

Esta parte fue completamente reescrita con énfasis:

- a. Tipos de permisos
- b. Plantas existentes
- c. Tomas de agua (en línea con normas internacionales)
- d. Descargas de la salmuera (zona de mezclado: 100 mts.)
- e. Protección a zonas ecológicas
- f. Calidad de las aguas de rechazo es reescrita para que coincida con NOM-001
- g. La periodicidad de muestreo cambió a semestral
- h. Se incorporó el Apéndice 1 – con especificaciones para el MIA. El primer borrador escrito por SEMARNAT fue completamente modificado.



# NORMA

- Discusiones del G.T. para octubre:
  - a. Definir cual es el tamaño de plantas que están excluidas de completar la MIA
  - b. Revisar la Norma Anteproyecto en su totalidad
  - c. Discutir numerales 6, 7, 8, y 9
- En la junta de noviembre, el propósito es aprobar la Norma Anteproyecto y firmarla por los integrantes del G.T.

# PREGUNTAS?