

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

2554 SWEETWATER SPRINGS BOULEVARD
SPRING VALLEY, CALIFORNIA
Boardroom

TUESDAY
July 15, 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

All items appearing on this agenda, whether or not expressly listed for action, may be deliberated and may be subject to action by the Board.

The Agenda, and any attachments containing written information, are available at the District's website at www.otaywater.gov. Written changes to any items to be considered at the open meeting, or to any attachments, will be posted on the District's website. Copies of the Agenda and all attachments are also available through the District Secretary by contacting her at (619) 670-2280.

If you have any disability that would require accommodation in order to enable you to participate in this meeting, please call the District Secretary at 670-2280 at least 24 hours prior to the meeting.

Certification of Posting

I certify that on July 11, 2014 I posted a copy of the foregoing agenda near the regular meeting place of the Board of Directors of Otay Water District, said time being at least 24 hours in advance of the meeting of the Board of Directors (Government Code Section §54954.2).

Executed at Spring Valley, California on July 11, 2014.

/s/ Susan Cruz, District Secretary

AGENDA ITEM 3



STAFF REPORT

TYPE MEETING:	Regular Board	MEETING DATE:	August 6, 2014		
SUBMITTED BY:	Bob Kennedy Engineering Manager	CIP./G.F. NO:	P2451- 001101	DIV. NO.	ALL
APPROVED BY:	<input checked="" type="checkbox"/> Rod Posada, Chief, Engineering <input checked="" type="checkbox"/> German Alvarez, Assistant General Manager <input checked="" type="checkbox"/> Mark Watton, General Manager				
SUBJECT:	Informational Update for the Rosarito Desalination Plant and Conveyance 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 Conveyance and the Otay Mesa Conveyance and Disinfection System Projects (Project) (see Exhibit A for Project location).

ANALYSIS:

The Project has two different components - the Rosarito desalination plant and conveyance in the Mexican side and the conveyance and disinfection system in the United States' (U.S.) side.

The desalination plant and the conveyance system south of the border are being developed by NSC Agua S.A. de C.V. (NSC Agua), a Mexican corporation majority owned by Consolidated Water Co. Ltd. (Consolidated Water), a publicly-traded company. Consolidated Water is headquartered in George Town, Grand Cayman. The Company designs, builds, and operates seawater

reverse osmosis (RO) desalination plants and/or water distribution systems in the Cayman Islands, Belize, the British Virgin Islands, the Commonwealth of the Bahamas, and Bali, Indonesia, and is expanding operations into Mexico.

PLANT SITE AND EASEMENT ACQUISITION

Negotiations with the Federal Electricity Commission (CFE) are complete and NSC Agua secured permanent easements and rights to connect pipelines and pumps to and from the desalination plant to the seawater intake and outlet structures; and is working to final the cooling water take agreement of the Presidente Juarez power plant.

On April 2, 2014 the City of Playas de Rosarito issued an approval for the land use of the property for a desalination plant (see Exhibit B) and NSC Agua is currently working on building permits and associated environmental documents.

On May 15, 2014, NSC Agua finalized the purchase of two parcels of land in Rosarito for the desalination plant (about 50 acres in total area), adjacent to the power plant and submitted the Environmental Impact Reports to Secretaría del Medio Ambiente y Recursos Naturales (SEMARNAT), the federal environmental agency in Mexico.

A news article titled, "Aguardan llegada de planta desalinizadora (Awaiting arrival of desalination plant)" was published in the newspaper, Frontera.info, on June 9, 2014 (see Exhibit C). The article was as a result of an interview with Rodolfo Gonzalez, the President of the Ejido Mazatlan. The Ejido Mazatlan is one of the sellers of the property and owns most of the land available for development in Rosarito. The article mentions about future opportunities for Rosarito including a KIA Plant and energy generation plants.

OTAY'S CONVEYANCE SYSTEM/ACTIVITIES

The Project will provide a potable water transmission pipeline and pump station to convey the desalinated water from the border between the U.S. and Mexico on Otay Mesa to Roll Reservoir on Otay Mesa.

Given the many challenges in advancing this Project, the District has retained specialty consultants to provide technical, regulatory, bi-national, and policy assistance.

In December 2012, the Board Desalination Committee discussed with the General Manager the signing of a non-binding Letter of Intent (LOI) with NSC Agua to negotiate a Water Purchase

Agreement for the purchase of desalinated water produced from the Rosarito Desalination facility and delivered to the U.S.-Mexico border at a point near the proposed Third Border Crossing on Otay Mesa. This is the second LOI signed by the District and NSC Agua. The previous LOI was signed on February 5, 2009.

Concerning the facilities north of the border, the District awarded a contract to AECOM Technical Services for the design of a large diameter pipeline 3.5 miles long, a pump station, and a disinfection facility on October 21, 2010. On April 8, 2014, the Board approved an amendment to increase the contract amount for project management services and for changes in scope for the environmental data collection services. This also extended the contract completion date to June 30, 2018. Part of the contract also includes CEQA/NEPA compliance and other services to get California Department of Public Health permitting. AECOM has now completed most of the preliminary environmental studies. AECOM's current authorization is for \$1,496,021. As of May 29, 2013, AECOM has invoiced the District for \$805,954. The total expenditures to date on the Project are \$2,879,849 (see Attachment B).

AECOM has also started work on the preliminary design reports for the pipeline. Staff and the consultant are working with NSC Agua to determine pressure, size, and point of location at the border.

PUBLIC OUTREACH EFFORTS

Outreach efforts have been taking place to apprise stakeholders, elected officials, and the public about the progress of the Rosarito Beach Desalination Project. These efforts included one-on-one briefings with elected officials, presentations to local chambers of commerce and community groups, updates to regulatory agencies and officials, development of informational materials, and information shared with the media about the Project. To date, the response to community outreach has been positive. As the Project moves forward these outreach efforts will continue.

The District recently hired (W)right On Communications to serve as the District Public Reach consultants. They have extensive experience on outreach efforts on both sides of the border. In addition, NSC Agua has also hired Arturo Elenes. Mr. Elenes is based in Tijuana, B.C. and will complement the outreach efforts from the Mexican side. Both consultants, NSC Agua, and District staff met on June 27, 2014 to discuss strategy and commonality of the messages to be common on both sides of the border.

It is estimated that this Project will start delivering water to Otay customers by early 2018. This will be the first cross-border water supply project of its kind and requires public messaging to inform key stakeholders and the public of the significance of the Project. The District retained Rea and Parker Research to study customers' opinion on the safety, quality, reliability, and affordability of the new water supply. A number of concerns were raised including water quality, crime, terrorism, environmental impacts, and potential nationalization of the assets. There were some concerns about the location of the facility being in Rosarito, Mexico. There is good support for desalinated water as a diversified water supply, a supply that is close to users, and it has been suggested that the desalinated water be 40% of the District's supply. Rea and Parker Research are in the process of conducting a new survey. This effort will be completed by late summer 2014.

The District has established very important contacts and discussions with various Mexican officials. This has resulted in a better understanding of the water situation and various projects and initiatives by local, state, and federal agencies in Mexico.

Diputado Jaime Bonilla, through the Mexican Congress Northern Border Affairs Commission, obtained for the District a participation in a working group led by CONAGUA, writing the new desalination federal standards for intakes, outfalls, and brine discharges. District staff has been participating in these deliberations and our input has helped to shape the language of the new standards.

On June 11-13, 2014, several District staff and Board members were invited to attend the Desalination course that was executed by Centro del Agua para América Latina y el Caribe (CDA) of the University of Monterrey that was sponsored by the North American Development Bank (NADB) and the Border Environment Cooperation Commission (BECC) in San José del Cabo, Baja California Sur (see attached Exhibit D, BECC Bulletin). The subject of the training was, "*Current and Future Outlook of Desalination in Mexico as Alternative Source to Ensure Water Availability.*" The program focus related to the management and implementation of environmental infrastructure and municipal utility services in the border communities.

PRESIDENTIAL PERMIT/ENVIRONMENTAL PROGRAM

The District has begun the permitting process and has submitted a request to the United States Department of State (State Department) requesting the State Department to act as the NEPA lead agency on the Project and process a Presidential Permit to

authorize the construction, operation, and maintenance of a new border crossing pipeline to import desalinated seawater from the U.S./Mexico International Border subject to State Department jurisdiction. The Presidential Permit application referenced the International Boundary and Water Commission issued Minute No. 319, "Interim International Cooperative Measures in the Colorado River Basin through 2017 and Extension of Minute 318 Cooperative Measures to Address the Continued Effects of the April 2010 Earthquake in the Mexicali Valley, Baja California." This Minute includes opportunities for International Projects, specifically, "New Water Sources Projects" that identified a Binational Desalination Plant project in Rosarito Beach, Baja California, Mexico. The District is also working on its environmental compliance documents for both Federal (NEPA) and State (CEQA).

On April 24, 2014 the project was posted on the Federal Registry. A description of the project was also added to the State Department's website. A link to the Federal Registry post is also included on the State Department website address: <http://www.state.gov/e/enr/applicant/applicants/index.htm>

One representative from the State Department visited in San Diego on July 8-10, 2014 to visit the proposed site for the plant and the potential pipeline alignment on both sides of the border. She met resource agencies such as the U.S. Fish and Wildlife Services (USFWS) and the U.S. Army Corp of Engineers (ACOE). She also met with District staff, consultants, and NSC Agua staff.

NSC Agua recently completed their Environmental Impact Report for the desalination plant and the pipeline from the desalination plant in Rosarito to the El Florido Water Treatment Plant in Tijuana. They submitted the report to SEMARNAT (see attached Exhibit E, Evidence of Receipt). The Environmental Impact Report for the last segment from El Florido to the border has not been completed and is expected to be submitted in the next couple of months.

CDPH PERMITTING

The District, AECOM, and NSC Agua have been meeting regularly to finish the draft California Department of Public Health (CDPH) Permit Approval Road Map (White Paper) which was forwarded to CDPH on February 18, 2014 for review and comment. Following the submittal to CDPH, the District and NSC Agua scheduled a meeting to receive guidance on how the Project will be planned, designed, and operated to safeguard public health and to achieve regulatory approval by CDPH. Since submitting the White Paper, the District and NSC Agua have met twice with CDPH. The

meetings on March 19, 2014 and May 7, 2014 with CDPH focused on the White Paper and also on initiating Source Water testing and Sanitary Surveys. Meetings have also been held with the EPA (Environmental Protection Agency) and staff with the San Diego Regional Water Quality Control Board to discuss the Project. In July 2014, NSC Agua started the water quality testing on Rosarito.

WATER PURCHASE AGREEMENT

NSC Agua is working on an outline of the Terms and Conditions (Term Sheet) of the proposed Water Purchase Agreement for the District to review and comment. Because of the complex and technical nature of this project and the transaction, specialized legal, financial, and engineering expertise is required to conduct project due diligence and to assist staff in the preparation and negotiation of this Term Sheet and a future Water Purchase Agreement. Staff is working on developing a short list of these potential key consultants and will bring each to the Board for consideration at the appropriate time.

NSC Agua is also working with Baja state officials on a Letter of Intent. To aid in these efforts at the state and federal levels in Mexico, NSC Agua has retained a lobbyist in Mexico City.

A write-up of the Rosarito Desalination Water Plant Project was published in the Global Water Intelligence Water Desalination Report dated June 2, 2014 under the heading "*SWRO Development Gathers Momentum*" (see Exhibit F).

MINUTE No. 319

As part of this report, the District's Consultant, Peter Silva of Silva-Silva, International, will make an oral presentation about Minute No. 319 (see Exhibit G, Minute No. 319) and the potential water transfers between South Western States and Mexico under the Minute. This potential water transfer could be a boost for the desalination project.

CESPT

A delegation from the District, headed by the Board President, met on April 25, 2014 with the new CESPT Director and his executive team. Director Alfonso Alvarez Juan was appointed by the Baja California Governor in January 2014.

The District has an excellent working relationship with CESPT's personnel and this "meet and greet" visit renewed the opportunities to continue working with the CESPT team. For the

next meeting, it was agreed that CESPT will visit the District to see our facilities.

BINATIONAL AFFAIRS

The District's Consultant, Hector Mares-Cossio, organized a meeting on July 9, 2014 with Enrique Ruelas, the State Director of the Comisión Estatal del Agua (CEA), whereby, District staff and NSC Agua representatives presented the Rosarito project. Hector is currently coordinating with the Northern Affairs Commission and Diputado Bonilla a meeting with CILA in Mexico City in the fall of 2014. He is also organizing meetings with the Baja California Governor and CONAGUA's state representatives.

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

P:\WORKING\CIP P2451 Desalination Feasibility Study\Staff Reports\Board 8-06-14\BD 08-06-14 Staff Report Rosarito Desal Project Update Info Item (BK-RP).doc

- Attachments:
- Attachment A - Committee Action
 - Attachment B - Budget Detail
 - Exhibit A - Location Map
 - Exhibit B - Property Land Use Approval
 - Exhibit C - Aguardan llegada de planta desalinizadora
 - Exhibit D - BECC Bulletin
 - Exhibit E - Evidence of Receipt from SEMARNAT
 - Exhibit F - Water Desalination Report, Volume 50, Number 21, dated June 2, 2014, "SWRO Development Gathers Momentum"
 - Exhibit G - Minute No. 319



ATTACHMENT A

SUBJECT/PROJECT: P2451-001101	Informational Update for the Rosarito Desalination Plant and Conveyance 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 July 15, 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.



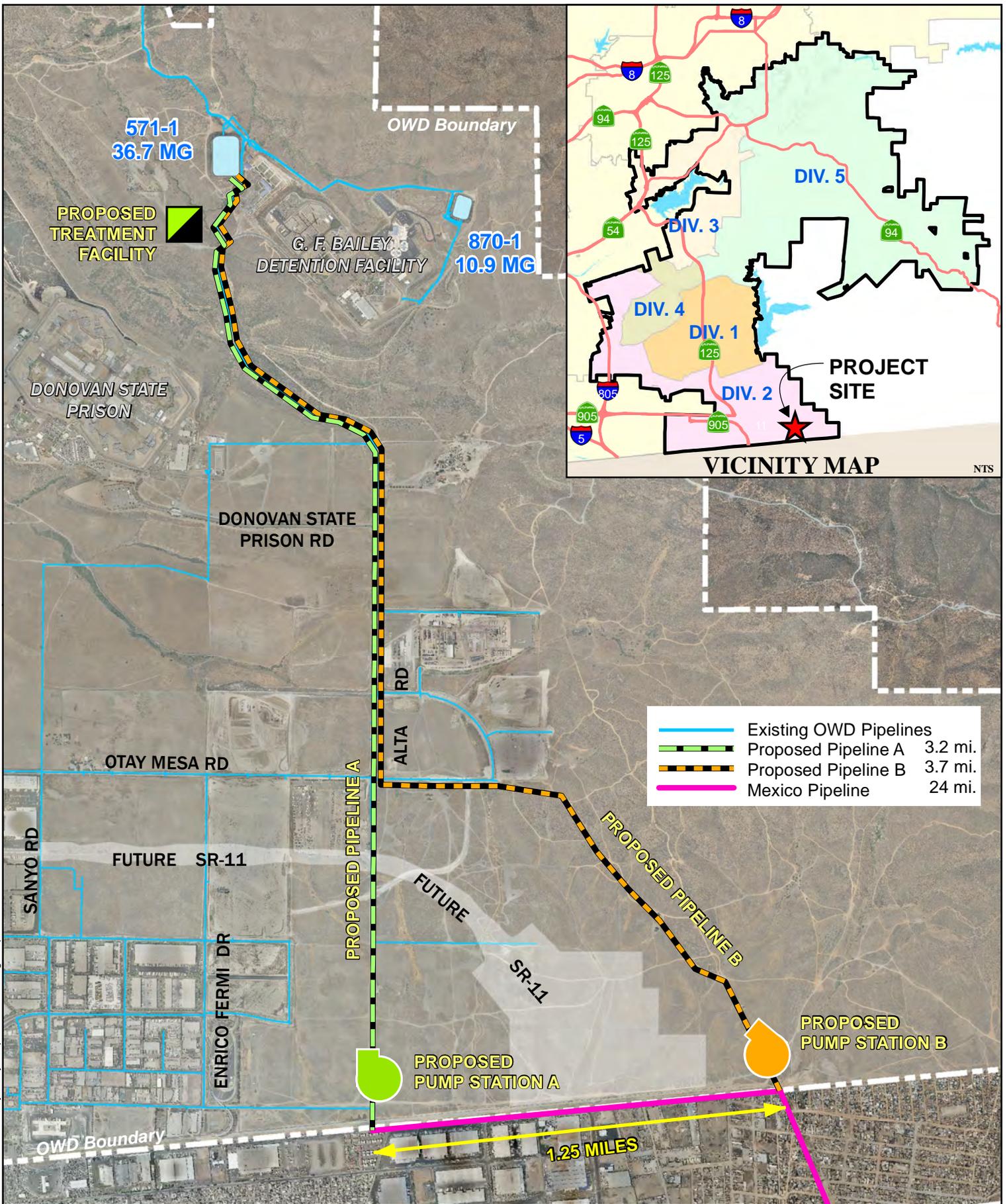
ATTACHMENT B

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

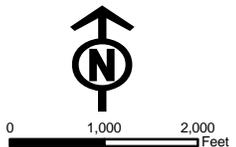
Project Budget Detail						
P2451-Otay Mesa Desalination Conveyance and Disinfection System Project						
Budget:	\$30,000,000.00	Committed	Expenditures	Outstanding Commitment & Forecast	Projected Final Cost	Vendor/Comments
Planning	Consultants	\$ 98,577	\$ 98,577	\$ -	\$ 98,577	CAMP DRESSER & MCKEE INC
		\$ 13,311	\$ 13,311	\$ -	\$ 13,311	CPM PARTNERS INC
		\$ 12,200	\$ 12,200	\$ -	\$ 12,200	REA & PARKER RESEARCH
		\$ 70,078	\$ 70,078	\$ -	\$ 70,078	MARSTON+MARSTON INC
		\$ 437,200	\$ 360,400	\$ 76,800	\$ 437,200	HECTOR I MARES-COSSIO
		\$ 4,173	\$ 4,173	\$ -	\$ 4,173	SALVADOR LOPEZ
		\$ 254,000	\$ 140,289	\$ 113,711	\$ 254,000	SILVA SILVA INTERNATIONAL
	Travel	\$ 19,230	\$ 19,230	\$ -	\$ 19,230	STAFF
	Printing	\$ 61	\$ 61	\$ -	\$ 61	MAIL MANAGEMENT GROUP INC
	Prof Legal Fees	\$ 162,041	\$ 162,041	\$ -	\$ 162,041	GARCIA CALDERON & RUIZ LLP
		\$ 43,175	\$ 43,175	\$ -	\$ 43,175	SOLORZANO CARVAJAL GONZALEZ Y
		\$ 16,114	\$ 16,114	\$ -	\$ 16,114	STUTZ ARTIANO SHINOFF
	Service Contracts	\$ 106	\$ 106	\$ -	\$ 106	SAN DIEGO DAILY TRANSCRIPT
		\$ 500	\$ 500	\$ -	\$ 500	REBECA SOTURA NICKERSON (INTERPRETOR)
	Standard Salaries	\$ 838,242	\$ 838,242	\$ -	\$ 838,242	
	Total Planning	\$ 1,969,007	\$ 1,778,496	\$ 190,511	\$ 1,969,007	
	Design	Consultants	\$ 4,046,706	\$ 805,954	\$ 3,240,752	\$ 4,046,706
\$ 5,109			\$ 5,109	\$ -	\$ 5,109	MARSTON+MARSTON INC
\$ 114,175			\$ 114,175	\$ -	\$ 114,175	MICHAEL R WELCH PHD PE
\$ 8,818			\$ 8,818	\$ -	\$ 8,818	CPM PARTNERS INC
\$ 5,000			\$ 5,000	\$ -	\$ 5,000	ATKINS
\$ 50,293			\$ 21,792	\$ 28,501	\$ 50,293	BROWNSTEIN HYATT FARBER & SCHRECK LLP
\$ 50,000			\$ 17,500	\$ 32,500	\$ 50,000	BUSTAMANTE & ASSOCIATES LLC
Travel		\$ 2,874	\$ 2,874	\$ -	\$ 2,874	STAFF
Prof Legal Fees		\$ 7,761	\$ 7,761	\$ -	\$ 7,761	STUTZ ARTIANO SHINOFF
Service Contracts		\$ 114	\$ 114	\$ -	\$ 114	REPROHAUS CORP
		\$ 343	\$ 343	\$ -	\$ 343	SAN DIEGO UNION-TRIBUNE LLC
Standard Salaries		\$ 111,583	\$ 111,583	\$ -	\$ 111,583	
Total Design		\$ 4,402,776	\$ 1,101,024	\$ 3,301,752	\$ 4,402,776	
Construction		Standard Salaries	\$ 329	\$ 329	\$ -	\$ 329
	Total Construction	\$ 329	\$ 329	\$ -	\$ 329	
Budget	\$30,000,000.00					
Total		\$ 6,372,113	\$ 2,879,849	\$ 3,492,263	\$ 6,372,113	

(March 23, 2005 through May 29, 2014)

P:\WORKING\CIP P2451 Desalination Feasibility Study\Graphics\Exhibits-Figures\Exhibit A.mxd



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





Playas de Rosarito, B. C. 01 de Abril del 2014. H. AYUNTAMIENTO DE PLAYAS DE ROSARITO

DECLARANDO 02 ABR 2014

C. ANTONIO RAMIREZ GOBBI. PROPIETARIO DEL PREDIO SOLICITANTE PRESENTE.-

Por medio del presente y en seguimiento a la solicitud US/68/2014, recibida por esta Dirección, en la cual se solicita OPINION TECNICA de Uso de Suelo para CONSTRUCCION DE UNA PLANTA DESALADORA (área de 81289 m2), con ubicación en parcela No. 32 Z-1 P-2/5, Col. Lienzo Charro, Zona Centro, clave catastral EM-032-001, de este Municipio de Playas de Rosarito, B. C.

Una vez analizados los lineamientos del Programa de Desarrollo Urbano del Centro de Población de Playas de Rosarito B. C., 2007-2020 (PDUCP-PR) publicado en el Periódico Oficial número 43 del Estado de B. C., el 19 de Octubre de 2007, las variables urbanas que inciden en la zona así como la inspección física al predio se encontraron los siguientes Puntos:

- 1. En la Carta de Estructura Urbana Propuesta para el año 2020 del PDUCP-PR, el predio se clasifica con uso de suelo RCC, RESERVA DE USO COMERCIAL.
2. En el Punto 3.12.1 USO DE SUELO POR DISTRITO, este predio se localiza dentro del DISTRITO I. BARRIO 1.
3. En el punto 3.12.3 Usos Compatibles por Distrito señala que para el distrito y barrio indicado lo zonifica como reserva comercial, uso de suelo Industria Ligera CONDICIONADA.
4. En el Nivel Antecedentes del PDUCP-PR para el estudio y análisis del área urbana clasifica la ciudad en 14 sectores, en este caso el predio se ubica en el Sector 2. Denominado Villas del Mar. Este sector se caracteriza por presentar las etapas que distinguen el crecimiento, teniendo su origen a partir de los veintes y de la cual forman parte las parcelas No. 33 y 34, además de la concentración de comercio, turismo y equipamiento a lo largo del Bulevar Benito Juárez. El uso del suelo predominante es el habitacional, cuenta con algunas áreas baldías disponibles para crecimiento. Los desarrollos dependen del enlace a través del Bulevar Benito Juárez.
5. En su Nivel Normativo el PDUCP-PR señala como objetivos particulares en cuanto a imagen urbana, se busca definir una imagen urbana distintiva para Playas de Rosarito, mediante la reglamentación de los nuevos desarrollos y la recomposición de la imagen en los corredores urbanos actuales. Todo en función del carácter urbano turístico que guarda la ciudad en la región.
6. En base al Reglamento de la ley de Desarrollo Urbano art. 77 y norma general de ordenación 19 estudio de impacto urbano. Previo al registro de cualquier manifestación, licencia, permiso o autorización, quienes pretendan llevar a cabo alguno de los siguientes proyectos, requerirán el dictamen de la Secretaria de Desarrollo Urbano en materia de impacto urbano o urbano ambiental:

- I Proyectos de vivienda con más de 10000 m2 de construcción.
II Proyectos de oficinas, comercios, servicios, industria o equipamiento con más de 5000 m2 de construcción.

- 7. Con base en el Reglamento de la Ley de Edificaciones para el Municipio de Playas de Rosarito, Baja California, establece lo siguiente:
8. De acuerdo a inspección realizada se localizo parcela no. 33 actualmente deshabitada y baldía, el terreno no presenta pendientes arriba del 35% ni áreas con relieves muy accidentadas, ni taludes, la superficie es totalmente plana, colinda al norte con muro de contención limite de zona de amortiguamiento de la planta de generación de CFE, al este con parcela No.32, al sur con área habitacional de la colonia Lienzo Charro y al oeste con predios habitacionales de la parcela No. 32.
9. En congruencia con lo anterior y con fundamento en lo dispuesto por el artículo 115 Constitucional, la Ley de Desarrollo Urbano del Estado de Baja California, el Decreto No. 166, que aprueba la creación del

TEL: (661) 6149600 Y (661) 6149656

C. José Haroz Aguilar No. 2000, Fracc. Villa Turística. Playas de Rosarito, B.C., C.P., 22710



Municipio de Playas de Rosarito publicado en el Periódico Oficial el 21 de Julio de 1995, la Ley de Edificaciones, la Ley del Equilibrio Ecológico y Protección al Ambiente, los Reglamentos derivados de los mismos; así como la inspección realizada, esta Dirección emite **OPINION TECNICA DE USO DE SUELO FAVORABLE** para **CONSTRUCCION DE UNA PLANTA DESALADORA**, pero condicionado a lo siguiente:

- a) La presente Opinión Técnica condicionada en materia de uso de suelo, se otorga sin perjuicio de las demás autorizaciones que correspondan a otras instituciones.
- b) Se otorga la presente, en la inteligencia, que podrá ser modificado o adecuado su contenido, en su oportunidad por así considerarlo los programas, leyes y reglamentos relativos al Desarrollo Urbano así como la autoridad competente que lo requiera.
- c) Las obras de protección realizadas o que deban realizarse para mitigar afectaciones por naturaleza son responsabilidad del desarrollador.
- d) Deberá pasar al departamento de Gestión Ambiental y Ecología Municipal para tramitar su licencia correspondiente.
- e) Deberá presentar documentación que acredite la contratación vigente del servicio de manejo, recolección periódica y disposición final de basura orgánica e inorgánica así como de residuos contaminantes que se pudiesen generar.
- f) Presentar estudio de mecánica de suelo en áreas donde se ubicara la planta.
- g) Deberá presentar factibilidad de PEMEX para su proyecto.
- h) Deberá presentar factibilidad de C.F.E. para su proyecto.
- i) Deberá presentar factibilidad de C.E.S.P.T. para su proyecto.
- j) Deberá presentar factibilidad de CONAGUA para su proyecto.
- k) Deberá presentar factibilidad de S.C.T. para su proyecto.
- l) Deberá presentar copia de la resolución del Manifiesto de Impacto Ambiental y el estudio de Riesgos, que emite la Dirección de Ecología del Estado.
- m) Exhibir póliza de seguro para la reparación de daños a terceros, en caso de que sea otorgada la licencia.
- n) Deberá anexar copia de los documentos solicitados en los incisos anteriores y presentar el proyecto ejecutivo (planta de conjunto indicando la integración de este proyecto con el resto del predio, fachadas y planta arquitectónica).
- o) Deberá presentar Estudio de Impacto Urbano al Departamento de Uso de Suelo.
- p) Las condicionantes antes mencionadas serán revisadas por este departamento al tramitar su Dictamen de Uso de Suelo, cumpliendo con los requisitos que establece el Registro Municipal de Trámites.
- q) Esta FACTIBILIDAD de uso de suelo procede únicamente para los términos solicitados y se le apercibe que de presentarse RECHAZO SOCIAL JUSTIFICADO o cualquier otra afectación comprobable de riesgo para la salud a los habitantes de la zona durante el periodo de construcción y operación de esta planta, así como el que incumpla las condicionantes establecidas en esta resolución, la presente será revocada.

TEL: (661) 6149600 Y (661) 6149656

C. José Haroz Aguilar No. 2000, Fracc. Villa Turística. Playas de Rosarito, B.C., C.P., 22710



NOTA IMPORTANTE: EL PRESENTE OFICIO NO ES UN PERMISO DE CONSTRUCCION, NI DE OPERACION Y EN EL CASO DE FALSEDAD DE INFORMACION RECIBIDA EN LOS DOCUMENTOS DE PROPIEDAD O CUALQUIER INFORMACION, AUTOMATICAMENTE ESTE OFICIO QUEDA ANULADO.

Para cualquier modificación que surja con fines de mejorar el inmueble, el proyecto deberá de apearse a las especificaciones técnicas Leyes y Reglamentos que rigen el Desarrollo Urbano del Estado de Baja California, así como el cumplimiento de las licencias respectivas para los servicios públicos, debiendo estar autorizadas por las dependencias correspondientes.

Sin otro particular quedo de usted.


Atentamente
"POR UN GOBIERNO QUE ENTIENDE
Y ATIENDE A LA GENTE"
[Signature]
C.P. Andrés Gómez Nájera
Director De Control Urbano
DIRECCION DE CONTROL URBANO
Ayuntamiento de Playas de Rosarito, B. C.

H. AYUNTAMIENTO DE
PLAYAS DE ROSARITO
DECLARADO
02 ABR 2014
DIRECCION DE CONTROL
URBANO

[Signature]
Ing. Juan Manuel Díaz Ríos
Jefe del Departamento De Uso de Suelo
H. V. Ayuntamiento de Playas de Rosarito, B. C.

Aguardan llegada de planta desalinizadora

Hay también proyectos de inversiones eólicas y de electricidad para el Noreste de Rosarito

Rosarito, BC.-La planta desalinizadora y proyectos de generación de energía eléctrica no contaminante son algunas inversiones que estarán llegando a Rosarito, dio a conocer el presidente del Comisariado del Ejido Mazatlán, Rodolfo González.

Explicó que en el caso de la planta desalinizadora, la empresa NSC Agua compró al ejido 20 hectáreas de tierra colindantes a la planta generadora de energía eléctrica Presidente Juárez de la CFE, y desde hace 5 años se



Rodolfo González.

iniciaron los tratos para la venta del predio donde se pretende construir la planta desalinizadora.

Añadió que aún se estudia hacia dónde deberán salir los ductos para conectarse a Mesa de Otay y entregar el agua a la Cespt, pero son de-

talles técnicos que deberán irse solventando para que inicien las obras.

Explicó que la llegada de esta planta despertó el interés de empresas dedicadas a la generación de energía eléctrica, y hay proyectos de plantas eólicas y otras generadoras de electricidad que pretenden instalarse en la zona industrial de Rosarito, ubicadas al Noreste de la ciudad.

Dijo que la zona industrial de Rosarito tiene una dimensión de 240 hectáreas, la cual no está muy impactada y ahí pudieran instalarse las plantas generadoras de energía eléctrica, ya que al principio había la intención de que estas se ubicaran cerca de la CFE, pero el sitio está muy impactado, puesto que

hay población en el lugar.

González Pitones mencionó que hace algunos años la empresa automotriz Kia compró más de 100 hectáreas hacia el 2004 y parece ser, que el proyecto que se tenía de construir una planta armadora se reactivará.

Por lo que compete al Baja California Center, el dirigente de los ejidatarios cuyas tierras colindantes al recinto les pertenecen, explicó que ya se les entregó un estudio de un proyecto conceptual, donde se especifica cómo pudiera quedar ese lugar si se impacta adecuadamente.

Detalló que son un promedio de 248 hectáreas las que rodean al centro de convenciones.

— POR CARMEN GUTIÉRREZ

EXHIBIT C



Se necesita contratar entre 15 a 20 elementos más, dice Castelán.

Urge mantenimiento a estaciones de bomberos

Rosarito, BC.-La rehabilitación de las estaciones de bomberos en Rosarito empieza a ser una necesidad urgente, ya que se registra al menos un 10% de incremento en los servicios anualmente y ante ello se deben modernizar para dar un mejor servicio.

Héctor Castelán, director de Bomberos de la ciudad, explicó que existe interés por parte del Gobierno municipal para invertir en el área de bomberos y por ello, realizó ya algunos recorridos para conocer las necesidades de las cinco estaciones, que hay distribuidas en el

Municipio.

Castelán Medina refirió que las estaciones del Centro y de Primo Tapia son las más viejas, con más de 40 años de su construcción, y en ambos casos se plantea la necesidad de derrumbarlas para crear nuevas y más funcionales instalaciones.

Comentó que trimestralmente reciben un promedio de 800 llamadas para atender algún reporte y se requiere que el servicio pueda brindarse lo antes posible, para evitar catástrofes.

— POR CARMEN GUTIÉRREZ



Aquí alcanzo el éxito

Estudia una Maestría en Ingeniería

Concentraciones en:

- Administración industrial
- Administración de Materiales y Logística
- Diseño de procesos y Manufactura
- Automatización y Control
- Ingeniería Aeroespacial
- Redes y Telecomunicaciones

Única en México con
Acreditación Internacional





CETYS
UNIVERSIDAD

Enfrenta tus retos con pasión | www.cetys.mx | Tel. (664) 903.1800



Tradición y Tecnología en Servicios de Limpieza



CON PERSONAL TÉCNICO CALIFICADO Y EL EQUIPO MAS MODERNO.

Somos especialistas en lavado de alfombras y muebles

Lo máximo en potencia y calidad:
Sistema de extracción con



Además:

-Limpieza y abrillantado de todo tipo de pisos. -Limpieza general. -Limpieza diaria.



Servicios domésticos, comerciales e industriales.



685-0600 Suc. Rosarito (661)612-15-12
www.lavatec.com.mx

BORDER ENVIRONMENT COOPERATION COMMISSION BECC BULLETIN

— LATEST NEWS & EVENTS —

BECC, NADB host first-ever Desalination Seminar in Los Cabos

On June 11 through 13, a total of 35 participants attended a seminar hosted by the North American Development Bank (NADB) and the Border Environment Cooperation Commission (BECC) in Los Cabos, Baja California Sur, to discuss the current and future outlook of desalination in Mexico as an alternative source to ensure water availability. The seminar consisted of 16 classroom hours and a field visit to the desalination plant operated by the Los Cabos water utility. The seminar was provided by instructors from the Monterrey Technological Institute's (Instituto Tecnológico de Estudios Superiores de Monterrey, ITESM) Latin American and Caribbean Water Center (Centro del Agua para América Latina y el Caribe, CDA).



Participants visit the plant in Los Cabos

Attendees included participants from both sides of the U.S.-Mexico border, such as Congressman Jaime Bonilla, Chairman of the Congressional Committee on Northern Border Affairs; officials from the Mexican section of the International Boundary and Water Commission (IBWC), representatives of National Water Commission's (CONAGUA) northern watershed organizations, the director of the northwest watershed organization, Cesar Lagarda, the Tamaulipas and Baja California state water commissions, local utility staff from various Mexican border communities, and executives from the Otay Water District in California.

Jorge Silva, NADB Program Coordinator, made some opening remarks and highlighted the Bank's interest in "setting in motion synergies around the issue of desalination with all the agencies involved in the field, and promoting alternative measures to ensure the supply and treatment of water within the NADB/BECC jurisdiction."

Miguel Angel Lopez, an internationally recognized CDA instructor, led the first part of the training. His presentation included an overview of the technological outlook for desalination by evaporation or membranes. He noted that this is a viable option for regions with water stress or water supply vulnerability.



ITESM Trainer Miguel Angel López

The course demonstrated the increasing global trend to produce desalinated water, which has gone from 48 million cubic meters (m³)/day to 95 million m³/day in 2006, an amount sufficient to supply water to 470 million users.

He said Mexico has several seawater and brackish water treatment plants in Baja California and Baja California, Mexico City, and Quintana Roo, particularly in Cancun. He underscored that the plant in Los Cabos, with 200 lps capacity, is the only public service desalination facility in Mexico. It has been in operation since 2007 and has potential for expansion. The instructor said there are plans to build sizeable facilities in Rosarito (4.5 cubic meters per second) and Ensenada (more than

500 lps), Baja California, and several more throughout Mexico, at a cost of nearly US \$300 million.

He also said in the global future outlook, reverse osmosis is emerging as a leading technology, along with others that seem equally attractive, such as evaporation to treat both seawater -which is the most common type- and brackish water.

Course attendees discussed the cost of reverse osmosis water desalination, which ranges between US \$0.5/m³ in Spain and Israel, and US \$3.0/m³ in Australia. These figures indicate a global tendency to achieve very competitive prices, which largely depend on the cost of electricity around the world. In Mexico, the average cost of desalination is US \$0.6/m³.

A second course instructor was Hector Peterson, who has been involved in managing various desalination projects, including the one in Los Cabos. His presentation addressed the structuring of desalination projects from the legal, financial, and administrative perspectives.



The desalination plant

Recommendations issued for desalination projects included:

- Investing in preliminary and pre-feasibility studies to select the most appropriate technology, considering different site options, as well as soil mechanics and environmental studies.
- Designs must consider headworks, pretreatment, membrane types, and availability of brine, sludge handling and disposal, water volume, concentration, and flow.
- Inadequate pretreatment can cause irreversible damage to membranes, which results in additional production costs and operating issues. For that reason, fouling by dirt must be minimized.
- The main challenge is to be able to incorporate desalinated water to the supply without causing a major impact on water rates, and to make it competitive and minimize impacts to users.
- Public-private partnership schemes have been successful throughout the world. The involvement of the private sector is critical to address the reduced availability of grants.
- Public-private partnerships for BOT schemes are highly recommended to advance desalination projects.
- The existing legal framework provides certainty to these public-private partnership schemes. This includes relevant federal and state laws.
- Encourage the use of renewable energy to reduce production costs and install separate power systems to address the high energy cost of desalination.
- Implement desalination policies as part of development plans.
- Review regulations with highly streamlined administrative processes, such as the standard currently being developed to address brine discharges.
- Promote research and development in the field.
- Course participants acknowledged that, despite the progress made in the field at the global level, the issue of desalination is still considered a taboo by the public. In this regard, the recommendation was to sponsor an international workshop on desalination to dispel existing reservations and debunk myths among the public. The socialization of the issue, combined with democratic planning at the local level, is the way to consolidate this type of projects, as was done and continues being done in Los Cabos.


SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES
DELEGACION FEDERAL DE SEMARNAT EN EL ESTADO DE BAJA CALIFORNIA
Constancia de Recepción

Número de bitácora: 02/MP-1689/05/14	Fecha de recepción: 29 DE MAYO DEL 2014, 14:38 HRS.
Clave del proyecto: 02BC2014HD028	Nombre del proyecto: ACUEDUCTO ROSARITO- EL FLORIDO
Trámite: RECEPCION, EVALUACION Y RESOLUCION DE LA MANIFESTACION DE IMPACTO AMBIENTAL EN SU MODALIDAD PARTICULAR.- MOD. A: NO INCLUYE ACTIVIDAD ALTAMENTE RIESGOSA	
RFC: NAG100512UA7	
Razón Social: NSC AGUA SA DE CV	
Número del documento:	
Monto pagado: \$ 27115	Referencia pago: 6436F70B55
Datos para notificaciones: RECOGE EN OFICINA REGIONAL: ISMAEL SANCHEZ GONZALEZ	
Entrega Requisitos Completos: SI	
Observaciones: ENS.DEBERA PUBLICAR EXTRACTO DE PROYECTO EN PERIODICO MAYOR CIRCULACION, DENTRO DE 5 DIAS Y PRESENTARLA A ESTA AUTORIDAD 5 DIAS POSTERIOR, ART.34 FRACC. I LGEEPA, 41 REIA EN CASO DE NO PRESENTARLA SE DESECHARA EL TRAMITE ART. 17-A LFPA	
 <hr/> ENRIQUE NORIEGA SPINOLA Persona que acude a realizar el trámite	 <hr/> MARIA ISABEL VEGA FLORES El técnico receptor



Mayo 16, 2014

Lic. Alfonso Orel Blancafort Camarena

Delegado Federal en Baja California

P R E S E N T E

Asunto: Evaluación de la Manifestación de Impacto Ambiental del proyecto **Acueducto Rosarito - El Florido**

Ismael Sánchez, como representante legal de la sociedad NSC Agua, S.A. De C.V. Señalando como domicilio para oír y recibir notificaciones en Av. Sánchez Taboada 10488, col. Zona Río en Tijuana Baja California, Código Postal 22320, y autorizando al Rubén Sánchez Campodónico, Sr. Enrique Noriega Spinola, Milton Rubio Díaz y al Sr. Rubén Barrera Ávalos para realizar cualquier gestión al respecto, por este medio solicitamos atentamente se dé ingreso a la Manifestación de Impacto Ambiental Modalidad Particular, Sector Hidráulico, del proyecto **Acueducto Rosarito - El Florido**, para su evaluación y trámite según SEMARNAT-04-002-A.

Con este fin se acompaña a la presente, el comprobante correspondiente al pago de derechos realizado y el número de ejemplares impresos y en formato digital de la Manifestación, de acuerdo a lo establecidos en el procedimiento del trámite referido.

Sin más por el momento.

A t e n t a m e n t e

Lic. Ismael Sánchez
Representante Legal



NSC Agua, S.A. de C.V.

Blvd. Sánchez Taboada No. 10488 Piso 8, Interior 801, Zona Río, Tijuana, B.C. C.P. 22320

Teléfono: (664) 615-8024

PLAZA : 074
SUCURSAL : 0602
USUARIO : MB30278
R.F.C. : NAG100512UA7

PAGINA 1 DE 1

DENOMINACION O RAZON SOCIAL: NSC AGUA S.A. DE C.V.

FECHA Y HORA DE PAGO: 26/05/2014 11:46 hrs.

NO. DE OPERACION: 414612008602

LLAVE DE PAGO: 6436F70B55

CUENTA BANCARIA : 0000000000

TOTAL EFECTIVAMENTE PAGADO: \$27,115

DEPENDENCIA : 08 SECRETARIA DE MEDIO AMBIENTE Y RECURSOS NATURALES

POR LOS CONCEPTOS SIGUIENTES:

DERECHOS, PRODUCTOS Y APROVECHAMIENTOS

CLAVE DE REFERENCIA DEL DPA: 084000984

CADENA DE LA DEPENDENCIA : 00110020220023

IMPORTE 27,115

CANTIDAD PAGADA 27,115

CADENA ORIGINAL :

||10001=NAG100512UA7|10017=27115|20001=40012|20002=414612008602|40002=2014
0526|40003=11:46|40008=6436F70B55|14704=27115|14708=27115|14720=27115|1473
3=084000984|14734=00110020220023|30003=000001000007000163512||

SELLO DIGITAL :

||hhKbrwtXWM26nIZX1JHkNX29/+p1G0UoN1Xx1gpeU9KRRvIACONGzip7v
qRwxzrb+jUyjwXjnkB+000KeLFiZZuaRSx/cnLFxnGydmvap7oL7tpJLgv2
lJCGv6fK0AezWgImGch72W+MIqwfY6VAExFKZfUy77sm1/YK5vXn9hk=||

ESTIMADO CLIENTE VERIFIQUE QUE LOS DATOS SEAN CORRECTOS,
SOLO EL DIA DEL PAGO ESTAMOS AUTORIZADOS A CORREGIR.

0602-C5 0602-C5
BBVA Bancomer 12
Suc. Tijuana-Rio
Caja 5
26 MAY 2014
RECIBADO PARA DEPOSITO O
PAGO ESTE DOCUMENTO, DE
ACUERDO CON EL ARTICULO 39
L.G.T.O.C.
0602-C5 0602-C5

 		SECRETARÍA DE MEDIO AMBIENTE Y RECURSOS NATURALES DELEGACION FEDERAL DE SEMARNAT EN EL ESTADO DE BAJA CALIFORNIA Constancia de Recepción	
Número de bitácora: 02/MP-1683/05/14 Clave del proyecto: 02BC2014HD027		Fecha de recepción: 29 DE MAYO DEL 2014, 14:27 HRS. Nombre del proyecto: PLANTA DESALINIZADORA ROSARITO	
Trámite: RECEPCION, EVALUACION Y RESOLUCION DE LA MANIFESTACION DE IMPACTO AMBIENTAL EN SU MODALIDAD PARTICULAR.- MOD. A: NO INCLUYE ACTIVIDAD ALTAMENTE RIESGOSA			
RFC: NAG100512UA7			
Razón Social: NSC AGUA SA DE CV			
Número del documento:			
Monto pagado: \$ 54230		Referencia pago: 048B080E53	
Datos para notificaciones: RECOGE EN OFICINA REGIONAL: ISMAEL SANCHEZ GONZALEZ			
Entrega Requisitos Completos: SI			
Observaciones: ENS. DEBERA PUBLICAR EXTRACTO DE PROYECTO EN PERIODICO MAYOR CIRCULACION, DENTRO DE 5 DIAS Y PRESENTARLA A ESTA AUTORIDAD 5 DIAS POSTERIOR, ART.34 FRACC.I LGEEPA, 41 REIA, EN CASO DE NO PRESENTARLA SE DESECHARA EL TRAMITE ART.17-A LFPA			
 <hr/> ENRIQUE NORIEGA SPINOLA Persona que acude a realizar el trámite		 <hr/> MARIA ISABEL VEGA FLORES El técnico receptor	

Para consultar el estatus de su trámite visite la página WEB: <http://tramites.semarnat.gob.mx/> en la sección "Consulta tu Trámite en línea" ó comuníquese al ECC al teléfono 01-800-0000-247 de 09:00 a 15:00 y de 16:00 a 18:00 hrs
 Este Documento será inválido si contiene tachaduras o enmendaduras.



Mayo 16, 2014

Lic. Alfonso Orel Blancafort Camarena
Delegado Federal en Baja California
P R E S E N T E

Asunto: Evaluación de la Manifestación
de Impacto Ambiental del proyecto
Planta Desalinizadora Rosarito

Ismael Sánchez, como representante legal de la sociedad NSC Agua, S.A. De C.V., señalando como domicilio para oír y recibir notificaciones en Av. Sánchez Taboada 10488, col. Zona Río en Tijuana Baja California, Código Postal 22320, y autorizando al Sr. Rubén Sánchez Campodónico, Sr. Enrique Noriega Spinola, Milton Rubio Díaz y al Sr. Rubén Barrera Ávalos para realizar cualquier gestión al respecto, por este medio solicitamos atentamente se dé ingreso a la Manifestación de Impacto Ambiental Modalidad Particular, Sector Hidráulico, del proyecto **Planta Desalinizadora Rosarito**, para su evaluación y trámite según SEMARNAT-04-002-A.

Con este fin se acompaña a la presente, el comprobante correspondiente al pago de derechos realizado y el número de ejemplares impresos y en formato digital de la Manifestación, de acuerdo a lo establecidos en el procedimiento del trámite referido.

Sin más por el momento.

A t e n t a m e n t e

Lic. Ismael Sánchez
Representante Legal

SECRETARIA DE MEDIO AMBIENTE Y RECURSOS
NATURALES DELEGACIÓN FEDERAL EN BAJA CALIFORNIA
RECIBIDO
MAY 29 2014
RECIBIDO
DELEGACIÓN FEDERAL EN BAJA CALIFORNIA
ENERGÍA Y CLIMA
12:30 Alexoc [Signature]

NSC Agua, S.A. de C.V.

Bldv. Sánchez Taboada No. 10488 Piso 8, Interior 801, Zona Río, Tijuana, B.C. C.P. 22320
Teléfono: (664) 615-8024

PLAZA : 074
SUCURSAL : 0602
USUARIO : MB30278
R.F.C. : NAG100512UA7
DENOMINACION O RAZON SOCIAL : NSC AGUA S.A. DE C.V.
FECHA Y HORA DE PAGO : 26/05/2014 11:43 hrs.
NO. DE OPERACION : 414612008421 LLAVE DE PAGO : 048B080E53
CUENTA BANCARIA : 0000000000
TOTAL EFECTIVAMENTE PAGADO : \$54,230
DEPENDENCIA : 08 SECRETARIA DE MEDIO AMBIENTE Y RECURSOS NATURALES

POR LOS CONCEPTOS SIGUIENTES:

DERECHOS, PRODUCTOS Y APROVECHAMIENTOS
CLAVE DE REFERENCIA DEL DPA : 084000984
CADENA DE LA DEPENDENCIA : 00110020220043

IMPORTE 54,230
CANTIDAD PAGADA 54,230

CADENA ORIGINAL :

||10001=NAG100512UA7|10017=54230|20001=40012|20002=414612008421|40002=2014
0526|40003=11:43|40008=048B080E53|14704=54230|14708=54230|14720=54230|1473
3=084000984|14734=00110020220043|30003=000001000007000163512||

SELLO DIGITAL :

||FPkYFhhfof7/i7K6+bmBW9c1lWswEMHH8rvYD/Hvb6haYkH+p7WYwQhLe
fHQSYhgw9r3q0hPm3f9dmRK52cPJzo8nFO8Mi/u8ZnkfLiyRSgCdozjm2Zi
eQm8lkVcPBe6kMBZVLzF6p5rB0xCnBVNpmfoUJxDaoEiy6jjGxMxba4=||

ESTIMADO CLIENTE VERIFIQUE QUE LOS DATOS SEAN CORRECTOS,
SOLO EL DIA DEL PAGO ESTAMOS AUTORIZADOS A CORREGIR.



0602-C5 0602-C5
BBVA Bancomer 12
Suc. Tijuana-Rio
Caja 5
26 MAY 2014
RECIBIMOS PARA DEPOSITO O
PAGO ESTE DOCUMENTO, DE
ACUERDO CON EL ARTICULO 39
L.G.T.O.C.
0602-C5 0602-C5

WATER DESALINATION REPORT

The international weekly for desalination and advanced water treatment since 1965

Volume 50, Number 21

2 June 2014

Mexico

SWRO DEVELOPMENT GATHERS MOMENTUM

NSC Agua, Consolidated Water's (CWCO) Mexican subsidiary, has completed the purchase of two parcels of land in Rosarito Beach, Mexico, on which it plans to build a 100 MGD (378,500 m³/d) SWRO plant. The cost of the parcels, which have a combined total of 20ha (49.5 acres) and are located near Comisión Federal de Electricidad's (CFE) Rosarito Power Station, was slightly over \$20 million.

CWCO CEO Rick McTaggart said, "We believe the site represents the best possible location for a northern Baja California, desal plant because it is adjacent to an existing feedwater source and is of sufficient size to accommodate a 100 MGD facility." He noted that the land purchase demonstrates the company's confidence in the project's viability and their commitment to its completion.

Negotiations on water purchase agreements with Comisión Estatal de Servicios Públicos de Tijuana (CESPT) and Southern California's Otay Water District (OWD) are expected to begin shortly. Agreements with CFE, which allow for the construction of facilities to transport feed water and RO concentrate between the adjacent desal and power plant sites, are in place. OWD has already signed a non-binding letter of intent to purchase water from the project and started applications for necessary US regulatory approvals, including a Presidential Permit for the US border crossing.

NSC has engaged Carollo, GHD, KPMG and Santamarina y Steta as engineering, technical, financial and legal advisors, respectively. A Manifestación de Impacto Ambiental (MIA), or Environmental Impact Report, is believed to be ready for submittal to the Mexican regulators, and OWD has engaged AECOM to undertake design work on the pipeline and other facilities on the US side of the border.

The plant will cost an estimated \$550 million, plus \$150 million in conveyance costs, depending on the final capacity, schedule and delivery points.

New York

HUDSON RIVER RO PROJECT DELAYED

It looks like United Water New York's (UWNY) plans to begin construction of an RO plant on the Hudson River at Haverstraw, New York, will be put on hold. At a 22 May Public

Service Commission (PSC) hearing, the Commission's staff said that a decline in water demand since 2007 has delayed the need date for the supply to 2020.

The staff recommended suspending the 2015 deadline for the new water supply going online, while instructing UWNY to continue to pursue the necessary permits for construction before the Department of Environmental Conservation.

Construction of the 7.5 MGD (28,390 m³/d) plant was planned to take place in three equal 2.5 MGD stages over 15 years at a total estimated cost of between \$139.2 and \$189.3 million.

While covering the opposition to the project, which is located downriver from the Indian Point Nuclear Plant, a local reporter did her part to fuel the flames of ignorance by writing: "One local opponent said that desalination would not remove radiation in our water from Indian Point, and is only for places like Saudi Arabia. Another said how the water from reverse osmosis is acidic and therefore not potable. Many minerals are removed from the body by consuming this type of water, which would cause decrease in brain function, an increased rate of babies born with Down's syndrome and many more negative impacts."

California

EXPERT PANEL TO LOOK AT SUBSURFACE INTAKE

As part of its review of Poseidon Resources' permit application to construct a 50 MGD (189,250 m³/d) SWRO facility in Huntington Beach, the California Coastal Commission recommended that Poseidon undertake a more complete independent analysis of intake alternatives, particularly the feasibility of subsurface intakes.

In order to establish a review process that is responsive to the Commission's guidance and appropriately engages Poseidon, Commission staff and Poseidon have agreed to convene an Expert Panel that will conduct an independent scientific review of the intake alternatives.

The Panel's initial meeting, which will be held in Huntington Beach on 9-10 June, will include briefings by the Commission staff and Poseidon on the proposed project, presentations on site characteristics and possible intake alternatives.

INTERNATIONAL BOUNDARY AND WATER COMMISSION
UNITED STATES AND MEXICO.

Coronado, California
November 20, 2012

MINUTE NO. 319

**INTERIM INTERNATIONAL COOPERATIVE MEASURES
IN THE COLORADO RIVER BASIN THROUGH 2017 AND
EXTENSION OF MINUTE 318 COOPERATIVE MEASURES TO ADDRESS THE
CONTINUED EFFECTS OF THE APRIL 2010 EARTHQUAKE IN THE
MEXICALI VALLEY, BAJA CALIFORNIA**

The Commissioners met in the City of Coronado, California on November 20, 2012 at 1:00 p.m., in order to consider interim international joint cooperative measures to address water management in the Colorado River Basin.

I. BACKGROUND

The Commissioners referred to the interest of both countries in identifying cooperative opportunities that would help ensure that the Colorado River system is able to continue to meet the needs of both nations, consistent with the declarations in the August 13, 2007 Joint Statement by officials from both governments, and the Joint Declaration by the United States Secretary of the Interior and Mexico's Ambassador on January 15, 2009, which noted that, based on the principles of mutual respect and bilateral collaboration, the United States and Mexico have sought to address areas of common interest and support the efforts of the Commission to identify innovative opportunities for water conservation and environmental protection.

The Commissioners observed that in this context, in early 2008 the Commission prepared the terms of reference to be applied, established a framework for discussion, and coordinated binational work groups in order to explore opportunities for cooperation on the Colorado River, in furtherance of the provisions of the "United States-Mexico Treaty on Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande," signed February 3, 1944 (hereinafter the 1944 Water Treaty).

The Commissioners also referred to Minute 317, "Conceptual Framework for U.S.-Mexico Discussions on Colorado River Cooperative Actions," dated June 17, 2010, which stipulates that the Commission "shall in particular explore opportunities for binational cooperative projects that: minimize the impacts of potential Colorado River shortage conditions; generate additional volumes of water using new water sources by investing in infrastructure such as desalinization facilities; conserve water through investments in a variety of current and potential uses, including agriculture, among others; and envision the possibility of permitting Mexico to use United States infrastructure to store water."

The Commissioners recognize that various considerations exist in both countries with respect to the implementation of some of the long-term options and activities that have

been identified in Minute 317 to address binational cooperative objectives and opportunities. Minute 319 represents a further agreement by the United States and Mexico to work towards addressing these considerations by implementing several of these options and activities in phases.

From the date this Minute enters into force and for an interim period through December 31, 2017 a series of temporary measures will be undertaken, including a pilot program to improve infrastructure and develop projects in Mexico, which will allow both countries to better assess the long-term opportunities and cooperative measures for water conservation, management and development.

The Commissioners referred to the interest stated by the Governments of the United States and Mexico in the preservation of the riparian and estuarine ecology of the Colorado River in its limitrophe section and delta, in accordance with the provisions of Minute 306, "Conceptual Framework for United States-Mexico Studies for Future Recommendations concerning the Riparian and Estuarine Ecology of the Limitrophe Section of the Colorado River and its Associated Delta," dated December 12, 2000.

In addition, activities will be initiated with regard to longer term planning, study, and development of future cooperative actions that could be undertaken, including discussion of potential for deliveries to Mexico of new or non-Colorado River sources that would allow Mexico to utilize additional volumes of such water after the term of this Minute.

The Commissioners further referred to Minute 318, "Adjustment of Delivery Schedules for Water Allotted to Mexico for the Years 2010 through 2013 as a Result of Infrastructure Damage in Irrigation District 014, Rio Colorado, Caused by the April 2010 Earthquake in the Mexicali Valley, Baja California," dated December 17, 2010.

II. PREVIOUS CONSULTATIONS

The Commissioners made note of the consultations held under the framework of the Commission, during which issues of mutual interest were jointly identified, as were the mechanisms for their discussion through binational work groups coordinated by the Commission, which included the participation of a wide range of agencies and organizations at the three levels of government, as well as non-governmental and research institutions from both countries, who are stakeholders in the matters under discussion. In this context, the Commissioners referred to the binational Consultative Council created under Minute 317, composed of representatives of the Commission, the federal governments and the basin states, to facilitate consideration of the matters associated with these issues and make recommendations to the Commissioners as appropriate; the Commissioners will review the Consultative Council's activities and recommendations.

The Commissioners also noted that the topics covered during the aforementioned binational discussions included aspects such as generating and conserving additional

volumes of water, salinity, variable water supplies within the Colorado River Basin, opportunities to establish Intentionally Created Mexican Allocation (ICMA) by means of Mexico deciding to defer delivery of water volumes through adjustments to its annual delivery schedule, the exchange of water, and the delivery of water for the environment; at the same time, several specific binational projects were identified that could be jointly implemented to the benefit of both countries.

III. PROPOSED MEASURES

Both countries have recognized the value of an interim period of cooperation to proactively manage the Colorado River in light of the historical and potential future increased variability due to climate change; therefore, proactive management of the Colorado River will maximize utilization of the resource during variable reservoir conditions, benefiting both countries. The Commissioners made note that based on the consultations undertaken through the binational work groups, it is in the interests of the United States and Mexico to partner in exploring various cooperative measures with regard to the management of the Colorado River system, including allowing for the creation of Intentionally Created Mexican Allocation (ICMA) when Mexico chooses to adjust its delivery schedule, sharing in the benefits of water that may be available temporarily through high elevation reservoir conditions, engaging in cooperative measures to reduce the likelihood of unprecedented drought-related reductions in water deliveries to water users in both countries, and addressing the continuing impacts of the 2010 earthquake in the Mexicali Valley. To further binational cooperation, the countries have identified the following measures to be undertaken during an interim period from the date this Minute enters into force through December 31, 2017. These measures incorporate mechanisms identified on a voluntary basis in consultations within and between both countries to explore cooperative opportunities on the Colorado River.

If by December 31, 2016, the Commission has not completed a comprehensive Minute that extends or replaces the substantive provisions of this Minute through no later than December 31, 2026, the Commissioners shall instruct their respective Principal Engineers to develop recommendations for a potential comprehensive Minute by working with and taking into consideration the advice of the Consultative Council and any other institution that each Commissioner deems necessary, by reviewing the experiences gained through implementation of this Minute and by considering the reports and other documentation that have been prepared.

For purposes of making the determinations under Section III of this Minute, the Commission will request from the United States Bureau of Reclamation (Reclamation) the August 24-Month Study, which will be used for projecting the January 1 elevations of Lake Mead. The Commission will provide the Study to Mexico's National Water Commission through the Mexican Section. The 24-Month Study refers to the operational study conducted each month by Reclamation to project future reservoir operations.

Furthermore, in the event of a mid-year review of Colorado River operations, Reclamation will provide the Commission with updated projections and if increased deliveries are authorized to water users in the Lower Basin in the United States, then increased deliveries will be made available to Mexico under the provisions of Section III of this Minute.

The Commissioners made note that based on the consultations undertaken and the progress on each issue and particular project, the following cooperative measures have been identified:

1. EXTENSION OF MINUTE 318 COOPERATIVE MEASURES TO ADDRESS THE CONTINUED EFFECTS OF THE APRIL 2010 EARTHQUAKE IN THE MEXICALI VALLEY, BAJA CALIFORNIA

The Commissioners, in reference to Resolution 10 of Minute 318, recognizing the potential benefits of continuing joint cooperative actions between the two countries, considered the progress achieved to date in the reconstruction of the damaged infrastructure in Mexico. Additionally, they recognized that, as of the date this Minute is signed, the works contemplated in Minute 318 to repair infrastructure damage in Irrigation District 014, Rio Colorado, caused by the April 2010 earthquake in Mexicali, Baja California, have not been concluded.

Based upon the need to continue these repairs the Commissioners decided:

- To extend through December 31, 2017 the cooperative measures first established in Minute 318;
- That all water that was previously deferred under Minute 318 shall be referred to and accounted for and combined with any amounts deferred under Section III.1; and
- Subject to Section III.4.o of this Minute, the maximum total amount previously stipulated in Resolution 1 of Minute 318 shall not apply.

Furthermore, the Commissioners decided the following:

- Mexico may utilize water generated under the framework of Minute 318 when Mexico requests it, including to compensate for any reduction in deliveries under Section III.3, and subject to the specific terms contained in the 1944 Water Treaty and this Minute; and
- The 2% assessment that applies to ICMA in the year of its creation will not be applied to those volumes of water deferred due to infrastructure damage in Mexico.

2. DISTRIBUTION OF FLOWS UNDER HIGH ELEVATION RESERVOIR CONDITIONS

The Commissioners considered the appropriateness of coordinating basin operations under high elevation reservoir conditions for an interim period to provide benefits to both nations. This interim cooperative approach will result in deliveries to Mexico of volumes of water in addition to the normal annual delivery of 1,500,000 acre-feet (1,850,234,000 cubic meters) stipulated in Article 10(a) of the 1944 Water Treaty when the basin is in a condition such that Lake Mead elevation is at or above 1,145 feet mean sea level (msl) and Colorado River mainstream water is available for delivery to water users in the Lower Basin of the United States in conformance with the surplus guidelines applicable to said users that are in effect at the time this Minute enters into force. With this understanding, this interim cooperative approach will be carried out as follows:

- a. In years when Lake Mead is projected to be at or above elevations specified in the following table on January 1 of the following year and Mexico has reached at least once a minimum of 80,000 acre-feet (99 million cubic meters [mcm]) of ICMA under this Minute and/or deferred delivery under Section III.1 after the date of entry into force of this Minute, Mexico may increase its order for Colorado River system water as follows:

b.

Lake Mead Elevation	Mexico Annual Increase
At or above 1,145 feet msl and below 1,170 feet msl	40,000 acre-feet (49 mcm)
At or above 1,170 feet msl and below 1,200 feet msl	55,000 acre-feet (68 mcm)
At or above 1,200 feet msl and flood control releases are not required	80,000 acre-feet (99 mcm)
When flood control releases are required, regardless of elevation	200,000 acre-feet (247 mcm)

- c. For delivery of increased flows at high elevation reservoir conditions, the Mexican Commissioner will provide a timely notification to the United States Commissioner of the schedule for increased releases, indicating the volumes, months, and delivery points in which the delivery of said volumes is desired.
- d. The provisions of this Minute will not affect the operation of Article 10(b) of the 1944 Water Treaty, which provides that additional waters of the Colorado River system may be delivered to Mexico up to 200,000 acre-feet (246,697,000 cubic meters) for a total quantity not to exceed 1,700,000 acre-feet (2,096,931,000 cubic meters).

3. DISTRIBUTION OF FLOWS UNDER LOW ELEVATION RESERVOIR CONDITIONS

The Commissioners considered the appropriateness of coordinating basin operations under low elevation reservoir conditions for an interim period to provide benefits to both nations. The United States and Mexico recognize that it is in their mutual interests to mitigate and work preventatively and proactively in a program to address the potential for unprecedented reductions on the Colorado River, which would occur when major Colorado River storage reservoirs reach critical elevations. If these major reservoirs reach critical elevations as a result of prolonged drought conditions in the basin, it may no longer be operationally possible to deliver each country's full amount of Colorado River water, which would result in reductions in Colorado River deliveries that would adversely affect the interests of water users in both countries.

The Commissioners observed that in the framework of this joint cooperative process the information regarding shortage conditions has been exchanged and said conditions have been modeled jointly for the purpose of analyzing rainfall and runoff behavior. The Commissioners also observed that, for an interim period, it is appropriate to use the elevation of Lake Mead as the trigger for potential reductions as part of this program under this Minute that will provide benefits for both countries.

The Commissioners made note that under domestic operational guidelines that are applicable to United States water users in the Lower Basin, the following water delivery reductions are applied: 333,000 acre-feet (411 mcm) when the January 1 Lake Mead elevation is projected to be at or below 1,075 feet msl and at or above 1,050 feet msl; 417,000 acre-feet (514 mcm) when the January 1 Lake Mead elevation is projected to be below 1,050 feet msl and at or above 1,025 feet msl; and 500,000 acre-feet (617 mcm) when the January 1 Lake Mead elevation is projected to be below 1,025 feet msl.

Considering the above, current conditions, projected water availability, potential water shortage in the Colorado River Basin, and the benefits of preventative and proactive management, the Mexican Commissioner stated the willingness of the Government of Mexico to implement the measures that are described below, and the United States Commissioner agreed with such measures, which will operate in the following manner:

- a. Water delivery reductions to Mexico: 50,000 acre-feet (62 mcm) when the January 1 Lake Mead elevation is projected to be at or below 1,075 feet msl and at or above 1,050 feet msl; 70,000 acre-feet (86 mcm) when the January 1 Lake Mead elevation is projected to be below 1,050 feet msl and at or above 1,025 feet msl; and 125,000 acre-feet (154 mcm) when the January 1 Lake Mead elevation is projected to be below 1,025 feet msl.

- b. Prior to December 31, 2017, Mexico may adjust its order to include deliveries from ICMA or water deferred under Section III.1 up to a volume to offset the reductions described in Section III.3.a above, not to exceed a total annual delivery to Mexico of 1,500,000 acre-feet (1,850,234,000 cubic meters), on the condition that Mexico has reached at least once a minimum of 80,000 acre-feet (99 mcm) of ICMA under this Minute and/or deferred delivery under Section III.1 after the date of entry into force of this Minute.
 - c. Whenever Lake Mead is below elevation 1,025 feet msl and it is projected to decrease to below 1,000 feet, the United States Section of the Commission shall consult with Reclamation at least annually to consider Colorado River hydrologic conditions, and notify the Commission of the results of said consultations to enable the Commission to discuss further measures that could be undertaken recognizing that reductions in both countries may need to increase when Lake Mead is below elevation 1,025 feet msl.
 - d. In order for the Government of Mexico to systematically track the basin conditions and prepare in a timely manner for any eventual reductions in its deliveries, the Government of the United States will provide the most current information to Mexico on basin conditions as often as required, including precipitation, streamflow, and water storage conditions in the basin and their historical behavior; the consumptive water uses for the different basin states and the historical trend; and the status of the determination of shortage conditions in the Colorado River Basin within the United States, including, on a monthly basis, the 24-Month Study.
 - e. In years when Lake Mead is projected to be at or below the elevations identified in Section III.3.a on January 1, the United States will furnish to Mexico, through the Commission, information on the natural causes for the projected reservoir elevation of Lake Mead.
 - f. Lake Mead reservoir elevations and correlation with drought indicators will be monitored and studied during the term of this Minute. Prior to December 31, 2017, the Commissioners shall consider the results of such monitoring and studies, to assess the pertinent future applicability of such information for potential operational agreements.
4. INTENTIONALLY CREATED MEXICAN ALLOCATION (ICMA)

The Commissioners determined that as a cooperative measure to address the growing water demand and potential low elevation reservoir conditions in the basin in the future, a program of Intentionally Created Mexican Allocation (ICMA) will be established. Mexico will be able to create ICMA by deciding to defer delivery of water volumes through adjustments to its annual delivery schedule resulting from water conservation projects or

new water sources projects. ICMA would then be available for subsequent delivery. Creation, accumulation and delivery of ICMA will be subject to the following terms:

- a. Mexico may use ICMA or water deferred under Section III.1 for any purpose, subject to the specific provisions of this Minute.
- b. Mexico may create an annual maximum volume of ICMA of 250,000 acre-feet (308 mcm) through December 31, 2017, by making a downward adjustment to the schedule for the annual delivery to Mexico of its Article 10(a) allotment under the 1944 Water Treaty, in accordance with Section III.4 of this Minute. Any adjustment of deliveries of water deferred under Section III.1 shall count towards the annual maximum 250,000 acre-foot (308 mcm) amount.
- c. The maximum volume of ICMA that Mexico may take delivery of in any one calendar year is 200,000 acre-feet (246,697,000 cubic meters) until all of its available ICMA is used. Any delivery to Mexico of water deferred under Section III.1 shall count towards the 200,000 acre-foot (246,697,000 cubic meters) maximum annual delivery amount established in this Section III.4.c. In any given year, the total annual delivery to Mexico may not exceed 1,700,000 acre-feet (2,096,931,000 cubic meters).
- d. When Lake Mead is below elevation 1,025 feet msl, Mexico may not take delivery of ICMA or water deferred under Section III.1.
- e. A 3 percent reduction for evaporation shall be applied annually on December 31 to ICMA and water deferred under Section III.1 beginning in the year of creation. This reduction will not be applied in years when Lake Mead elevation is below 1,025 feet msl on January 1.
- f. A 2 percent water assessment shall be applied to ICMA in the year of creation and reserved for environmental purposes in Mexico. The 2 percent assessment would not be applied to any water created through the Water for the Environment and ICMA/ICS Exchange Pilot Program described in Section III.6 or to the water deferred under Section III.1. ICS refers to Intentionally Created Surplus applicable in the United States.
- g. Notwithstanding the provisions of Section III.3.b, ICMA or water deferred under Section III.1 will not be delivered to Mexico when doing so would reduce the projected January 1 elevation of Lake Mead triggering the first water delivery reduction level (at or below 1,075 feet msl) or a subsequent water delivery reduction level (below 1,050 or below 1,025 feet msl) as provided in Section III.3.

- h. Mexico may create ICMA or water deferred under Section III.1 in any year except when flood control releases are being made from Lake Mead.
- i. If Mexico decides to create ICMA or water deferred under Section III.1 at or above 1,145 feet msl, increased deliveries to Mexico above 1,500,000 acre-feet (1,850,234,000 cubic meters) that occur when Lake Mead is at or above 1,145 feet msl may not be converted to ICMA or considered water deferred under Section III.1. When Lake Mead is at or above 1,145 feet msl, Mexico will describe the water conservation projects or new water sources that created the ICMA or affirm that the delivery adjustment is related to the continuing impacts of the 2010 earthquake in the Mexicali Valley.
- j. During flood control releases, the quantities of ICMA and water deferred under Section III.1 accumulated by Mexico, and the quantity of ICS accumulated by the United States after January 1, 2013 in accordance with domestic operational guidelines, will be released proportionally based on volume. Mexico shall decide how to allocate the reduction between its accumulated balances of ICMA and water deferred under Section III.1. This provision will remain in effect after December 31, 2017 until no ICMA and water deferred under Section III.1 remain.
- k. The Mexican Commissioner will provide a timely notification to the United States Commissioner of the creation of ICMA or water deferred under Section III.1 by means of a letter indicating the volumes and schedule for the creation of said ICMA or the adjustment in its delivery schedule, including a brief description of the water conservation projects or new water sources or describing that the delivery adjustment is related to the continuing impacts of the 2010 earthquake in the Mexicali Valley. The United States and Mexico will consider operational constraints to ensure that creation of ICMA or water deferred under Section III.1 does not adversely affect U.S. operations.
- l. For delivery to Mexico of ICMA or volumes deferred under Section III.1, the Mexican Commissioner will submit a request for the corresponding delivery to the United States Commissioner, indicating the volumes and months in which the delivery of said volumes is required. The United States Commissioner, upon receipt of the request, will review the Colorado River system's status and approve the order subject to available balances of ICMA or volumes deferred under Section III.1 as well as operational issues identified in the review of the Colorado River system's status, taking into consideration the desire of both countries to schedule the delivery of ICMA or volumes deferred under Section III.1 in such a fashion so as not to trigger the first water delivery reduction level (at or below 1,075 feet msl) or a subsequent water delivery reduction level (below 1,050 or below 1,025 feet msl) as provided in Section III.3 and to avoid potential adverse effects on United States operations. Reclamation shall forward

to the Commission water accounting records that will be used by the Commission to account for the creation, delivery, and resulting balances of water deferred under Section III.1 and ICMA under Section III.4.

- m. Beginning on January 1, 2018, Mexico may order delivery of ICMA and water deferred under Section III.1 only when the elevation of Lake Mead is greater than 1,075 feet msl but cannot order delivery of such water when the elevation of Lake Mead is below 1,075 feet msl; delivery of these volumes remains subject to the terms established in Sections III.4.a, c-e, g, j, l.
- n. The water deferred under Section III.1 may be converted to ICMA at Mexico's election and, when that occurs, will be subject to all of the conditions associated with ICMA as described in this Section III.4.
- o. Through December 31, 2017, Mexico may accumulate a maximum combined balance of 1,500,000 acre-feet (1,850,234,000 cubic meters) of ICMA and water deferred under Section III.1.

5. SALINITY

In light of the efforts made by both governments to reach an agreement on a permanent and definitive solution to the international problem of the salinity of the Colorado River through Minute 242, "Permanent and Definitive Solution to the International Problem of the Salinity of the Colorado River," dated August 30, 1973, the Commissioners determined that any cooperative arrangement or measure that is implemented under this Minute 319 through December 31, 2017 must comply with the salinity differential between Imperial Dam and the Northerly International Boundary (NIB) as described in Resolution 1.a) of Minute 242.

With respect to the foregoing, the Commissioners observed that the implementation of certain cooperative options, such as the creation of ICMA and water deferred under Section III.1, could impact the salinity of the waters delivered at the Northerly International Boundary, and therefore require the implementation of measures to address said impacts.

In this context, based on the analysis performed by the Binational Work Group established under the Commission framework to assess the issue of salinity, the Commissioners observed the appropriateness of minimizing salinity impacts when creating ICMA and water deferred under Section III.1. To this end, the Governments of the United States and Mexico will operate their systems in order to minimize impacts on salinity due to creation of ICMA and water deferred under Section III.1 as follows:

- a. Mexico may use the Wellton-Mohawk bypass drain to convey volumes it considers appropriate. The United States and Mexico will take into account

operational constraints to ensure that the water conveyance does not adversely affect United States water operations.

- b. During the creation of ICMA and water deferred under Section III.1, the salinity and volumes stipulated in Minute 242 will be complied with at all times, which will proceed under the following terms:
 - i. Taking into account the potential impact that the adjustment in the schedule for creating ICMA and water deferred under Section III.1 may have on the salinity differential between Imperial Dam and the NIB described in Resolution 1.a) of Minute 242, the aforementioned salinity differential will be calculated as if the volume of water created as ICMA and water deferred under Section III.1 were delivered from Imperial Dam to the NIB, consistent with the Water Deliveries Monitoring adopted in the Amended Joint Report of the Principal Engineers associated with Minute 314, "Extension of the Temporary Emergency Delivery of Colorado River Water for Use in Tijuana, Baja California," dated November 14, 2008.
 - ii. The volumes of water that Mexico conveys to the Wellton-Mohawk bypass drain and/or discharges directly to the channel of the Colorado River downstream from Morelos Dam as a result of the creation of ICMA or deferred delivery under Section III.1 of this Minute, will be added to and accounted for in their quantity and quality with the deliveries at the NIB in order to comply with the volumes and salinity limits stipulated in Minute 242 and the 1944 Water Treaty. To implement what is described in this paragraph, the Principal Engineers, through an exchange of letters, will document the procedure developed by the Binational Salinity Work Group.
- c. For purposes of this section, those volumes of water that Mexico expressly requests to be conveyed in accordance with Sections III.5.a-b shall be accounted for as part of Mexico's 1944 Water Treaty allotment.

6. WATER FOR THE ENVIRONMENT AND ICMA/ICS EXCHANGE PILOT PROGRAM

The Commissioners considered that to the extent additional water supplies can be identified, it is desirable to have water for environmental purposes flow to the Colorado River limitrophe and delta ecosystem.

The Commissioners referred to Minute 306, which provided a conceptual framework for United States-Mexico studies related to the riparian and estuarine ecology of the Colorado River limitrophe and delta.

The Commissioners also made note of Minute 316, "Utilization of the Wellton-Mohawk Bypass Drain and Necessary Infrastructure in the United States for the Conveyance of Water by Mexico and Non-governmental Organizations of both Countries to the Santa Clara Wetland during the Yuma Desalting Plant Pilot Run," signed April 16, 2010, in which the Governments of the United States and Mexico, together with a binational coalition of non-governmental organizations, previously worked together in the spirit of binational cooperation to make water available for environmental benefits on a temporary basis.

The Commissioners also made note of the Environmental Work Group's efforts to identify water needs for the Colorado River limitrophe and delta. This pilot program will arrange for the means to create 158,088 acre-feet (195 mcm) of water for base flow and pulse flow for the Colorado River limitrophe and its delta by means of the participation of the United States, Mexico, and non-governmental organizations. The Commissioners further acknowledged that there remain important issues to be explored with regard to environmental water needs, including the timing and location of periodic pulse flows and base flows.

Implementation of this Minute will provide a mechanism to deliver both base flow and pulse flow during the period this Minute is in force. For purposes of the pilot program in this Minute, a volume of water will be delivered to the Riparian Corridor in a joint effort between the Government of the United States and the Government of Mexico, with the anticipated participation of a binational coalition of non-governmental organizations. Furthermore, the information developed through implementation of this Minute will be used to inform future decisions regarding binational cooperative efforts to address proactive actions in the Colorado River Delta.

The Commissioners further made note that in the discussions among the binational work groups regarding cooperation on the Colorado River, the opportunity was observed to obtain mutual benefits from joint investments by both countries in binational projects that could generate or conserve volumes of water. Based on the joint investments made, some of the water produced through these projects would be made available for environmental water needs, while other portions would be distributed between the two countries for a defined period of time in the proportion agreed upon through the Commission in this Minute. The Commissioners noted that the implementation of such a program would require the resolution of a series of issues, and that investigation of those issues through a pilot program could yield significant information.

Accordingly, the Commissioners observed that the following shall apply:

- a. During the five-year interim period (2013-2017), a joint-cooperative pilot program will be implemented to evaluate the aspects involved in creating water for the environment and an ICMA to ICS exchange project.

- b. A binational coalition of non-governmental organizations has indicated its willingness to provide water for base flow. This arrangement will be documented in a Joint Report of the Principal Engineers in accordance with the Delivery Plan referred to in this Minute.
- c. As part of this pilot program, resources for a joint investigation of the different aspects of the pilot program should be obtained. The resources for this investigation should be provided by the United States and Mexico. This investigation should:
 - i. Evaluate the performance of the pilot program, including:
 - its success in creating water for the environment;
 - the environmental benefits derived therefrom;
 - the accounting for the volumes conserved;
 - the operational aspects of creating ICMA and the conversion of ICMA to ICS.
 - ii. Explore options for future joint cooperative actions to create water for the environment, capitalizing on the environmental improvements achieved during the five-year period that this Minute is in force.
 - iii. Test the mechanisms for the allotment and delivery of water to the Riparian Corridor in the reach between Morelos Dam and the Hardy River confluence.
 - iv. Evaluate the ecosystem response, most importantly the hydrological response and, secondarily, the biological response.

The Pilot Project will be implemented as follows:

- d. The United States will contribute a total amount of \$21 million dollars to Mexico through the Commission for infrastructure and environmental projects in Mexico. The Commission will develop a schedule for contributions to reach this amount. The infrastructure and environmental projects include the following:
 - i. water infrastructure, including the Reforma Canal lining and technical improvement projects in Module 18 of Irrigation District 014, Rio Colorado
 - ii. environmental enhancement of riparian areas of the Colorado River, including its delta
 - iii. other related projects
- e. Mexico shall receive all waters derived from this binational pilot project subject to the following agreements for the limited term of this Minute:

- i. The United States and Mexico will implement a binational cooperative pilot program for the duration of this Minute. The binational project will generate environmental flows to benefit the riparian ecosystem and as a part of that effort a pulse flow will be implemented to the Colorado River Delta of approximately 105,392 acre-feet (130 mcm) tentatively during 2014 but no later than 2016. A portion of the funds provided in Section III.6.d above by the United States will provide funding for projects which will generate 50% of this pulse flow. The United States and Mexico shall take all such appropriate actions in their respective territories to ensure that such pulse flow reaches the intended areas of the Colorado River Delta. The sources of water to implement this flow shall be from ICMA created or water deferred under Section III.1.
 - ii. To provide for the delivery of the base flow and pulse flow for environmental purposes within Mexico under this Minute, the Commissioners will direct the Consultative Council and the Environmental Work Group to prepare a Delivery Plan, which will include a schedule of monthly flows, delivery points and volumes in an amount of approximately 105,392 acre-feet (130 mcm) for pulse flow and 52,696 acre-feet (65 mcm) for base flow. The Delivery Plan will be submitted to the two Sections of the Commission for review and approval by January 31, 2014. Once approved by the Commission, the Delivery Plan will be implemented, consistent with the 1944 Water Treaty and the provisions of this Minute.
 - iii. In consideration for the infrastructure investments referenced in this Section III.6, before December 31, 2017, Mexico shall take all action necessary to provide to the United States a total quantity of 124,000 acre-feet (153 mcm) of water to be converted from ICMA, water deferred under Section III.1, or from any other source for use in the United States.
- f. The international accounting for the pulse flow and base flow implemented under this pilot program will be performed by the Commission, taking into consideration the information provided by Reclamation. The Commission, with the advice of the Consultative Council, will present a report to the Governments of the United States and Mexico regarding the delivery of water pursuant to the pilot program and the environmental results achieved by such deliveries.
 - g. A Joint Report of the Principal Engineers shall be prepared by December 31, 2018 with the results of the investigation referred to in Section III.6.c above, evaluating its success in creating water to be used for environmental and other purposes, the environmental benefits derived therefrom, the accounting for the volumes conserved, and the operational aspects of creating ICMA and the conversion of ICMA to ICS. The aforementioned report will contain the recommendations necessary for similar subsequent programs.

7. INTERNATIONAL PROJECTS

The Commissioners noted that during the talks held within the framework of Minute 317 of the Commission to discuss the opportunities for cooperation on the Colorado River, the opportunity was observed to obtain mutual benefits by undertaking construction of international projects with joint investment by both countries that would allow for water conservation or the generation of new water sources to address the growing water demands in the basin and potential shortage conditions in the basin in the future. In this context, the Commissioners observed the usefulness of immediately pursuing development of the Environmental Restoration Pilot Project at the Miguel Aleman Site. The Commissioners further observed that a number of other opportunities exist for joint cooperative projects benefitting both nations, including but not limited to those set forth below. These additional projects should be pursued concurrently with development and execution of a Minute to extend the substantive provisions of Sections III.1-6 of this Minute 319 through 2026.

The specific binational opportunities that have been identified at this time are as follows:

a. Environmental Restoration Project at the Miguel Aleman Site

In 2013, the Commission will begin implementation of a 50-acre (20-hectare) Environmental Restoration Project, with willows, cottonwoods and mesquites, at the Miguel Aleman site located in Mexico near the Colorado River limitrophe reach across from the Hunter's Hole restoration site in the United States.

The total cost of the Environmental Restoration Project is \$700,000 dollars, with contributions from both countries. The distribution of works and costs between the two countries has been discussed and proposed by the Binational Environmental Work Group established under Minute 317, and should be formalized in a Joint Report of the Principal Engineers for implementation of the Project.

To develop the activities for this Environmental Restoration Project, the Commission will rely on contracting and/or consulting by environmental institutions from both countries specializing in the matter.

In addition to implementing this Environmental Restoration Project, the Commission will continue to explore other projects and joint cooperative opportunities for environmental restoration in the Colorado River Delta, considering the "Water Needs in the Colorado River Delta" report prepared by the Binational Environmental Work Group under the framework of Minute 306 and Minute 317 of the Commission.

b. Water Conservation Projects

Study and implementation of these projects will require agreement of the two countries through the Commission, and such agreement should be contained in a specific Minute of the Commission:

- i. Alamo Canal Regulating Reservoir Conservation Pilot Project
- ii. Payment for Taking Agricultural Land out of Production (Fallowing)
- iii. Modernization and Technical Improvements to Irrigation District 014

c. Project Associated with System Operations

Study and implementation of this project will require agreement of the two countries through the Commission, and such agreement should be contained in a specific Minute of the Commission:

- i. Conveyance of Mexican Water through the All-American Canal (AAC)

This project for consideration of the potential conveyance of Mexican water through the All-American Canal has been identified as a high priority of both the United States and Mexico, and will be the subject of expedited consideration by both countries upon the entry into force of this Minute. The Commissioners took note of the commitment of U.S. entities, led by Reclamation and the United States Section of the Commission, to establish processes and timelines to work through applicable issues that must be addressed for the construction of a connection between the All-American Canal in the United States and Mexico's Colorado River-Tijuana Aqueduct, at Pump Station 0 that, at a minimum, could be used for water deliveries to Mexico in emergency situations.

d. New Water Sources Projects

Study and implementation of these projects will require agreement of the two countries through the Commission, and such agreement should be contained in a specific Minute of the Commission:

- i. Binational Desalination Plant in Rosarito, Baja California
- ii. Beneficial Use of the New River
- iii. Binational Desalination Plant near the Gulf of California (Sea of Cortez)

Finally, the Commissioners took note of the commitment of the U.S. institutions to continue the efforts during the term of this Minute for the development of studies, designs, and other analyses for the potential implementation of additional binational infrastructure

that could generate significant volumes of water to benefit both countries, including but not limited to those enumerated above.

With regard to the above, the Commissioners observed that the binational work groups discussed the projects listed in the table below, which also presents the estimated volume of water that each project will generate. The current estimated cost for those projects is approximately \$1,700 million dollars. There is no obligation for any financial participation by the United States, Mexico, or any other party in these projects. Nonetheless, the Commissioners took note that both governments have stated their firm willingness to continue discussion of potentially allotting resources for the development of projects for the conservation and generation of water for mutual benefit.

PROJECT	ESTIMATED ANNUAL VOLUME in thousand acre-feet (mcm)
Miguel Aleman Environmental Restoration	not applicable
Alamo Canal Regulating Reservoir	3.2 (4)
Fallowing Payments	243 (300) one time
Modernization of Irrigation District 014	
First Phase	101 (125)
Subsequent Phases	519 (640)
AAC-Pump Station 0 Connection	to be determined
Rosarito Desalination Plant	56 (69)
Use of the New River	38 (47)
Explore Desalination Plant in Gulf of California (Sea of Cortez)	to be determined
TOTALS	717 (885) annually 243 (300) one time

The Commissioners considered that these quantities were based on preliminary estimates by the binational groups or by the responsible institutions in one country and that they could be subject to adjustments once the details of the respective projects are developed.

The Commissioners noted the intention of the Governments of the United States and Mexico to seek agreement on the development of additional bilateral collaborative projects through an additional Minute to be negotiated during the interim five-year period of the joint cooperative pilot program covering the period between 2013 and 2017, and with the same

implementation horizon until 2026 that has been indicated for a comprehensive Minute that would extend or replace the substantive provisions of this Minute.

The Commissioners considered appropriate the recommendation of the binational work groups that a portion of the water generated in the potential future binational projects be reserved for environmental purposes and that any beneficiaries of binational projects will assume appropriate responsibility for the necessary actions to comply with the salinity limits of Minute 242.

Based on the above, the Commissioners submit the following resolutions for the approval of both governments:

1. The cooperative measures first established in Minute 318 shall be extended through December 31, 2017 consistent with the provisions of this Minute, including Section III.1.
2. Distribution of flows under high elevation reservoir conditions will be carried out in accordance with the provisions of this Minute, including Section III.2.
3. Distribution of flows under low elevation reservoir conditions will be carried out in accordance with the provisions of this Minute, including Section III.3.
4. Creation and delivery of ICMA and water deferred under Section III.1 will be carried out in accordance with the provisions of this Minute, including Section III.4.
5. Operations addressing salinity regarding creation of ICMA and water deferred under Section III.1 will be carried out in accordance with the provisions of this Minute, including Section III.5.
6. The Water for the Environment and ICMA/ICS Exchange Pilot Program will be carried out in accordance with the provisions of this Minute, including Section III.6.
7. Implementation of International Projects will be carried out in accordance with the provisions of this Minute, including Section III.7.
8. The limitations as to the rates of deliveries specified in Article 15 of the 1944 Water Treaty continue to apply.
9. The United States shall be deemed to have fulfilled its delivery obligations to Mexico under the 1944 Water Treaty for 2013 through 2017, notwithstanding any reduction or adjustment of delivery schedules pursuant to this Minute.

10. The Commission will apply the procedures described in this Minute to implement the above resolutions.
11. The interim measures agreed to in Resolutions 1 to 6 of this Minute will apply through December 31, 2017. However, delivery of any remaining ICMA and/or water deferred under Section III.1 after December 31, 2017 shall be carried out in accordance with the applicable paragraphs in Section III.4.
12. The discussions pursuant to Minute 317 as referenced in Section III.7 of this Minute may consider other joint cooperative actions, taking into consideration potential benefits to both countries.
13. The provisions of this Minute shall not be regarded as a precedent for developing further necessary implementing agreements within the United States, nor for future delivery of Colorado River water allotted to Mexico annually under Article 10 of the 1944 Water Treaty, nor for future salinity management via the mechanism described in Resolution 5 above.
14. The provisions of this Minute do not affect the interpretation or application of the provisions of Article 10(b) of the 1944 Water Treaty, including reduction of water allotted to Mexico under Article 10(a) of said treaty.
15. All activities undertaken pursuant to this Minute shall be subject to the availability of funds, resources, and corresponding personnel, as well as to applicable laws and regulations in each country.
16. This Minute shall enter into force upon notification of approval by the Government of the United States of America and the Government of the United Mexican States through the respective Section of the Commission.

The meeting was adjourned.



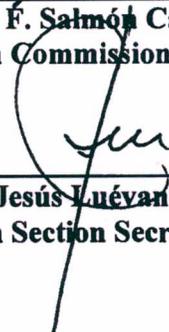
Edward Drusina
U.S. Commissioner



Sally E. Spener
U.S. Section Secretary



Roberto F. Salmón Castelo
Mexican Commissioner



José de Jesús Luévano Grano
Mexican Section Secretary