California Regional Water Quality Control Board

Colorado River Basin Region

Committee on Environmental Safety and Toxic Materials
New River Restoration Oversight Hearing

March 20, 2015

Assembly Environmental Safety and Toxic Materials Committee

Oversight Hearing on New River Restoration Efforts

Testimony of
Jose L. Angel, P.E.
Assistant Executive Officer
Colorado River Basin, California Regional Water Quality Control Board

Introduction

Honorable Chairman Alejo and Committee Members,

Thank you for the invitation to testify on this very timely and important hearing, and on behalf of our Colorado River Basin Regional Water Quality Control Board, we also welcome you to our Region. I am the Assistant Executive Officer for the Regional Water Board and have been with the Water Boards for over twenty-five (25) years. I am a California registered civil engineer and, for the last seventeen (17) years, I have been personally involved with development and implementation of water quality control policy to address New River pollution—not just at the Border with Mexico, but also in the Imperial Valley.

Attachment 1 shows the New River from Mexicali to the Salton Sea and summarizes the key recommended programs and projects of the New River Improvement Project Strategic Plan (Strategic Plan). Cal/EPA, its Boards, Departments, and Offices (BDOs), have made substantive progress to implement the Strategic Plan. In spite of all of this progress, the New River still remains severely impaired, with particular impairments here in the Calexico area. Therefore, I am going to discuss the New River quantitatively and qualitatively, but only to be able to offer a sense of what we believe the main challenges and obstacles are regarding restoration of the New River. I will also share my perspective on the steps we believe can be taken to overcome those challenges and obstacles.

Quantitative and Qualitative Overview of New River Water Quality

Our water quality monitoring data, as well as data collected by other agencies, including the United States Geological Survey, indicate that the pollutants with the most severe impact on the New River in Calexico are significantly different than the pollutants with the most severe impact on the New River by the Salton Sea. In fact, as indicated in the Strategic Plan, our monitoring data show that:

1. the main water quality problem in Calexico is the threat that pathogens in the New River pose to public health, followed by the problem of trash, which is followed by the lack of adequate dissolved oxygen; and
2. notwithstanding the pathogens and trash problems, most of the New River impairments downstream from Calexico are caused by pollutants associated with agricultural runoff from the Imperial Valley.[1]

So allow me to tackle the last problem first because that is the easiest.

Challenges Downstream from Calexico

Last January 15th our Board approved new and comprehensive regulatory controls through its adoption of a conditional waiver of Waste Discharge Requirements for Agricultural Wastewater Discharges to address the potential and actual impacts caused by those discharges originating in the Imperial Valley. Adoption of that waiver was in addition to our previously adopted Silt/Sediment Total Maximum Daily Load Basin Plan regulatory amendments for the New and Alamo Rivers and Imperial Valley Drains, which also require Imperial Valley farmers to implement management practices to address water quality problems in these surface waters. We also regulate through permits all of the wastewater treatment plants and industry in the Valley that discharge or potentially discharge pollutants into the New River. So, as far as managing controllable sources of pollution on this side of the Border is concerned, we have laws and regulatory programs in place to address the impairments caused by these sources, and the impairments are being addressed.

Challenges in Mexicali

Regarding the New River pathogen problem in Calexico (Item 1, above), it has two primary sources: (1) treated but undisinfected discharges of municipal and industrial wastewater; and (2) emerging bypasses of raw sewage in Mexicali. Between these two, the bypasses are the more significant problem and are the result of sewage infrastructure problems in Mexicali. Attachment 2, which consists of a letter from our Board to the US Section of the International Boundary and Water Commission (US IBWC) and the United States Environmental Protection Agency (USEPA), and a staff memorandum addressed to our Board, details the historical problem and the emerging problem. In addition, the raw sewage in the New River also violates Treaty Minute environmental and water quality standards between the US and Mexico.

The challenge in addressing the problem in Mexicali is not technical since this is a fairly straightforward sanitary engineering problem. Nor is the challenge an issue of a lack of cooperation or coordination. We believe we have as good a working relationship with

[1] The impacting pollutants in the New River by the Salton Sea are selenium, silt/sediment, and toxicity.

our US IBWC, USEPA, and Mexican counterparts as possible; and there is an effective Binational Technical Committee (BTC) for the New River/Mexicali Sanitation Program that has a proven track record for overseeing implementation of close to $100M worth of binational projects in Mexicali. Instead, the challenge in this case is two-fold: (1) money, or the lack thereof, to be more precise, and (2) not treating key dilapidated or broken sewage infrastructure in Mexicali as a matter of emergency, even though it clearly poses a significant threat to California.

We recognize that fully characterizing and addressing all of the current and emerging sewage infrastructure problems in Mexicali is going to take time and that special studies may have to be conducted for that purpose to come up with the most cost-effective solutions. We understand and enthusiastically support that approach in principle, but I respectfully submit for your consideration that we do not need a study to identify and determine how to address some obvious problems, such as the broken and malfunctioning sewage pumps and maintenance equipment that are already out of commission. Instead, what is needed is money, along with a sense of urgency, because fixing these obvious problems needed to be done at least two years ago to avoid what is happening now--large discharges of raw sewage into the New River. There are also binational institutions in place already that were set up precisely to fund sewage infrastructure: the North American Development Bank (NADBank) and the Border Environment Cooperation Commission (BECC).

So, besides sending more letters, what can be done to address these financial and infrastructure problems? I respectfully submit for your consideration that policy makers must speak with one voice to urge our federal colleagues and binational institutions to expedite funding assistance to replace the broken equipment and equipment that has outlasted its useful life, that this be done as a matter of emergency, and that they simultaneously conduct any other necessary studies they feel must be conducted. Otherwise, things are going to get significantly worse in the Calexico area, and it is going to be quite a while before they improve.

For example, Attachment 3 gives a sense of how bad things can get. Attachment 3 shows New River water quality when we get raw sewage at the Border (left column) as compared with when there is no raw sewage in the New River (right column). In fact, it is my professional opinion that if we do not address the problems in Mexicali, building a disinfection facility and its associated conveyance structure in Calexico would be an ineffective expenditure of money—it is just not going to work since the majority of the problems originates in Mexicali. Nevertheless, with that said, I still believe the problems in Mexicali will be effectively addressed. My hope, however, is that they are addressed sooner than later. This leads me now to discuss the challenges in Calexico.

Challenges in Calexico

The Strategic Plan recognizes that because California has more stringent bacteria water quality standards for the New River than Mexico does, there will be residual bacteria pollution even when the sewage infrastructure in Mexicali is working properly. In recognition of this and to provide for the construction of a river parkway near the Border, the Strategic Plan recommends building a trash screen to address the trash impairment; and building a conveyance structure and disinfection facility for the New River, downstream from the Border, to handle this residual bacteria.

The challenge in Calexico to implement the trash and disinfection system is not the current water quality control regulatory framework. As indicated to us by the State Water Resources Control Board's Office of Chief Counsel, we do not need to modify the Water Code to accommodate the disinfection system. Thus, there are no water quality legal impediments to implementing this remedial option.

Fundamentally, in my opinion the main challenges in Calexico are three: (1) getting someone to own and operate the recommended trash screen and disinfection infrastructure, which may require additional federal legislation; (2) funding—close to $100M is needed; and (3) prioritization—assigning a sense of urgency to the Plan's recommendations for Calexico also. Building the trash screen near or at the Border in the US will certainly require consent from the U.S. Department of Homeland Security and coordination with the US IBWC. Dealing with the first challenge will facilitate dealing with the other two challenges.

So, what options are available to deal with these three challenges? I can think of several examples where Congress has provided direction regarding similar problems (e.g., Nogales, AZ, and San Ysidro, CA). Therefore, I respectfully submit for your consideration that this needs to be made not just a priority problem, but it needs to be made an <u>explicit priority</u> for funding. That would get it done sooner than later, which would be good for the environment and would improve the quality of life of people in the Border area. We owe it to the people of Calexico to get this done now.

Chairman Alejo and Committee Members, on behalf of our Regional Water Board, I want to thank you for bringing attention to this serious problem. Thank you also for your consideration and for the opportunity to be of service.

Attachment 1

New River on a Reach-by-Reach Basis and Recommended Programs and Projects

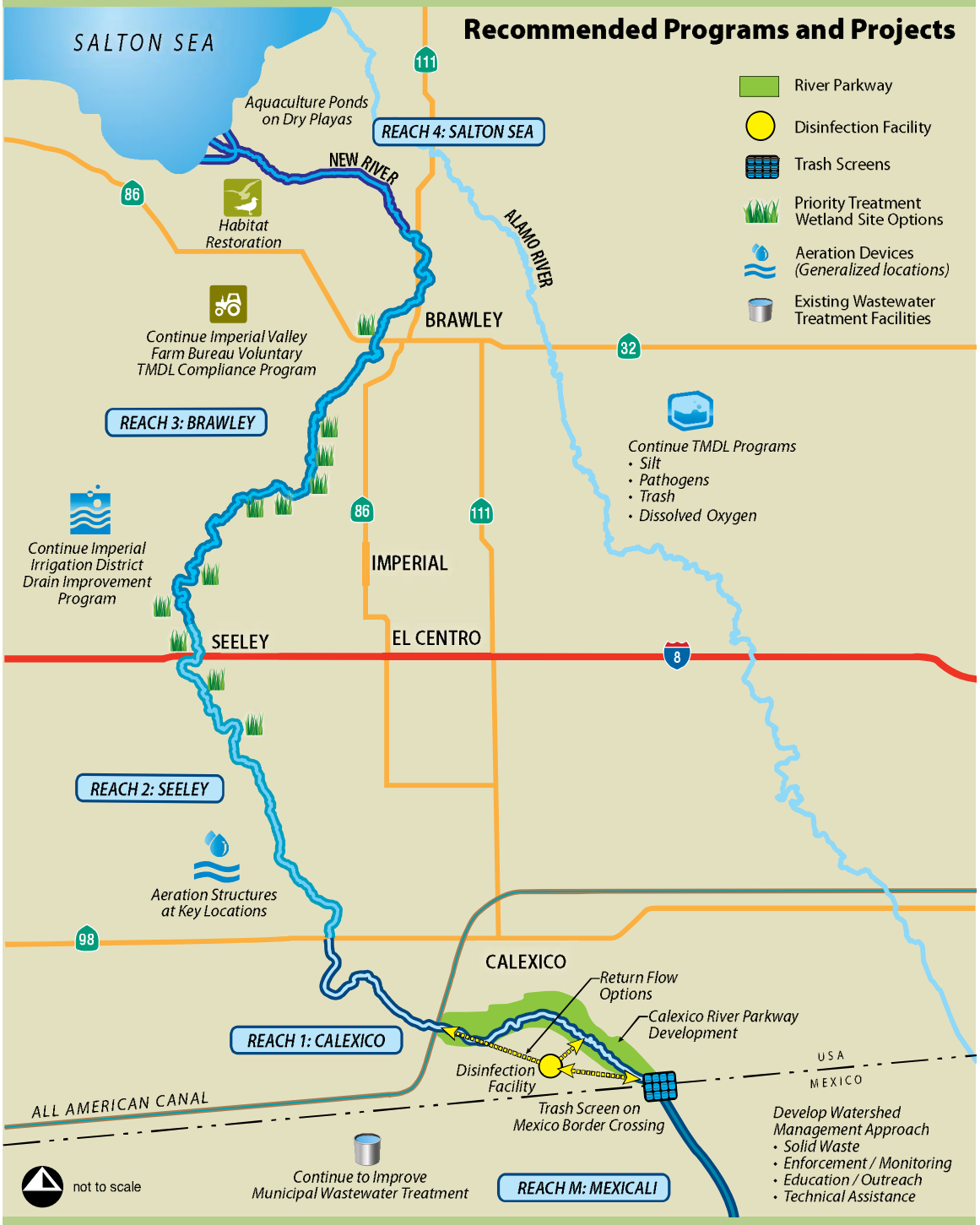

Figure 1. Strategic Plan Recommended Solutions

Attachment 2

December 8, 2014 Colorado River Basin Water Board Letter to US IBWC and USEPA

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Colorado River Basin Regional Water Quality Control Board

December 8, 2014

Mr. Edward Drusina, US Section Commissioner
International Boundary and Water Commission
4171 North Mesa, Suite C-100
El Paso, TX 79902-1441

Mr. Jared Blumenfeld, Regional Administrator
United State Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA, 94105

Dear Commissioner Drusina and Regional Administrator Blumenfeld:

SUBJECT: NEW RIVER POLLUTION FROM MEXICO – RAW SEWAGE BYPASESS AND STATUS OF SEWAGE INFRASTRUCTURE IN MEXICALI

I am writing you to bring to your attention sewage infrastructure problems in Mexicali and the adverse consequences they are having on New River water quality in California. Attached is a copy of a recent memorandum that we received from our staff detailing the problems—problems that are of significant concern to our Regional Board.

Following completion of the Mexicali II binational projects in late 2007, there was significant water quality improvement in the New River at the International Boundary. We were also encouraged by the regulatory steps taken by Comision Nacional del Agua to address point sources causing New River pollution in the Mexicali metropolitan area. Regrettably, as stated in the memorandum, we have been informed that aging sewage collectors and sewage pumping plants and lift stations in Mexicali are yet again in desperate need of repairs and/or replacement. As you may know, when a sewage collector collapses or a pumping plant or lift station fails, this typically results in bypasses of raw sewage into the New River. To make these problems worse: (1) there is a critical need for essential operation and maintenance equipment for the collection system (i.e., sewer vacuum trucks) and the Las Arenitas Wastewater Treatment Plant (WWTP) and Zaragoza WWTP are also in need of repairs.

This year alone, we know of at least three (3) major bypasses of raw sewage into the New River due to the failing infrastructure. Presently, raw sewage bypasses from Mexico into the New River range from 5 up to 40 million gallons per day! While the

bypasses may be short termed, they have a devastating water quality impact for California. These bypasses also pose a significant public health hazard and create nuisance conditions as the River enters California, diminishing the water quality gains made in recent years for New River at the International Border and our regulatory efforts on the US side of the Border.

Undoubtedly, correcting the problems requires time, money, and cooperation at all levels of government. Because of these requirements, the USEPA and US IBWC have been given specific delegated authority to address New River pollution from Mexico, I respectfully request that you:

1. address the above-mentioned infrastructure problems as a priority;
2. support Mexico's request to secure expedited binational funding to address the problems, including emergency funding to fix existing collapsed collectors and repair failed equipment at the pumping plants; and
3. request that Mexico develop contingency plans to handle future collapsed collectors and failing pumping facilities in a manner that do not result in continuing bypasses of raw sewage into the New River.

I look forward to your response and progress updates on our request. In the interim, if you have specific questions about this matter, please contact Robert Perdue at (760) 346-7491. Thank you for your attention and consideration of this request.

Sincerely,

Ellen M. Way, Chair
Colorado River Basin Water Board

Attachment

cc: Mathew Rodriquez, Cal/EPA, Sacramento
Felicia Marcus, State Water Resources Control Board, Sacramento
Francis Spivy-Weber, State Water Resources Control Board, Sacramento
Tom Howard, State Water Resources Control Board, Sacramento
Anna Morales, IBWC, Yuma
Tomas Torres, USEPA, San Diego
Ing. Francisco Berna, CILA, Mexicali, Mexico
Ing. Modesto Ortega Montaño, CESPM, Mexicali, Mexico
Maria Elena Giner, BECC, Ciudad Juarez, Mexico

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Colorado River Basin Regional Water Quality Control Board

TO: Regional Water Board Members
Robert Perdue, Executive Officer

FROM: Jose L. Angel, P.E.
Assistant Executive Officer JLA

DATE: November 10, 2014

SUBJECT: **NEW RIVER POLLUTION FROM MEXICO**

Dear Board Memebers,

At your last Board meeting, you requested a written report on the subject matter. This memorandum follows up on your request and provides you an update on the status of sewage infrastructure in Mexicali and the resulting current and emerging threats to New River water quality at the International Border.

Background[1]

Currently, the flow of the New River at the International Border with Mexico is approximately 81,590 ac-ft/yr (USGS, 2013) and consists of urban runoff, treated municipal wastes, untreated and partially treated industrial wastes, and agricultural runoff from the Mexicali Valley. Agricultural runoff makes up approximately 50 to 55% of New River flow at the International Border. As described in greater detail in the Strategic Plan, flows in the New River at the Border with Mexico have been reduced by as much as 40% during the last 10 years due to a number of factors, including reduction of agricultural runoff and municipal wastewater discharged into the New River and its tributaries in Mexico.

Historically, the New River has been recognized as a significant pollution problem since at least the late 1940s, primarily due to the raw sewage coming from Mexicali. The raw sewage caused extremely high concentrations of fecal coliform bacteria and offensive odor at the International Border, amongst other problems. Beginning around 1956, the flows of the New River at the boundary increased considerably due to development of agricultural drainage return flows from Mexicali Valley. This dilution water temporarily alleviated the odor problem, but in the sixties the problem became increasingly noticeable as sewage loading increased with the population growth. The problems worsen in the 1970s and in the 1980s due to continued population growth and the lack of an adequate sewage infrastructure (i.e., collection and treatment capacity) to service Mexicali.

[1] A more detailed account of New River pollution from Mexico can be found at:
http://www.waterboards.ca.gov/coloradoriver/water_issues/programs/new_river/newriverbook.shtml

In 1980, the Unites States and Mexico Sections of the International Boundary and Water Commission (IBWC) adopted Treaty Minute 264, which established water quality standards for the New River at the International Boundary and called for the elimination of Mexico's raw sewage discharges into the New River by 1982. In spite of the this Minute, by the mid-1990s, the Mexicali I and II areas were already discharging up to 10-million gallons per day of raw sewage into the New River due to the dilapidated sewage infrastructure (e.g., collapsed sewage collectors and failing sewage pumping facilities); and lack of operation and maintenance equipment for the sewage collection system, lack of standby power supply for the pumping facilities, and lack of wastewater treatment capacity for the Mexicali II area[2]. In 1992, US and Mexico adopted Treaty Minute No. 288, which established a long-term sanitation strategy for the New River at the Border and divided the sanitation projects into Immediate Repairs (a.k.a. "Quick Fixes"), the Mexicali I, and the Mexicali II projects. Treaty Minute 294, adopted in 1994, established a Binational Technical Committee (BTC) to oversee implementation of the projects and make recommendations to address New River sanitation problems in Mexicali. The US BTC members are the US Section of the IBWC, US Environmental Protection Agency (USEPA), State Water Resources Control Board, our Regional Water Quality Control Board, Imperial Irrigation District, and Imperial County. For Mexico, the members are the Mexican Section of the IBWC, Comision Nacional del Agua (CONAGUA), State of Baja California (Comision Estatal de Servicios Publicos de Mexicali, Comision Estatal del Agua, and Secretaria de Infraestructura y Desarrollo Urbano Estatal), and the City of Mexicali. So, as a matter of policy, California has been cooperating with Mexico. It has also provided technical and political support for funding to address New River pollution originating in Mexicali. That said, and as a matter of policy, we view the US Section of the IBWC and USEPA as primarily responsible for addressing New River pollution from Mexico.

The binational projects rehabilitated and built over 21 miles of sewage main collectors (main sewage interceptor pipes ranging from 18 to 48 inches in diameter) and rehabilitated three major pumping plants and several lift stations in Mexicali. The projects also included improvements to an existing 20-mgd wastewater treatment plant (Zaragoza WWTP) and culminated in the construction of a new 20-mgd pumping plant and a new 20-mgd wastewater treatment plant (Las Arenitas WWTP). The projects' costs totaled about $85 million dollars and were funded by both countries through the North American Development Bank (NAD Bank)—a binational organization created by the NAFTA. The Border Environment Cooperation Commission (BECC)—the NAD Bank's sister institution—was responsible for certifying the projects met a series of environmental criteria and qualified for funding. The Quick Fixes, Mexicali I, and II sanitation projects were completed in 1999, 2005, and 2007, respectively. Immediately after the Mexicali II projects were completed, there was significant water quality improvement in the New River at the International Border. Table 1, attached, summarizes the New River water quality before and after the projects were completed. As shown in the table, there was significant reduction of pathogen-indicator bacteria and a significant increase in dissolved oxygen in the New River. The projects also eliminated volatile organic constituents (VOCs) being detected in the New River.

The successful completion of the binational projects enabled the BTC to focus on: (1) the most significant industrial sources of New River pollution in Mexicali (four slaughterhouse) and the indiscriminate dumping of trash in drains tributary to the New River; and (2) CESPM's efforts to expand the treatment capacity of Las Arenitas WWTP to handle increases in wastewater flows. Four slaughterhouses were discharging untreated industrial wastewater into drains tributary to

[2] By the mid-2000s, the Mexicali I and II areas were discharging up to 20-mgd of raw sewage into the New River.

the New River, in violation of Mexican regulations[3]. CONAGUA took formal enforcement against all of them. Consequently, one of these industries went out of business (Bachoco) and two other (Su Karne and Don Fileto) eliminated their discharge to the drains and are now in compliance with Mexican norms. The other slaughterhouse ("Rastro Municipal") is still in litigation with CONAGUA. Very little progress has been made to curve the trash problem—it comes down to much needed additional trash collection services, outreach and education, plus surveillance and enforcement. The proposed expansion was well underway and expected to be completed by 2016. Due to the sewage infrastructure problems described in the following paragraphs, the water quality improvement made during the last 10 years and the completion of the expansion of Las Arenitas WWTP are in jeopardy.

Status of Infrastructure

Today's Mexicali is divided into four sewage service areas: (1) Mexicali I, (2) Mexicali II, (3) Mexicali III, and (4) Mexicali IV. Figure 1, attached, shows the service areas. The Mexicali III and IV areas include most of the maquiladora industry and new urban development. The City collection system has approximately 1,500 miles of sewage pipes that include minor and major collectors. The heart of the sewage collection system is its lift stations and pumping plants. Two wastewater treatment plants, the Zaragoza and Las Arenitas WWTPs, service Mexicali. The Zaragoza WWTP discharges approximately 20 to 22 mgd of secondary treated, but undisinfected wastewater into a drain that is tributary to the New River. The Las Arenitas WWTP also discharges approximately 22 mgd of secondary and disinfected wastewater to a tributary of the Colorado River.

It is my understanding that in March 2014 CESPM informed the BTC that key sewage collectors and equipment at pumping facilities in Mexicali have reached and/or are beyond their expected useful life and, consequently, are in immediate need of repair and/or replacement. CESPM also reported that of the five (5) sewer vacuum trucks it had for maintaining the sewage collection system, only one (1) is still in operation. According to CESMP, most of the sewage collectors in need of repair are 25 years or older and do not include collectors that were previously repaired or replaced as part of the binational projects. Many of the dilapidated collectors are old concrete pipes. However, it is my understanding that at least three of the pumping plants that need repairs and/or replacement equipment (e.g., new motors) are plants that were rehabilitated or built under the binational projects. Additionally, all of the sewer vacuum trucks were purchased as part of the binational projects in late 1990. The table shown below summarizes the categories of infrastructure that CESPM reports need immediate attention:

Infrastructure[4]	Problem	Projected Cost to Fix
Pumping Plants and Lift Stations	Structural damage and equipment problems (e.g., motors)	$9.5 M
Zaragoza and Las Arenitas WWTPs	Short-circuiting at Zaragoza and structural damage at Las Arenitas	$3.4 M
Sewage Collectors	Collapsed and dilapidated collectors	$7.4 M

[3] Contrary to popular misconception, none of the approximately 190 maquiladoras in Mexicali discharges into the New River. They are all connected to the City's sewage collection system.

[4] I have seen estimates that go as high as $300M to address the "trash problem" in Mexicali and another $30-60M to address storm water.

Infrastructure[4]	Problem	Projected Cost to Fix
O&M Equipment (Vacuum Trucks)	Down to one sewer vaccum truck for over 40 miles of collectors	$7.5 M
Mexicali IV (Expansion of Las Arenitas)	Funding	$11.5 M
New sewage lines	Funding	$3.5 M
	Projected Total	**$42.8 M**

As you may know, when a major pumping plant fails or a sewage collector collapses in Mexicali, Mexico routinely discharges raw sewage into the New River, including sewage that should be treated at Las Arenitas WWTP. On numerous occasions we have asked IBWC and USEPA to urge Mexico to develop contingency plans to avoid bypasses into the New River. This year alone Mexico has reported five (5) major bypasses of raw sewage into the New River (i.e., discharges of 3 mgd or more of raw sewage). Attached is a copy of the notification from CESPM to the Mexican Section of IBWC detailing its most recent bypass of raw sewage into the New River (670 liters per second = 15.3 mgd).

Water Quality Threat

A relatively minor bypass of 100,000 gpd has the potential to deplete the dissolved oxygen in the New River at the Border. In addition to the nuisance odors the raw sewage causes in the Calexico downtown area, our water quality monitoring program for the New River at the Border indicates that bypasses cause pathogen-indicator bacteria to spike. When Mexico discharges the raw sewage, particularly from the Mexicali III area, which includes the maquiladora industry, our program also has documented the presence of pollutants associated with industry (e.g., VOCs). The bypasses also have adverse water quality impacts for the Salton Sea because of increases to the overall nutrient loading into the Sea by as much as thirty percent (30%). From a regulatory perspective, this causes noncompliance with key California water quality standards, including the New River's Pathogen and Dissolved Oxygen Total Maximum Daily Loads, and toxicity and aesthetics water quality objectives, to name a few. Further, the raw sewage would (1) render the Strategic Plan's recommended disinfection facility for the New River in Calexico impracticable to implement and (2) diminish the water quality improvements that we have made through our regulatory programs, such as programs to control the quality of agricultural runoff in the Imperial Valley.

Steps Taken to Address Problem

CESPM reportedly has been spending its limited resources on making emergency repairs to collapsed collectors and failing pumping equipment. This includes resources that previously had been allocated to complete the Las Arenitas WWTP expansion. CESPM also reported the lack of necessary resources to deal with most of the other above-mentioned problems[5]. Addressing those problems is fairly straightforward from an engineering perspective, and in this regard the BTC can be instrumental and has a good track record. However, as indicated above, the overarching problem in this case is simply lack of economic resources. It is debatable whether CESPM has, and is implementing, an adequate revenue collection program to properly

[5] The Baja California Governor just forgave the "water debt" for people in Mexicali who were not paying their water bill. The water bill includes the sewer service fee also.

operate and maintain its sewage infrastructure, but also whether it has an adequate capital outlay program to properly handle future infrastructure needs.

CESPM has asked BECC, NADBank, and USEPA for economic assistance to address the ongoing problems as an emergency matter thus minimize adverse water quality impacts. USEPA, NADBanck, and BECC have indicated that there are no "emergency monies" available for these types of problems. CESPM has been advised to go through the BECC certification process to qualify for technical and economic assistance from the BECC and NADBank. Going through the certification process takes at least one year (if everything goes well). Because the water and wastewater needs along the US-Mexico border exceed the available grants from the NADBank, projects are ranked in order of priority. Projects that consist of providing sewage services to unsewered areas/communities that are currently discharging raw sewage are the top priority.

During the last four years, we have not been able to consistently attend the BTC meetings and binational observations tours of the New River in Mexicali to represent the state's interest due to budgetary constraints. We also lost all of our funding that was specifically allocated to deal with New River pollution from Mexico. Consequently, we do not have sufficient information from CESPM to determine what sewage infrastructure needs "repairs" CESPM should be making as part of the day-to-day operation and maintenance of its system or to determine whether any of the failing infrastructure is part of the binational projects that were implemented during the last 15 years. Notedly, operation and maintenance of infrastructure does not qualify for grant funding. Replacement of aging infrastructure maybe possible, but in light of the overall needs in the Border area, replacement may not be a top priority for grant funding, although it would qualify for other type of assistance from the NADBank (e.g., loans). Ms. Wright and I will be attending a BTC meeting on November 18, 2014, in Mexicali to get more details on the infrastructure problems and discuss ways to address them. Conceivably, the BTC may get from CESPM a mixed bag of projects: projects that qualify and projects that do not qualify for BECC certification. Regardless, even if funding were available for everything that CESPM has to fix, I believe it would take at least two years to fix the problems. In the interim, we can expect additional intermittent discharges of raw sewage into the New River from the failing infrastructure.

Summary and Recommendations

Dilapidated and aging sewage infrastructure in Mexicali is resulting in bypasses of raw sewage into the New River. Baja California estimates that it needs approximately $42 M to address this problem, but it lacks the money to do so. Therefore, CESPM is requesting economic binational assistance, including assistance from the NADBank. The raw sewage from Mexicali is adversely impacting water quality in the New River in California and potentially may wipe out the water quality improvements made during the last 10 years on both sides of the Border. Raw sewage releases would also make implementation of key recommendations contained in the New River Improvement Project Strategic Plan for the New River in Calexico economically impracticable.

Even though we viewed the USEPA and IBWC as having primary responsibility for dealing with New River pollution from Mexico, our Board's policy for the last 20 years has been based on cooperation at all levels of government, including providing technical assistance to Mexico to address this problem. The state of California has also supported Mexico's requests for binational funding for sewage projects in Mexicali. All of these initiatives have been instrumental in improving New River water quality at the Border. They have also enabled us to

have frank discussions with Mexico and thereby successfully implement binational projects to address New River pollution from Mexico.

If we are to minimize the amount of raw sewage that is discharged into the New River and protect hard won New River water quality improvements, I respectfully submit for your consideration that we need: (1) to make this not just a Regional, but a state priority; and (2) dedicated resources to deal with this problem and the emerging water quality threats. Regarding the former, we have briefed the State Water Resources Control Board management and Cal/EPA so we can have a meeting with them to discuss policy and our roles. Regarding the latter, we are putting together a request to the State Water Board for additional resources for New River pollution from Mexico. Needless to say, we need to make addressing these problems a federal priority as well.

I'll be presenting this report to you at the upcoming November Board meeting. In the interim, please let me know whether you need additional information regarding this matter. I can be reached at (760) 776-8932. Thanks.

Attachments

cc: Tom Vanderberg, OCC

Figure 1 – Mexicali Sewage Service Areas

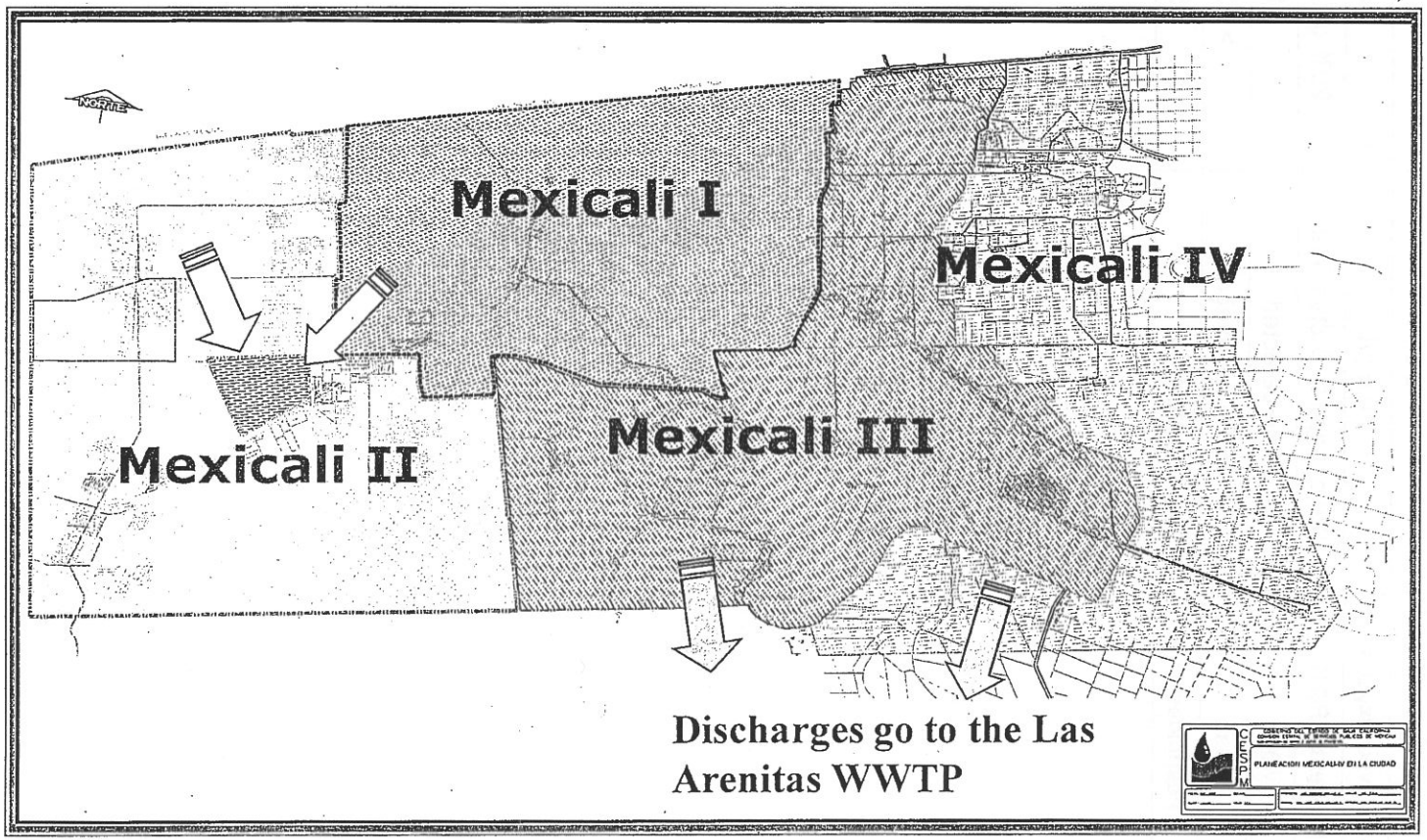

Table 1 – New River Water Quality at the International Boundary (pre- and post-Binational Projects)

ISSUE	PRE BINATIONAL PROJECTS	POST BINATIONAL PROJECTS[1]
Fecal, E. Coli	> 1,000,000	~ 100 - 60,000
Dissolved Oxygen	< 1.0 mg/L	~ 5.0 mg/L
Nutrients (PO4)	40% of Load to Salton Sea	20% of Load to Salton Sea
VOCs	Some detected	Non-detect
Trash	> 150 cu yds/year	> 150 cu yds/year
Pesticides	Detected	Still a problem

[1] As indicated by IBWC and Regional Water Board monitoring data for New River at the International Boundary.

CESPM
Comisión Estatal de Servicios Públicos de Mexicali

REPRESENTACIÓN EN MEXICALI
TURNAR A: FECHA: 08/10/14
☒ REPRESENTANTE ☐ CONTABILIDAD
☐ REF. UPTU. R.C. ☒ ASIST. EJEC.
☒ HIDROMETRIA ☒ ARCHIVO
☐ ACUERDO FECHA:
OBSERVACIONES: X-594.12 ACR/PA

BAJA CALIFORNIA
GOBIERNO DEL ESTADO

SUBDIRECCIÓN	SUBDIRECCIÓN DE AGUA Y SANEAMIENTO.
ÁREA	DEPARTAMENTO DE AGUAS RESIDUALES
OFICIO	DG-542-14
FOLIO	216488
LUGAR Y FECHA	MEXICALI, B.C. A 6 DE OCTUBRE DE 2014

Ing. Francisco Alberto Bernal Rodríguez.
Representante en Mexicali.
CILA.
Presente.-

Por este conducto informo que el pasado día 30 de septiembre del año en curso, se presentó una fuga de agua residual en la Planta de Bombeo de Aguas Residuales No.1, esto derivado del alto grado de corrosión que presenta el arreglo de tuberías de descarga de los equipos de bombeo a los emisores.

Para realizar los trabajos de reparación fue necesario el paro total de la Planta, desfogando al Rio Nuevo por un periodo de 7 horas un gasto aproximado 670 lps. por el Colector Sur y de la Planta de Bombeo de Aguas Residuales No. 2.

Sin más por el momento quedo pendiente para cualquier aclaración al respecto.

RECIBIDO
OCT 08 2014
C.I.L.A.
MEXICALI, B.C.

Atentamente

Ing. Modesto Ortega Montaño
Director General

COMISION ESTATAL DE SERVICIOS PUBLICOS DE MEXICALI
DESPACHADO
OCT 07 2014
DESPACHADO
SUB-DIRECCION AGUA Y SANEAMIENTO
Mexicali, B.C.

C.c.p. Ing. Enrique Ruelas Lopez.- Director General de CEA.
c.c.p. Ing. Isaac David Vizzuett Herrera.- Subdirector de Agua y Saneamiento. CESPM
c.c.p. Ing. Evaristo Villa Rodríguez.- Subdirector de Obras. CESPM
c.c.p. Ing. Miguel Federico Duarte Palacios.- Subdirector Comercial. CESPM
c.c.p. C.P. Cecilia Urrea González.- Subdirector Administrativo. CESPM
c.c.p. Archivo.

Attachment 3

New River Water Quality (Pre- and Post-binational projects)

New River Water Quality at the International Border		
Issue	Pre-Binational Projects (up to 20 mgd of raw sewage)	Post-Binational Projects (no raw sewage)
Fecal, E. Coli	> 1,000,000	~ 8,000 – 60,000
Dissolved Oxygen	< 1.0 mg/L	~ 5 mg/L
Trash	> 150 cu yds/year	Same
Selenium	< 5 ppb	> 5 ppb
Nutrients (PO4)	40% of Load to Salton Sea	20% of Load to Salton Sea
Toxicity	Detected	Mitigated
VOCs	Some detected	Non-detect
Average Flow at the International Border ~ 80-100 mgd		