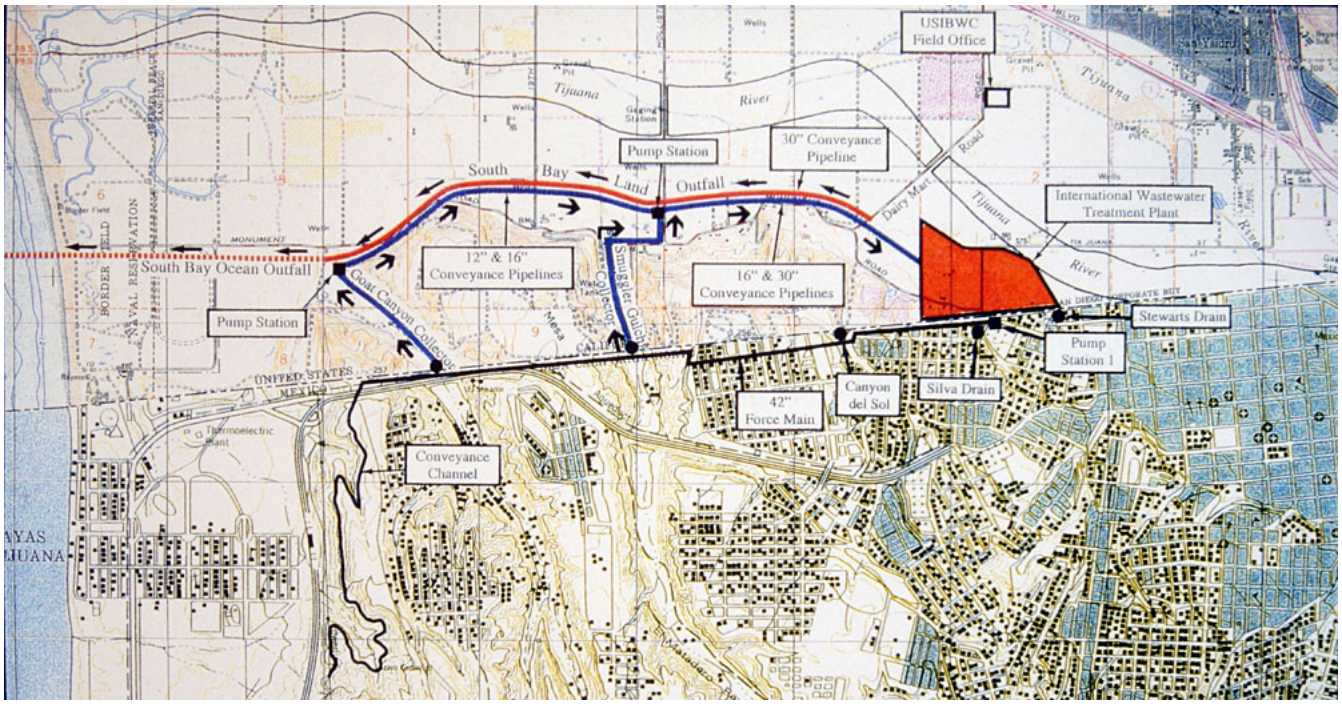
Tijuana River Valley Sewage Treatment

by Steve Schoenherr



Flow of sewage treated at the International Treatment Plant

1889/03/01 - The U.S. and Mexico established the International Boundary Commission (IBC) on March 1, 1889 as another temporary body to apply the rul were adopted by the Convention of 1884. The IBC was extended indefinitely in 1900 and is considered the direct predecessor to the modern day Internation Boundary and Water Commission. The 1884 Convention was modified by the Banco Convention of March 20, 1905 to retain the Rio Grande and the Colora as the boundary. (International Boundary and Water Commission, http://www.ibwc.state.gov/About_Us/history.html)

1927/04/08 - PROPOSE TIJUANA FLOOD DISTRICT. Preliminary steps to organize a flood control district for the protection of Tijuana river valley lands American side were taken at a meeting called at San Ysldro last night by J. G. France, San Diego county farm advisor. Forty owners and residents, represen acres, attended the meeting and organized by the election of C. E. Duehrer [C. G. Buehrer] , chairman, and W. F. Seal, secretary. John Hull. H. F. Schnell ar B. Beyer were appointed as a committee to consult with the county board of supervisors on preliminary surveys and other organization arrangements. Mr. F an estimate that by straightening the river channel and building stone dikes. 3000 acres could be protected from further flooding at a cost of about $50 an ac Diego Union, Apr. 8, 1927)

1929/10/22 - READY TO ACT RIVER PACT WASHINGTON, Oct. 22 (AP.) The international water commission, composed of representatives of the Mex United States governments, met here today and resumed discussions of water divisions of the Rio Grande. Colorado and Tia Juana rivers, which flow on bo the international boundary. Today's meeting was taken up entirely with organization work and there was no discussion of problems growing out of reclamati develop' merit on the three rivers in question. The commission will continue discussions, begun In Mexico City, Aug. 20. The commission members were w in the name of President Hoover by Joseph P . Cotton, undersecretary of state, who said that friendliness at former meetings Mexico City augured well for s the meeting here. Fortunato Dozal, chairman of the Mexican commission, said his country's representatives would take advantage of the amicable situation- for a future equitable settlement of the waters under dispute. It Is understood all meetings held here during the next several weeks will be executive. The co is meeting for the purpose of recommending a basis for a treaty which will distribute waters of these rivers between the two countries. It also is understood t commissioners virtually have completed a survey and will present their findings at this meeting. (San Diego Evening Tribune, Oct. 22, 1929)

1934 - As long ago as 1934 the two governments met to conduct a survey of "the Tijuana river sewage problem." One solution, a tunnel to the sea, was deer expensive at $60,000. ("A Partition of Paradise; A Short History of the Tijuana River Valley," 1991, in Parks-Tijuana River Valley Regional Park folder, Sa History Center)

1934/12/04 - Boundary Board Studies Plan for Sewage Disposal. Members of the international boundary commission were made fully acquainted yesterday sewage problems of the Tijuana river basin at a meeting held at the courthouse and attended by delegations of officials from Tijuana and San Diego county. Lawson, El Paso, and Armando Santacrux, Juarez, the two members of the commission, evinced keen interest in the problem and asked to be supplied with maps and other data that have been prepared by James Abbey, deputy district attorney; Julio Davila. Tijuana city engineer, and Bert Moore, deputy county s who have collaborated in preparation of preliminary reports and surveys. Present at the hearing with the boundary commissioners were d several members c

staff, including M. B. Moore, secretary; S. F . Crecelius. project engineer; R. G. Hosca, associate engineer; J . Franco Urias and R. Fernandez MacGregor. A who farm lands along the lower Tijuana river, north of the international border, protested some time ago against the flow of sewage from Tijuana, further up and on the south side of the border. Tijuana attempted to correct the evil by installation of a disposal plant which put out a less objectionable effluent. Study problem by health authorities of Lower California and of San Diego county and the state of California, convinced them that a comprehensive plan for carryi sewage of the lower Tijuana river basin to the sea at its mouth, on the American side of the border, would have to be evolved. At this point Abbey was instru contact the boundary commission, which has proved beneficial in supervising problems in which both nations must act jointly for their mutual good, with th that the commission and executives of its staff were made personally acquainted with an details yesterday. If the plan wins commission approval. $100,000 sought from the American and Mexican governments to finance the construction of trunk-line sewers to carry away effluent from local systems at Tijuana, S Ysidro. Agua Caliente and Colonla Libertad and bear them across the marshes at the mouth of the river and out to sea. Davila and Moore bad maps of the en project ready for the commission's inspection yesterday. Davila, in dlscussing reports that had been prepared for the commission, asked leave to amend parts with estimates on population. It is estimated that the community to be served by 1950 will be 50,000 persons. The engineer said that immediately after repea decrease in Tijuana population had been expected. Quite the contrary has been true, however, he said. While tourist travel has fallen off, permanent populati increasing. The early report bad indicated that population might fan off from 8000 to 5000. A recent census, he said, had shown the population to have incre 12,000. An average of 45 building permits is being issued every month. Present with Davila to represent Mexican interests yerterday were M. F . Guerra, Ti mayor; L. G. Martinez and M. Savinon, attorneys, and M. Granadas, representing Dr. S. Orsonio, Tijuana health officiaL Representing San Diego county int were Supervisor T. LeRoy Richards, Health Officer Alex M. Lesem, G. C. Zuckweiler, county sanitary inspector; Bert Moore, deputy county surveyor and J Abbey. (San Diego Union, Dec. 4, 1934)

1936 - A water treatment plant was built west of Monument road in 1936, on north bank of Tijuana river, where 3 wells been drilled, 2 large 45-foot tanks, s Palm City, IB, Coronado, North Island, some going to Highland reservoir on south side of Otay for storage. (Chula Vista Star, Jan. 27, 1939.)

1936/10/02 - TIJUANA RIVER FLOOD CONTROL PLAN ADOPTED BY PALM CITY CHAMBER. Business Men And Ranchers Of Valley Deckle On Bruhlmeier Plan; Display Booth Available At Fair. At the Palm City chamber of commerce meeting last night with Charlie Stream presiding, business men ranchers from the Tijuana river valley adopted a plan for flood control ot the Tijuana river. The chamber voted to adopt the Emil Bruhlmeier plan for their p All were agreed to ask the government to parallel the river with a dyke, scoop out the channel to the ocean from the International boundary, then every half dams would be built to cause the flood waters to deposit silt. All dykes and check drains were to be fenced with Mississippi flood wire to confine the river t channel. W. E. Evans described the floods of 1889, 1916 and 1927 and the destruction to the valley, also the fine farms that were ruined by inadequate flood protection. The Palm City chamber of commerce was notified that a display booth at the County Fair was available to the Sooth Bay district and San Ysidro Imperial Beach would be asked to aid in arranging a suitable display for the fair. Stream announced that it was the 8th birthday of the chamber of commerce throughout the eight years they had never failed to hold their regular monthly meeting. (San Ysidro Border Press, Oct. 2, 1936)

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1937/06/29 - Tijuana Sewer Project To Begin. Construction of Tijuana's sewage disposal lines along the lower reaches of the Tijuana river, on the American the international line, will begin July 6 as a federal project, the board of supervisors learned yesterday. The work, sponsored by the internal boundary comm will rid farmers in the Tijuana valley of a menace to sanitation that has been increasing as Tijuana has grown. The Mexican government, working in coopera the United States, has installed its system to the international boundary. (San Diego Union, June 29, 1937) 1937/07/13 - Border Sanitary Project Is let. The section of the International Boundary commission awarded the $139,000 contract for construction of the Tijuana sanitation project to J. C. Hickey, AIhambr yesterday at El Paso, Texas, The Associated Press reported. "Work will start soon on the project, said to be the world's first international undertaking of this Seven and one-half months will be required to complete the 8-mile outfall sewer which will serve San Ysidro, Tijuana and other towns on both sides of the international border. The line will empty in the Pacific ocean. About 100 men will be employed. B. F. Dupuy of the American section of the boundary comn win be the engineer in charge. Headquarters will be in San Ysidro. (San Diego Union, July 13, 1937)

1937/12/11 - SEWER SYSTEM WILL BE READY SOON AT BORDER. What its supporters declare will be one of the finest sewer system boasted by any community in the nation, soon will be available for use of residents in the area bounded in a general way by the international boundary, San Ysidro Palm Ci Imperial Beach and the ocean. Construction of almost seven miles of outfall sewer from the border port at San Ysidro. along the Tijuana river valley to the soon will be completed under contract with the international boundary commission by J. H. Hickey. The sewer, which carries effluent from treated Tijuana s and is designed to permit San Ysidro. Palm City, Imperial Beach and adjacent areas to connect with it is being built with federal funds obtained through inte negotiations started several years ago by the county health department and the district attorney's office. It is designed to remedy a sanitary and health proble at the border by the dumping of Mexican sewage into the Tijuana river, which, after passing through the Mexican border town, crosses into the United State empties into the sea about a mile south of Imperial Beach. Allotment for the construction work was $100,000. and when bids were opened, the lowest was $ over that amount. Congressman lzac, notified immediately of the threatened blocking of the improvement, obtained the neccsary additional funds within tw and the contract was awarded. Before work started on the America side of the boundary, the Mexican government had installed its part of the sewer, serving Caiiente, Tijuana and Colonia Libertad. With completion of the American project along the lower reaches of the Tijuana valley, modern sewage disposal wi available to all of the border area on each side of the line, if all goes well. Residents of the area to be served by the seven miles of pipe now may form impro districts and connect with it at only the cost of leading their lines to the main pipe. The plan, it is hoped, will put an tend to the use of over-burdened septic t which for years have created a threat of epidemics. Work on the American part of the sewer was started by the contractor July 26 and when completed will h employed about 100 men for 7 months/ All of them were taken from relief rolls of WPA, the lowest wage being 62 and 1/2 cents an hour. A government eng staff of inspectors have supervised the job under the direction of Ben F. Dupuy, associate engineer. When completed, the sewer win be turned over to the co the government. The 2500 feet of vitrified clay pipe has been laid in a foundation of drainage rock, about eight feet under the surface, with 57 manholes, a l tank at the ocean and 16-inch wrought iron pipe running into the ocean beyond the lowest point of low tide. (San Diego Union, Dec. 11, 1937) 1938/03/25 - Visits The Monument. WPA Job Supervisor Richards was in Monument last week inspecting the repair work being done by 80 WPA workmen. The section washed out by the recant flood waters has bean filled in with boulders, 1100 feet of woven wire, 5 feet wide, was laid in the newly dug trench and oiled with tone of rocks to insure against further washing by high water from the river All this, however, has been done on only one side of the river. It is just as neces be done on the other side if a similar washout is to be avoided in the coming year. Had this work been done years ago much of the land that has been washe sea would still be in use. (San Ysidro Border Press, Mar. 25, 1938)

1939/03/28 - Sewer Acceptance Delayed by County. Acceptance of the outfall sewer extending from San Ysidro to the mouth of Tia Juana river, built under supervision of the international boundary commission to care for sewage of border communities on both sides of the international line, was delayed by the c yesterday pending reports to be made next Monday on its condition. Opposition to acceptance without complete information as to structural condition of the particularly at its mouth, was made by Supervisor Walter Bellon. He reminded other supervisors that original specifications had called for extension of the l considerable distance into the sea and that the line had been shortened. As a result he feared there may be considerable silting and possible closing of the mo report from the health department office explained that the line had been shortened to reduce maintenance costs which are to be assumed by the county. (San Union, Mar. 28, 1939) 1939/04/04 - Supervisors Set Sewer Hearing. Hearing on an ordinance for operation of the new sewer system installed in Tijuana val U.S. boundary commission for joint use of communities on both sides of the international line, will be held by county supervisors at 1330 Thursday morning Supervisors yesterday, by 4 to 1 vote, accepted the trunk line built by the boundary commission. Supervisor Walter Bellon voted against acceptance. Victor deputy district attorney, informed supervisors that he had been in conference with Tijuana city officials. They are preparing to deposit funds matching those county, to guarantee maintenance of the main pipe line. They hope to be ready to connect with the line within six weeks, said Winnek. San Ysidro famlies a Tijuana valley and possibly Palm City and South San Diego will connect with the line soon, under regulations to be laid down in the ordinance to be conside the first time on Thursday. (San Diego Union, Apr. 4, 1939) 1941/06/10 - County Section Of U.S.-Mexican Sewer Damaged. Floods last winter tore out 100 the branch line of the Tia Juana valley international sewer, between San Ysidro and the main line to the ocean. R. W. Parks, county foreman of properties, to Diego county supervisors yesterday. While the main line, below the junction of the branches from San Ysidro district and the Tijuana district in Mexico, it m jointly by the Lower California territorial government and San Diego county, the damaged line is the county's responsibility under a contract with the federa government, Victor C. Winnek, chief county counsel, advised the supervisors. Parks said he would report on the result of his survey this week to the sanitary Tia Juana valley sanitation project. He said he had not made an estimate of the cost of repairing the damage. The sanitary board, composed of Bert Moore, c county road department; Gus Zuckweiler, county sanitary engineer, and Arthur A. Messenger, of San Ysidro, who was appointed yesterday, will study Parks and submit a recommendation to the supervisors. The county may seek to avoid expense of the extensive repair project by laying blame upon federal engine faulty construction, it was indicated. Walter Bellon, supervisors' chairman, asserted the damage could have been kept to a minimum had the line been laid pr The sewer, built two years ago with funds supplied by the federal boundary commission, serves residents of San Ysidro. Tijuana and the Tia Juana valley ar Diego Union, June 10, 1941) 1944/02/03 - The Water Treaty of February 3, 1944 expanded the duties and responsibilities of the IBC and renamed it the Inte Boundary and Water Commission (IBWC). The 1944 Treaty charged the IBWC with the application of the treaty and the exercise of the rights and obligatio the U.S. and Mexican Governments assumed thereunder and with the settlement of all disputes that were to arise under the treaty. (International Boundary a Commission, http://www.ibwc.state.gov/About_Us/history.html)

1944/02/03 - Mexico has been taking steps to improve the Tijuana disposal system under the procedures in Commission Minute No. 261, concluded under t Water Treaty in which the two Governments agree to give preferencial attention to the solution of the border sanitation problems. In the 1930's through the international collector and septic tank system with a shoreline discharge provided a solution. In the 1960s Mexico constructed two pump stations and two pr line systems along with an open channel along the western slopes near the coast, to provide an ocean discharge of Tijuana's sewage without treatment at a p 5.6 miles directly south of the international boundary. (South Bay International Wastewater Treatment Plant, http://www.ibwc.state.gov/mission_operations/sbiwtp.html)

1944/02/03 - From a flooding perspective, the site supports the Tijuana River Flood Control Project (TRFCP) of the International Boundary & Water Comm the United States and Mexico, formed by a 1944 treaty of the two countries. The project funded a concrete lined flood control channel in Tijuana which tran into a flared section on the U.S. side to slow water before it enters the estuary. "The Secretary of State, acting through the United States Commissioner, Inter Boundary and Water Commission, United States and Mexico, is hereby authorized to conclude with the appropriate official or officials of the Government o an agreement for the joint construction, operation, and maintenance by the United States and Mexico, in accordance with the provisions of the treaty of Febr 1944, with Mexico, of an international flood control project for the Tijuana River, which shall be located and have substantially the characteristics described "Report on an International Flood Control Project, Tijuana River Basin", prepared by the United States Section, International Boundary and Water Commiss United States and Mexico." (22 U.S. Code § 277d32 - Tijuana River flood control project; agreement with Mexico for joint construction, operation and mai

1947/04/22 - Sewage Problem Awaits Ruling. No action will be taken by the County to repair the lower. Tijuana River Valley sewage disposal system until ruling has been received from the International Boundary arid Water Commission that the County will have to appropriate $20,000 for the project, E. R. Sta Administrative Assistant to the Supervisors, reported yesterday. It reported from Washington the Commission has no funds to finance the repair project. The Supervisors had asked the American section of the Commission to repair part of the sewage system that was wrecked by the 1941 flood. The State Beaches Commission several months ago refused to include a section of the Tijuana river mouth area into the State park system because sewage from Tijuana seepin shore south of Imperial Beach created a health menace. It was to rectify this condition and to improve sanitary conditions near San Ysidro that the Supervis Federal funds to help pay for repairing the sewage disposal system of the lower Tijuana Valley. (San Diego Union, Apr. 22, 1947)

1960 - Water pollution in San Diego caused by sewage worst ever seen. San Diego Bay is under a continuous quarantine and Mission Bay is heavily pollute Diego moves forward with approval and construction of a new, regional "Metro" system. --

1962 Pt Loma treatment plant under construction. 1963 After three years of construction, Metro system is put into operation in August. The new system has miles of interceptors, 2 main pump stations and one primary treatment plant at Point Loma with a capacity of 88 MGD. Treated wastewater is now discharg offshore into the Pacific Ocean. Nine participating agencies connect into the Metro System for treatment of sewage (Imperial Beach, Chula Vista, National Mesa, Lemon Grove, El Cajon, Montgomery, Spring Valley and the US Navy). (http://www.sewagehistory.com/sandiego.html)

1965 - In 1965 the United States and Mexico concluded IBWC Minute No. 222 which authorized the construction of an emergency connecting pipeline betv main collector line in the City of Tijuana, Baja California and a branch collector line of the San Diego Metropolitan Sewage System. This connection provic times of breakdown in the Tijuana pumping plants or facilities, the safe disposal of Tijuana sewage in the San Diego system to avoid a serious unsanitary co might be caused by an overflow of waste water onto lands in the City of San Diego and in the streets in the City of Tijuana. The connection, constructed unc authorization in the Act of August 19, 1935, was completed in 1966. The connection consists of a valved turnout pipe in Mexico, extending northward 300 m) to the international boundary, thence a pipeline continuing northward in the United States a distance of 4,277 feet (1,304 m) partially under the Tijuana R floodplain to the San Ysidro branch collector line in the United States. The installation includes a metering station in the United States. Each Government p costs of the works it its territory. Mexico made use of the connection intermittently through 1975 and extensive use of the connection until 1998, with the co of the South Bay International Wastewater Treatment Plant (SBIWTP). (South Bay International Wastewater Treatment Plant, http://www.ibwc.state.gov/mission_operations/sbiwtp.html)

1965/11/14 - Photographs to accompany Memorandum to the Commissioner dated Dec. 2, 1965, subject "Effects of Rainstorm November 14 thru 25, 1965

River Basin". Photo Nov. 26, 1965. Panorama showing water impounded behind Rodriguez Dam from runoff during storm Nov. 16 thru Nov. 25. Volume sh represents about 1,800 acre-feet. Panorama showing Tijuana River from a point immediately upstream from the railroad bridge, and looking downstream t c United states . Shows water ponded i n the excavation for the proposed flood control channel . All runoff from the Tijuana River upstream fran this area was and retained at this point. (Area Operations Office, International Boundary and Water Commission, U.S. Section, San Diego Field Office) 1966/10/11 - Pho to accompany memorandum to the Commissioner dated D!cember 19, 1966, subject, "Tijuana River Effects of Rainstorm in the Area on December 6-7, 196 photos taken D!ceml:er 7. Photo No.4 _ Panorama of the Tijuana River at the international boundary, looking southlft!st. Hub at ~ end of photo indicates the water line which occurred during this period. Note also overflow on road north of channel in the United States. Water surface is about 150 f et wide. The ma surface velocity of the stream at this time was estimated to l:e 6.5 feet per second. Area Operations Office, International Boundary and Water Commission, Section, San Diego Field Office 1967 - Development of the Tijuana Estuary. The Tia Juana River Valley has always suffered from heavy flooding during ye heavy rain fall. As early as 1937 a flood control channel had been proposed between the point where the river crosses the border into the United States and t Ocean (Miscellaneous Survey No. 74 1937). In 1944 an International Boundary and Water Commission Treaty (IBWC) between Mexico and the United Sta recognized that the Tia Juana River posed a serious flood problem for both countries and the most effective solution would be a coordinated flood control ef between the two countries. In 1967 a plan was approved by the IBWC for a six mile concrete channel running through the Tia Juana River Valley, from the the Pacific Ocean. The channel would join a similar 2.7 mile concrete channel built by the Mexican government. In addition to controlling the potential floo the channel would open up approximately 4,200 acres of private land for development in the Tijuana River Flood Plain. With the channel, land values in the valley could be expected to increase by as much as 10 times. Developers bought land in the valley in anticipation of future profits and the city of Imperial B expected an increase in their tax base. On June 6, 1967 the city of Imperial Beach signed an agreement with Dr. Theodore Lamborn, president of the Helix I Harbour (sic) Development Corporation, to build a residential marina in the northern corner of the Tijuana Estuary. The idea was to transform the tidal swar collection of distinctive homes each with its own waterfront. The city sold 126 acres in the northern corner of the estuary, called the Banta Subdivision, to H 350,000 dollars with the stipulation that Helix begin construction within two years. Helix joined forces with U.S. Plywood. Their proposal called for: A seri made islands and peninsulas connected by a main channel running from the harbor entrance to Coronado Avenue. Most of the luxury homes will have a priv waterfront and boat dock. Scattered among these homes will be some apartment buildings and other multiple family buildings. A small shopping center and club will serve as a focal point for community activity (City Council Report 1967; cited in Flanagan 1986). Although favored by many in Imperial Beach, th was opposed by a large and active group of environmental activists. In what became one of the earliest focused environmental battles in San Diego County, 20 years local environmentalists fought the project and advocated preservation of the Tia Juana Slough as a wildlife sanctuary (Flanagan 1986). Led by Imp Beach veterinarian, Dr. Mike A. McCoy, the fight to save the estuary was one of the earliest environmental battles in San Diego County. The first 10 years v extremely difficult for those who opposed the marina project. In the early '70s there was almost no existing legislation to protect wetlands. Initially the only at their disposal dated back to the 1930s and included the Wild Life Conservation Act, and the Rivers and Harbors Act. By 1973 the Endangered Species Ac passed. This was followed in 1976 with the Clean Water Act, and the California Coastal Act. As each piece of legislation became available it was put to use marina opponents to stop the project (McCoy 2005). (Van Wormer, Stephen R. "A Land Use History of the Tia Juana River Valley," California State Parks, Service Center, June 2005.)

1967/06/19 - Tijuana River Flood Control Project (TRFCP). Under the terms of the 1944 Treaty relating to the Tijuana River, the IBWC in 1967 (IBWC Mi of June 19, 1967) recommended to the two Governments and they approved a joint project for the control of floods on the Tijuana River in the United State Mexico for protection of developments near the boundary in the City of San Diego, California and in the City of Tijuana, Baja California. A joint project wa because coordinated flood control works were required in each country to protect developments in the other country. That project provided for 2.7 miles (4. kilometers) of a concrete-lined channel south of the boundary in Tijuana, veering westerwardly to then continue for 6 miles (9.7 kilometers) to the Pacific C part of the project in the United States was modified in 1977 to the present stilling basin configuration (IBWC Minute 258) to conform to a change in land u planning in San Diego. The project consists of concrete-lined channel for the Tijuana River in Mexico extending from the boundary upstream 2.7 miles (4 k a concrete and rock-lined channel in the United States extending from the boundary downstream 0.9 miles (2 km). (International Boundary & Water Comm http://www.ibwc.gov/Mission_Operations/TJ_River_FCP.html)

1967/07/06 - Statement by the President on the Agreement with Mexico for an International Flood Control Project on the Tijuana River, July 6, 1967. Agree reached through the IBWC, U.S. and Mexico, which will now proceed to supervise joint design and construction of the project. The estimated U.S. portion $15.4m, of which local beneficiaries will pay $4.5m. (Public Papers of the Presidents of the United States: Lyndon B. Johnson, 1967)

1974 - Floods have always been a problem in the Tia Juana River Valley. San Diego Mayor Pete Wilson's decision in 1974 not to continue the flood control the Tia Juana River constructed by the Mexican government on the south side of the border resulted in the discharge of millions of gallons of high velocity the valley on the north side of the border following heavy rainstorms. Although the Army Corps of Engineers built a dissipater system at the border in 1976 the water velocity, it still did not control the quantity of flow. Flooding conditions were also exacerbated by runoff from Goat Canyon and Smuggler's Gulch was greatly increased over previous decades in volume, velocity, and amounts of debris and refuse carried by the water, due to the uncontrolled developmen occurred along these drainages south of the border as Tijuana grew (McCoy 2005; Powers 2005; Cuen 2005). A large flood in 1982 left farmers on the soutl the valley stranded for 17 weeks. The only way to get needed supplies available was to make a hole in the international border fence and go into Tijuana, M There was no electrical or telephone service. Valley inhabitants survived with gas powered generators and water pumps, and medical emergencies had to be by helicopter (Martin 2005). The valley suffered another devastating flood in 1992. These two deluges had a severe impact on the valley. Many agricultural were inundated and several farmers and horse ranchers moved out of the valley (Cuen 2005). Contamination of the water table caused the bottling plant In S Gulch to close. In addition to water damage, floods still bring large quantities of contaminants, refuse, and silt into the valley (Powers 2005; Cuen 2005). Sc former farmland adjacent to the border Is now covered in 8 feet of sediment (Abbott 2005). (Van Wormer, Stephen R. "A Land Use History of the Tia Juana Valley," California State Parks, Southern Service Center, June 2005.)

1980/06/25 - (photo) Imperial Beach Mayor Brian Bilbray kneels near spillage from a broken sewer line that flows into the Tia Juana River and is polluting of Imperial Beach. Bilbray yesterday visited this and a site at Playas de Tijuana where sewage is flowing into the ocean through an channel. -anger ong By J RANGEL Staff Writer, Coronado's city manager, the manager of the Hotel del Coronado and others in that city expressed concern yesterday over what one "sensational" and "incorrect" reports that the city is threatened by pollution from a temporary Mexican channel which is dumping sewage in the ocean abou south of the border. And officials who had warned of the potential problem said yesterday they now believe there is little chance the sewage could pollute C shores. The channel is diverting about 1% million gallons a day of untreated sewage from flowing into the Tia Juana River and polluting Imperial Beach. It the ocean at Playas de Tijuana. Imperial Beach and San Diego County officials, including John Melbourn, chief of the county's Environmental Health Divis Monday a shift in ocean currents or winds could carry the sewage north to Coronado. Yesterday, however, Melbourn said that he now doubts that the sewag constituted a threat to Coronado. "Pollution from the Tijuana sewage should not concern Coronado officials," he said. "There's been a northwardly shift of th since the (diversion began) on Friday," Melbourn said, but, because of the natural processes of assimilation and purification, "by the time it reaches Coronac

doesn't appear to have an impact." The beaches south of Silver Strand Park towards the border remain contaminated and are off-limits to swimmers, he said that bacteriological samples of the water have been taken and results should be ready by the end of the week. Scott Anderson, Hotel del Coronado manager, reports of a pollution threat were "sensational" (The San Diego Union, June 25, 1980) 1980/09/20 - (photo) Jim Truitt takes a swing at a pitch from his frien Chaffee at an Over-The-Line game at a clean Imperial Beach. In the background is the Imperial Beach Pier, which was damaged during storms earlier this y Playing on the beach^n activity that had been restricted because of sewage contamination, is a sign of reinvigorated business in Imperial Beach. Area busine attributed a serious business slump to the contamination, but with the pollution problem overcome they now say business is picking up. Tourist Industry Rel From Slump. IMPERIAL BEACH Louis Reyns, the manager of Pacific Sands Motel here, pulled out his guest registration book and noted there were no va "Business," he said with a smile, "has been normal plus more." . Just a few months ago, Reyns and other owners and managers of beachfront and tourist-rela businesses were expressing fears that they might have to close down. They were experiencing a drastic slump in business of from 40 to 60 percent. While in and the high cost of gasoline were partly to blame, the main cause, they said, was contamination from sewage that closed down the city's beaches. But since of sewage stopped and the beaches were reopened in late July, business has rebounded. Many merchants, including Reyns, said this week that huge numbers tourists have started to come back to Imperial Beach. The increase, they said, has more than compensated for the losses they suffered from the lengthy perio the only thing that appeared to be moving here was the ocean waves. "We had a chance to recuperate," Reyns said. "The weather has been nice to us and the have stayed clean." Khader Barghout, the owner of IB Liquor and Market, complained in July that he was about ready to sell out if the slump had continued more optimistic now," he said. "There's people on the beach, especially out-of-town tourists, and they like to spend money." Jessie Allen, the manager of Su Motel, said business will slow down a little since school started, but expects it to pick up again in midNovember when foreign visitors normally come. "At l we can hope," she said. "That's unlike before when we didn't know what would happen with the beaches." Laura Cubberly, manager of the Surf and Skate S business has increased 100 percent since July. "(The slump) really strained us," she said. "But we've been renting a lot of surfboards and roller skates. We're While the persons interviewed expressed optimism, they said business could be even better if the pier, which was partly washed out in last winter's heavy ra repaired. "We're lucky to be able to offset the loss of business from the pier with a higher number of visitors," Reyns said. "But we're eyeing it. Pretty soon, like we might need some drastic ation to have it fixed." He said he -recommended to the city that the way to have it repaired is to launch a publicity campai to "Operation Beaver," in which Mayor Brian Bilbray and four city council members attempted to dam the Tia Juana River to stop the flow of raw sewage f Mexico. "People thought he was some kind of crazy nut," Reyns said. "But he turned things around and brought the issue to a head." If the pier is fixed and stays clean, Reyns said, beachfront tourism business "will be in great shape." "And if the trend continues for about five years, we'll have a boom around her repairs are still a long way off, according to acting city manager George Field. He said that plans have been prepared by an engineering consultant and the p be ready to put up for bids in two weeks. However, construction would not start until April, he said, because of the lengthy bidding process. "The constructi companies will have to send divers down to the bottom and assess the structural damage down there," he said. But if the bids exceed $650,000, he added, th going to be in trouble." The cost of,repairs has been estimated at about ?1 million, but the federal government has not agreed to the figures. "There's going t problems if the bids exceed the federal estimates," he said. "We'll have to convince the government to give us more money or figure out how to raise the res money." (The San Diego Union, Sept. 20, 1980)

1981/04/09 - Sewage plant site freed for houses. South Bay land earmarked for a wastewater treatment plant was freed for housing develop- ment this week San Diego City Council. A building moratorium was lifted from the 156-acre site at Interstate 5 and Dairy Mart Rd. in anticipation of a five-year waiver the believes will be granted by the federal government. The waiver would exempt San Diego from complying with the Clean Water Act of 1972, which requires dumped into the ocean to be 90% pure. Without the waiver, the clty would be required to build a secondary sewage treatment plant to remove a greater amo suspended solids from the water. City officials have said the proposed $500 million project was unnecessary because the present Point Plant was not pollutii ocean. City staff recommended this week, however, that the city buy the proposed South Bay property from Robinhood Homes, Inc., for $7.55 million to en land would be available in case the U.S. Environmental Protection Agency ruled that the treatment plant was necessary. Council members unanimously reje purchase. "We believe the waiver is forthcoming," said Councilwoman Lucy Killea, who represents the South Bay. "The required secondary treatment plant on the old rules. I don't believe the new Reagan administration will require that money be spent on a secondary treatment plant when the primary plant is ad Even if the waiver does not come through, Killea said, the proposed South Bay site is dead. "A treatment plant will not be built on that site," she said. If a pl eventually is required, she said, the city would seek another site, preferably in the Tia Juana River Valley, away from residential construction. MEANWHIL will work on upgrading the Point Loma plant to ensure the EPA regulations are met, Killea said. In freeing the South Bay land, the council also urged the sta Commission to rescind its building moratorium on the site so the owners could proceed with housing development. City officials expect the commission to' their lead in ending the restriction. However, Paul Robinson, attorney for Robinhood Homes, was not as optimistic. He told the council he was "not at all ce commission would lift its moratorium. Even if it does, he said, the California State Water Resources Control Board, which believes the cfty should protect a Bay site for a treatment plant, could prevent housing construction. (Imperial Beach Star-News, Apr. 9, 1981)

1983 - Joint U.S.-Mexico wastewater treatment plant proposed. (The South Bay International Wastewater Treatment Plant Timeline, http://www.ibwc.state.gov/Files/south_bay.pdf)

1983/03/20 - (photo) Water Hyacinth Feeds On Sewage And Looks Pretty While Doing So. Alan Langworthy shows plant growing on sewage beside San D Stadium. Can a hyacinth clean up Tijuana sewage? The water hyacinth, a plant that thrives on sludge, may help accomplish what farmers and city officials c with the Tia Juana River Valley have been unable to for tome 20 years: solve the problem of Tijuana sewage. The international Boundary and Water Commi recent plans to create a 13-acre holding pond in the Tia Juana River Valley to handle possible sewage breakdown in Tijuana, could ultimately lead to a wate sewage treatment plan there, according to a spokesman for Congressman Duncan Hunter, R-Corona do. Chris Warden said an advisory committee to Hunter researching the whole Tijuana sewage problem, and the idea of using the holding pond for the sewage treatment site is still in the "brainstorming" stage. "W aware of the pond proposal as an emergency measure, and it seemed to go nicely with a plan Hunter has been working on." Warden said. He said Hunter has the idea with the boundary and water commissioner headquartered in El Paso, Texas, Joseph F. Friedkan, and they have considered it a possibility* althougl would ntod more development than the holding tank alone. "THERE WILL already be something in place though," said Warden, should the treatment plant go-ahead to be put in that area. A type ot sewage treatment that would likely be used is currently being tested at the Aquaculture Sewage Treatment Process also known as the "reverse osmosis plant," at the Southwest corner of the San Diego Stadium grounds. "The process recreates what mother nature does to pu sewage," said Alan Langworthy, supervisor of the aquaculture plant. Raw sewage is fed into a series of 15,000-gallon tanks each full of growing water hyac plants live on top of the water, with roots dangling below. LANGWORTHY said pollutants are nutrients for the plants, and are assimilated into the plant roc He said the plants can effectively remove lead, mercury, cadmium, excess nitrates and phosphates from sewage 'Äî thus, yet another*name for the process, hyacinth treatment. He said crayfish, catfish, worms and snails are also kept in the tanks, because they also assimilate sewage. "We just threw in a whole bu the eco-system adjust itself," Langworthy said. He said there was no sewage smell from the tanks because of the balanced ecosystems. AFTER THE sewage through the tanks, and goes through an ozone process that destroys any viruses, it is passed through a sand filter for clarification, according to Langworthy. on the quality of treatment desired, the water could then pass through a reverse osmosis unit which would remove over 90% of dissolved solids, and a carbo tower which would remove the last traces of organic material. At this point. Langworthy said, the water would be clean enough to drink. "SOMETIMES, I c

water that we treat/' he added. According to Langworthy, the water hyacinth process would cost little; the only expenses would be the energy required to op filter system. He said the cost of treatment could be defrayed by using the harvested hyacinth, which grows at a phenomenal rate, for livestock feed, soil am or as a source of methane fuel. "It's a very attractive way to treat sewage, he said, pointing to nearby sheep feed on hyacinth. Imperial Beach Mayor Brain B a hyacinth sewage treatment process at the proposed pond was one of any number of ideas being considered. He said it would probably be an interim step ir range solution of an "international problem." The Tia Juana River empties into the ocean south of Imperial Beach. And sewage pollution there has been a cc problem. HE SAID UNTIL Mexico began pumping all its sewage down to Rosarito, the site of a proposed Mexican water reclamation plant to be completec seven years and expected to handle all of Tijuan's sewage, something would have to be done soon. He felt the holding pond project was not a "catch-all" for sewage problem. (The Imperial Beach Star-News, mar. 20, 1983)

1983/03/20 - The international Boundary and Water Commission's recent plans to create a 13-acre holding pond in the Tia Juana River Valley to handle pos sewage breakdown in Tijuana, could ultimately lead to a water hyacinth sewage treatment plan there. Construction may begin April 18 on the "emergency" earthen holding pond. (The Imperial Beach Star-News, mar. 20, 1983) 1983/04/07 - Sewage pond starts April 18, unless. Construction may begin April 18 c "emergency" 13-acre earthen holding pond to help control Tijuana's sewage overflow, even while U.S. Congressman Duncan Hunter, San Diego, is "examin to block" It. The proposed holding tank is under question, too, before the California Coastal Commission and the Regional Water Quality Control Board, Ar Otay Mesa/Nestor Community Planning Group, representing aome 4,000 residents, including the 1.200 residents of the Evergreen Condominium Assn. near site, also oppose the tank. All within two miles of the site, the planning group called the tank variously "a raw scar on the earth," "a serious health hazard," ' children" and "a detriment to property values." THE TANK is to be built near the U.S.-Mexiean border, on the east side of Dairy Mart Rd. within the city of Diego. " T h c holding tank is an emergency measure. We are trying to act before the summer season begins and beaches become popular." said project direc Robert Ybarra. Ybarra is secretary of the U S . section of the International Boundary and Water Commission headquartered in El Paso. Texas An arm of the Department, Ybarra's office has jurisdiction because the sewage problem involves another country. Tijuana's overtaxed sewers often break down, and are th presumed cause of pollution at imperial Beach beaches, Ybarra said. The tank is to be used only temporarily, until Mexico is able to correct Ro^tawage prob which, Ybarra anticipates, will occur sometime "late this year or early next year." TIJUANA Is constructing a second sewage pumping plant. Ybarra said Cu the San Diego metro system handles about 12 million gallons par day of excess Tijuana sewage, but is unable to accommodate more. Also, if the Tijuana pij down again, the sewage would back up into the Tie Juana River and be carried out to sea, polluting the local coastline, Ybarra said. The holding tank will cc $45,000 and completion is expected early next month. Funds are allocated by the federal government, and construction will be performed by boundary com employees, although equipment such as bulldozers and excavating machines will be rented from local contractors. YBARRA SAID his office is "quite . . . F to back page [but fuzzy]. . . Duncan Hunter opposed will breed disease. . . . nearby Evergreen condo project opposed. (The San Diego Union, Apr. 7, 1983) 1983/04/21 - Tijuana sewage pond put on hold. Pond will not be built unless local residents request it, acc to Joseph Friedkin of IBWC . (The Imperial Beac News, Apr. 21, 1983)

1983/04/28 - Tijuana sewage pond gets Coast Commission OK. (The Imperial Beach Star-News, Apr. 28, 1983) 1983/05/12 - (photo) Rep. Peace Takes A C At Still-Wide Tia Juana River. Press conference on riverbank announces state offer on sewage plant. Steve Peace says state will help build sewage plant in T River valley. Standing on the banks of the Tia Juana River on Dairy mart Rd. south of Chula Vista, peace held a press conference yesterday to announce the water board's decision. IB a letter to Peace the board's executive director, Clint Whitney. said, "We consider the longstanding situation at the border a seriou health problem. There is the potential for a large outbreak of disease . . . The uncontrolled sewage releases have made California land and beaches unsafe fo humans." Imperial Beach south of Seacoast Dr. remains quarantined by the county health department, due to sewage from Mexico reaching the beach via th WHITNEY SAID, "The state la ready to commit Clean Water Bond funds for construction of a facility to treat wastewater In the area. But federal funding h held up, ha said, because of a conflict between the federal Environmental Protection Agency and the State Department over which should pay. The EPA. ha taken the position that, since the sewage does not originate in the U.S., it it net within its jurisdiction. A PRECEDENT exists for the State Department to pu 100% of the necessary funding for the project, which could coat from 950 to $100 million, Peace said he will introduce a resolution next week calling on th government to ante up. Since the federal government was willing to fund a temporary sewage holding pond. Peace speculated It has shown awillingness to v permanent solution. Asked if that temporary solution, had it gone forward, might not sewag have had a domiino effect on bringing w effect on bringing in fu permanent funds for a permanent solution, Peace disagreed. " I want to elementary school in temporary bunglows that are still there." THE NEXT step, he s local agencies to settle on the kind of technology they want. Peace said he expects to meet with experts soon to discuss technology. At hearings before the C Commission, several speakers argued against the holding pond, stating the problem should be handled at its source la Mexico. Peace said he agrees. in princ "we must he realistic/* He said there is almost no chance Mexico will be able to successfully tackle the problem in the near future. PEACE SAID he nt wou see a plant b b u u i nl t t b e i f o r e n e a t w i n ter's irains begin. Traditionally, heavy rains have overburdened Tijuana's systems, creating heavy flows of s into the river. "A lot of people are talking, no one is acting. I'm trying to kick a few people In the pants. If the problem is serious enough to consider such y a measure as a n temporary holding pond, then it is serious to do it right," (The San Diego Union, May 12, 1983) 1983/05/29 - Tijuana Valley Sewage Pond d regulations have tolled the final death knell for a sewage holding pond proposed for the Tia Juana River Valley. The holding pond was planned by the Intern Boundary and Water Commission, as an emergency measure to block pollution of the Tia Juana River by sewage from Mexico in breakdowns or overloads Tijuana sewer system. Area residents objected to the pond, fearing possible contamination of ground water and an eventual health hazard. The commission down and agreed to construct the $20,000 holding pond only if residents first requested it. Now, even if residents should change their minds, the commissio not construct the pond, said spokesman Robert Ybarra. Ybarra said requirements of the Regional Water Quality Control Board would have officially forced commission to take responsibility for treatment of sewage that would have collected in the pond. The 13-acre earthen tub would not have stopped pollution Juana River from the Mexican side of the border, anyway, Ybarra said. Raw sewage polluting Imperial Beach south of the southern end of Seacoast Dr. c o effluent reaching the river. (The Imperial Beach Star-News, May 29, 1983) 1983/07/21 - Tijuana Sewage on planning group agenda. Dennis O'Leary, who l team researching problems of and solutions for Tijuana's sewage spillage, will attend a public meeting tomorrow to hear public opinion. O'Leary will attend meeting of the Otay Mesa/Nestor Community Planning Group Friday at 10 a.m. at the South Bay Recreation Center, 19th and Coronado avenues, South San PL ANNING Group Chairman Ruth Schneider stressed that the meeting is open and speakers are welcome. O'Leary is project director for the San Diego co firm, Lowry & Associates, contracted by the city of San Diego to the Tijuana sewage problems. Tijuana's overworked facilities are incapable of preventing million gallons of raw sewage per day from polluting South Bay lands and waters. One recommendation is the establishment of a joint treatment plant betw two cities. A variety of other government agencies, local, state and federal, are interested in the coming report, O'Leary said. An update of the San Diego M Facility Plan of 1977, the report is to be submitted to San Diego in October and was moved up from a December deadline. O'Leary said officials consider th a "pressing issue." INTERESTED government agencies include the Regional Water Quality Control Board, the U.S. Coastal Commission, the U.S. Water ar Boundary Commission, the Environmental Protection Agency, state and county health departments, the state Depart-ment of Parks and Recreation; the Met Water Authority and South Bay cities and communities. O'Leary does not plan to give a formal presentation at Friday's meeting, but will listen to residents' Public opinion is a portion of the study, he said. (The Imperial Beach Star-News, July 21, 1983)

1983/08/11 - Mayor screaming mad about sewage woes. The flow of sewage that caused the county health department to close Imperial Beach's oceanfront

swimmers may have been temporarily stopped. Mayor Brian Bilbray said this week he made a personal plea to Baja California Governor Roberto de la Mad close the gates of Rodriguez Dam, apparently fee primary cause of bringing additional sewage to the beach. Late Friday county health officials closed the be swimmers after testing showed bacteria concentration had risen above the allowable level. UNTREATED sewage from Tijuana is dumped into the ocean so border and into the Tia Juana River. But the river is an ephemeral one during the summer, and apparently the untreated effluent was for tne uio&i pari being by file river bed. But about two weeks ago repair work began on Rodriguez Dam, and water from the reservoir swept the effluent down the river and into th the U.S. side of the border, polluting the beach. Bilbray said he called de la Madrid, asking that Rodriguez Dam gates be closed immediately. "He called me said he ordered them closed until further notice," Bilbray said. Nevertheless, it is unlikely the beach will be re-opened immediately. John Melbourn, spokesı the county Health Department, said the beach wOl not be re-opened to swimmers until water quality has improved and remains stable for several days. MEI ADDED the quarantine f Please turn to back page, this section (The Imperial Beach Star-News, Aug. 11, 1983)

1983/08/14 - Feds may dam Mexican sewage. Shortly after the Imperial Beach City Council this week declared the city in a state of economic and environn emergency a federal agency prepared to build a dike across the Tia Juana River at Dairy Mart Road to block the flow of sewage onto the beach. Mayor Bria said the council's resolution proclaiming the city in a state of emergency will be delivered to President Ronald Reagan by Congressman Duncan Hunter. Rea today with Mexican President Miguel de la Madrid. They are expected to discuss the sewage problem and possibly announce a new treaty to deal with Mex inadequate sewage facilties. IN ADDITION, Assemblywoman Sunny Mojonnier was at the special meeting declaring the emergency to receive a copy of th resolution for personal delivery to Gov. George Deukmejian. Bilbray said both Reagan and Deukmejian would be asked to declare the city a disaster area. S declaration would make the city eligible for state and federal aid. Raw, untreated sewage has been pouring onto the city's beach for over a week, causing the health department to put the beach off limits to swimmers. In addition, the pollution has already spread further north, resulting in the quarantine of Hie Silve State Beach, too. LOCAL HOTEL owners and beachfront businesspeople have already reported losing up to 50 percent of their customers because of the pc Pollution levels reached ISO times the safety level, but recently dropped down to 2.4 times the safety level Meanwhile, Joseph Priedken, sewage spokesmar U.S. International Boundary and Water Commission, said the agency has moved bulldozers to the site of the H a Juana River at Dairy Mart Road in San Die the intention of building a dike across the river. Friedken said the action was taken at Bilbray's request Friday. By Saturday, at press time, however, the agen yet actually built the structure. UNTREATED SEWAGE has been flowing into the river from Mexico for quite awhile, but two weeks ago water was release Rodriguez Dam in an effort to lower the level of the reservior so that repairs could be made to the gates, Friedken said. Until then, the sewage had been abs the river bed, but with the added water flow, up to 1,600 acre feet per day, the sewage was instead swept out to sea and polluted the beach. After the quarant put in place Bilbray called Baja California Governor Roberto de la Madrid and demanded the dam gates be closed iimnediately. De la Madrid complied. Ho large amounts of water are still flowing from the dam. THE PURPOSE of the dike, he said, would be to block off the flow of water and sewage until the wa drops sufficiently for the sewage to once again be absorbed by the river bed. Friedken also said state health officials haved objected to the building of the di the water would become stagnant and a breeding ground for disease carrying insects. Bilbray was elated at the coinmission's action. He said, "This time the government will perform Operation Beaver. Well back it (the sewage) up into Mexico and give them a taste of their own medicine." (The Imperial Beach St Aug. 14, 1983)

1983/08/14 - Imperial Beach City Council this week declared the city in a state of economic and environmental emergency and a federal agency prepared to dike across the Tia Juana River at Dairy Mart Road to block the flow of sewage onto the beach.Joseph Priedken, sewage spokesman for the U.S. Internation Boundary and Water Commission, said the agency has moved bulldozers to the site of the Tia Juana River at Dairy Mart Road in San Diego with the intenti building a dike across the river. Friedken said the action was taken at Bilbray's request Friday. Two weeks ago water was released from Rodriguez Dam in a lower the level of the reservior so that repairs could be made to the gates. Bilbray said, "This time the federal government will perform Operation Beaver. W (the sewage) up into Mexico and give them a taste of their own medicine." (The Imperial Beach Star-News, Aug. 14, 1983) 1983/08/18 - Beach sewage fou worsen. The spillways of Mexico's Rodriguez Dam were opened again this week, causing concern among health officials that ocean pollution along Imperia and Silver Strand State Beach will increase. On Sunday, the U.S. International Boundary and Water Commission built a sand dike across the Tin Juana Rive to temporarily stem the tide of sewage polluting the beaches. BUT WHEN MEXICAN officials opened the spillways Monday, said commission spokesman McNealy, the dike was breached to prevent flooding problems. McNealy said the spillways were opened again to lower the water level and give workmen a the gates to do repair work in anticipation of winter when reservoir levels will rise. McNealy said it was expected that the gates would be closed by yesterda until then the river would be running high at 900 cubic feet per second. McNealy said no decision has been made on whether the dike will be reconstructed dam gates have been closed again. He said the commission will continue to monitor the pollution situation and the water level of the river to determine if th should be rebuilt COUNTY HEALTH Department Spokesman John Melbourn said it is expected that the increased river flow will only serve to aggravate tl pollution pro blent, which had been decreasing. In July the dam gates were opened and the increased flow in the river carried raw, untreated sewage from Ti to the ocean, causing county officials to quarantine first Imperial Beach and later Silver Strand Beach. The gates were doted when Imperial Beach Mayor Br Bilbray mads a personal call to Baja California Governor Roberto de la Madrid. Sub?¬´>quently bacteria levels began to drop IN ADDITION, Bilbray aske boundary and water commission to temporari-ly dam the river to staunch the flow of sewage. The sewage previously had been absorbed by the river bed bu water flows began sweeping the effluent out to sea. Melbourn said that last Tuesday bacteria counts were at 24 times greater than the safety level, but by Sa they had fallen to only about 2H times greater than the safety standards. Melbourn said the county has been testing as far north as the Coronado Lifeguard S below North Island. The department determined that the presence of the dike would have been beneficial for the sewage problem although it might also hav increased mosquito breeding. MEANWHILE, Ron T rim, aide to Assemblyman Steve Peace, said Peace's South Bay office had received several complaints dike from local residents. Trim said some were concerned the dike was just another way to create a holding pond. The commission earlier this year planned construct an earthen holding pond as an emergency backup for sewage from Tijuana tgo he treated at the PL Loma treatment plant. Plans for the pond were when local residents organized opposition to it. Trim said he visited the site of the dike and noticed that before it was breached the water started overflowing Dairymart Road and nearby private property. LAST WEEK Imperial Beach declared itself a disaster area because of economic and environmental damages pollution and the beach quarantine. This week Mayor Bilbray said the county has had inquiries from the governor's office about the city's request that state a officials also declare the area in a state of emergency. worsen Bilbray said he feels encouraged by the commission's willingness to take action in building th by planned cooperation between Mexico and the U.S. on the problem. "THINGS ARE looking better/* Bilbray said. "I dost think anyone wfll just watt for t situation to resolve itself." He credited Congressman Duncan Hunter with securing federal assistance and interest. Bilbray also said he plans to ask that the l Barrett and Rodriguez Dams, which both contribute to the flow of the Tia Juana River, be lowered now so that any rains can be accommodated without furtl spilling. The end result, he hopes, will help keep the beaches clean at least for the month of September by keeping the water flow in the river low for an exte period of time. (The Imperial Beach Star-News, Aug. 18, 1983.) 1983/08/18 - On Sunday, the U.S. International Boundary and Water Commission built a sa across the Tia Juana River hoping to temporarily stem the tide of sewage polluting the beaches. But the dike was breached to when Rodriguez Dam spillway opened again to lower the water level and give workmen access to the gates to do repair work in anticipation of winter when reservoir levels will rise. In Jul gates were opened and the increased flow in the river carried raw, untreated sewage from Tijuana out to the ocean, causing county officials to quarantine firs Beach and later Silver Strand Beach. The commission earlier this year planned to construct an earthen holding pond as an emergency backup for sewage fro to the PL Loma treatment plant. Plans for the pond were scratched when local residents organized opposition to it. (The Imperial Beach Star-News, Aug. 18

1983/08/18 - (photo) Tom Shelton looks on the dike that failed to stop Mexican sewage. (The Imperial Beach Star-News, Aug. 18, 1983)

1983/09/04 - Beach reopened. After nearly a month of quarantine due to sewage pollution, the beach in Imperial Beach once again was opened to swimmers week.. Imperial Beach Fire Chief John Hoisenback said the quarantine w a s lifted Friday afternoon and that lifeguards would be back on the beach by Satu quarantine was lifted from the northern city limits to the south end o f Seacoast Drive. The southern part of the beach to the border will remain closed t o sw as it has since March. Silver Strand State Beach was also dated, but opened again earlier this week. h reope In early August the county department of health main part of the beach to swimmers because raw untreated sewage from Tijuana Md pushed pollution levels past the county's standard for safety. Business c the beachfront have complained of severe losses, and, in some cases, personnel were laid off and hours were cut back. Health department spokespersons sai would have to snow five consecutive days with bacteria levels below the county's standards before the beach could be opened. Prior to the beach ban, sewag dumped from Tijuana into ened the Tia Juana River bad been aft>-' seabed by the river bed. But water released from Rodriguez Dam for repair work carried effluent onto the beach. At one point the International Boundary and Water Commission tried to build a dike across the river t o hold back further pollution, flow of the river was so high that the dike was breached shortly after it was built. Imperial Bench Mayor Brian Bilbray tried asking Baja California Governc de la Madrid to close the gates of Rodriguez Dam. That also only worked for a short period of time. (The Imperial Beach Star-News, Sept. 4, 1983)

1983/10/09 - Sewage: losses weighed. Recently a move by local governmental officials and representatives has spurred more public notice of the problem. I Ronald Reagan and Mexican President Miguel de la Madrid met and signed a treaty declaring that the two countries will work together to solve environmen problems along the border. No specific funding was set aside to tackle such issues as a sewage treatment plant on either side of the border but discussion co The city of San Diego has refused to continue to treat Mexican sewage when an agreement expires in 1985. In addition, the city received a grant to study alt for sewage treatment plants ranging from traditional treatment to the experimental acquaculture treatment. The study is expected to be completed soon and a be recommended along with a method of treatment. Sites include the Tia Juana River Valley and Spring Canyon. (The Imperial Beach Star-News, Oct. 9, 19

1983/10/09 - (photo) Edwena Martin and her husband, James, were angered when they found that sewage was again this week flowing across the Martin Ra Monument Road. The untreated sewage comes through a canyon on the Mexican border. Martin and the photographer left quickly due to the bad odor and s gnats. (The Imperial Beach Star-News, Oct. 9, 1983)

1983/10/16 - Chamber to discuss sewage woes. Robert Mitton, district director of the Immigration and Naturalization Service, and D. "Matt" Marschell, pre Sea Breeze Farms, will be guest speakers at 1 p.m. Wednesday at a meeting of the Border League of Chambers. Topics of discussion will include a report o border crossing conditions, status of the Tijuana sewage treatment plant and a report on the progress of the American sewage treatment plant. The public is to the meeting at Jimmy's on the Green, 4475 Bonita Rd., Bonita. Reservations can be made by calling 420-2544 or 479-2044. (The Imperial Beach Star-Ne 16, 1983)

1983/11/17 - Sewage report: Tia Juana Valley site proposed. Dennis O'Leary, contracted through Lowry and Assoc., released his 2-volume report to the city and the issue has been placed on the council agenda. It recommends a combination of aquaculture facilities and a tertiary treatment plant for reclamation pu Water treated in a tertiary plant may be used for irrigating vegetable crops. In addition, the plan calls for an outfall line heading straight west from Monume The line would handle 185 million gallons per day and run five miles into the sea, almost three times the length of the current outfall line at Point Loma. A pipeline would carry the effluent, treat it "carefully" and diffuse it in the deeper waters of the sea. At that point, ocean depth is about 125 feet, O'Leary said. report also requests an interceptor system to offset Tijuana sewage spills affecting Goat Canyon, Smuggler's Gulch, Canon del Sol and Stewart's Drain, all i Tijuana River Valley. A diversion system would intercept the raw sewage that has been known to contaminate the area, and place it into the reclamation and system, he said. "I heard Smuggler's Gulch was running again this week. A diversion system could prevent this," he said. O'Leary also suggests a pipeline d Playas, Mexico, just south of Tijuana. "Although the resort (Playas) already has a sewage plant, they are still discharging untreated sewage into the ocean," "The best thing to do is to pick it up and treat it." In a preface, O'Leary states that the project could not be a complete success unless Mexico takes action to improvements on its own. That country must also give consideration to toxic and industrial waste disposal, he said. "The project is not a panacea. There are activities that must go on as well. The Mexicans must accelerate their sewage treatment plans." He spoke of spilling sewage problems in Tecate which drain this area. "I understand some volunteers in Tecate are trying to construct an aquaculture plant on their own there. This in itself might keep the problem from us," he said. . Last month, Vance White, a community leader in the Tia Juana Valley, said he had met with a public official in Tecate who was trying to creat aquaculture plant there on lands donated by the local brewery. White said the man was beset with problems. White has been a vocal proponent of aquacultu Nevertheless, O'Leary said the joint treatment plant would solve more than 95 per cent of the problem of overflow and growth. Estimated cost of the interna plant it about $730 million Depending on federal funding the plant may be operationalbet. ween 1988 and 1991, O'Leary said. He has been told the city of S will seek a federal grant under a fast-track schedule rather than apply for funds under the Clean Water Act. The proposal is a massive project and will accon everything south of the Otay River. (photo) Imperial Beach Mayor Brian Bilbray tries to keep the sewage-contaminated river behind a sand bar. Report calls million sewage plant here. (The Imperial Beach Star-News, Nov. 17, 1983) 1983/11/24 - South Bay officials study sewage plant proposal. Includes map of p route of outfall pipe. (The Imperial Beach Star-News, Nov. 24, 1983) 1983/12/15 - Sewage plant eyed today. A meeting will be held today at 10 a.m. to forn response to a proposed sewage treatment plant for the South Bay. The meeting, organized by Mayor Brian Bilbray, will be held at city hall in Imperial Beac open to the public, including residents from the city, South San Diego and the Otay Mesa/Nestor planning area. Bilbray said he is interested in proposing an solution to he problem of sewage pollution. A two-volume report from Lowry and Associates for the city of San Diego proposes the con-struction of both conventional and experimental sewage treatment facilities in the Tia Juana River Valley. However, the $700 million-plus projects would probably not be rea operate until sometime after 1988. Bilbray has suggested in previous interviews that a pipeline beginning at the border and crossing the Tijuana National Es Sanctuary could be set up to dump the untreated effluent several miles out in the See Sewage, page A-10 response Continued from page A-l ocean. Another interim solu. tion might be the construction of experimental aquaculture trea ment plants that could be co structed and in operation i'Äû ¬ª much shorter per time For years the valley and the ocean at Imperial Beach have been plagued with the flow of raw, untreated sewage from Mexico, but recently the problem became a real threat to Coronado" and other beaches further north. This summer the entire beach was closed for a month off imperial Beach due to untreate flowing through the Tia Juana River. The southern portion of the beach from the river mouth to the border has been quarantined since March. (The Imperial Star-News, Dec. 15, 1983)

1983/12/18 - Bilbray to lead fight for sewage solutions. Representatives of "the fertile crescent" gave Mayor Brian Bilbray a mandate this week to speak for sewage pollution in the South Bay. "We represent the fertile crescent and we'd like to make it a little less so," Bilbray told community leaders and residents Ysidro, the Tia Juana River Valley, Otay, Nestor, Imperial Beach and Coronado. Each community is directly affected by sewage pollution from Mexico. "Se pollutes the valley, the sloughs, the beach and the entire living environment,** Bilbray said, adding that the meeting was for "those people who have to live problem and the answer." By the end of the hour and a half long meeting, the groupof about a dozen people agreed to allow Bilbray to lobby for a system of surface collectors in the valley and an ocean outfall on the U.S. side of the border. The group agreed the two solutions would constitute an emergency respo

would have to be followed up by both interim and long-term plans. The basis for the discussion was a report from Lowry and Associates recommending cor of sewage treatment and water reclamation facilities, age solut e collector systems and an ocean outfall that could cost a total of over $729 million. Operatin the facilities are estimated at over $ 11 million in 1988, increasing to $25 million in the year 2000. The collection system would set cement tubs at spots alo border where sewage regularly crosses when Mexican pipelines break. Currently, there are pipeline breaks that send 2 million gallons of untreated effluent d spewing out through Smugglers Gulch and Goat Canyon. Dan Marschall, Tia Juana River Valley resident, was concerned that a collection system would sin another attempt to put holding ponds in the area. Area residents strongly protested a plan by the International Boundary and Water Commission earlier this y build an open holding pond in the valley. Most residents feared the holding pond would become an open cesspool . The plan was dropped after residents pre the state to intervene. Bilbray said the system proposed in the Lowry report "would have no ponding effect. I t wouldn't be a big cesspool. It would just coll and pump it immediately for treatment." The sewage presumably would be pumped for treatment to San Diego's Point Loma facility ortions out to sea after outfall, that could cost $200 million, was constructed. The Lowry report, commissioned by the city of San Diego, recommends that the ocean outfall be usec sewage has been treated. It is illegal to dump untreated sewage or toxic wastes into the ocean. Pollutants from Mexico, environmentalists believe, contain u toxic wastes from manufacturing plants. At a later meeting with the city's beachfront task force, Bilbray acknowledged, "it's not a perfect system it's someth with that's feasible.'* Task force member Dick Palmer was concerned flooding problems in the valley would affect pipes from the collectors. He pointed out 1980, during heavy flooding, sewage pipelines broke pouring the untreated effluent onto nearby farms. Bilbray said the safety of the lines would be the resp of San Diego. He added that the critical time for the collector system to work would not be during the flood season, but during the summer to assure the bea polluted and quarantined as it was in August. Palmer was also concerned about the proposed outfall. (The Imperial Beach Star-News, Dec. 18, 1983) 1984/(Ground broken for sewage treatment. Construction began yesterday in the face of opposition from local agencies on a federally financed emergency project keeping Tijuana's raw sewage off South Bay beaches, and out of canyon areas in the Tijuana River Valley. Bulldozers began breaking ground for a 13-acre h pond in an area along the border called Stewart's Drain. The plan is to pump sewage from the pond into San Diego's sewage system during off-peak hours to daily flow of about 3 million gallons... (San Diego Union, Jan. 22, 1984)

1984/01/22 - Bilbray Dam Mad. Imperial Beach Mayor Brian Bilbray staged theerection ofa temporary earthen dam across a stream of sewage this week in Juana River Valley. The action purportedly was to temporarily stop the flow of sewage from Mexico into the U.S. at one site and would do What some valle residents and Bilbray have called for ‹ force the untreated effluent back into Mexico. dam mad The dam, however, lasted only a few hours, and if it had held have forced the sewage eventually back into the U.S from another site. While the dam was ineffective, it came only two days before workers began building holding pond near the same area (see other story). The damming of Stewart's Drain in San Diego directly across the border from Mexico's sewage pumping accompHshed with the use of imperial Beach city equipment and manpower and the backing of a majority of the city council. Bilbray said it was also done knowledge and consent of elected officials in San Diego, although he refused to identify them. He added that Mayor Roger Roger Hedgecock was supportiv knew action would be taken at Stewart's Drain. Bilbray said he acted " t o reduce the health hazard" to Americans. He said he was told by an employee of H Stables, in the valley, that she contracted hepatitis as a result of sewage pollution this month. He also produced a letter from an Imperial Beach doctor mayo describing a case of hepatitis contracted "in the not distant past" by a surfer at Imperial Beach as a result of contamination of the ocean. The letter was accor by seven letters from area doctors addressed to Congressman Duncan Hunter urging "immediate measures t o curtail and treat the sewage outflow." When it pointed out that the county health department has no record of cases of hepatitis caused by sewage Bilbray said that if authorities can't definitely trace it to t they won't list it. Liz Whalen, 22, said she is the employee from Hilltop Stables who called Bilbray. She said she contracted hepatitis in August and she beli caused by sewage. es backi Sewage contamination of the beach caused the quarantine of the beach in August last year. The beach was re-opened but has bee quarantine again since Dec. 30. Whalen said she handles the horses who get into the contaminated water. "I'm surprised more people here don't have it. It's h prove where you got it, but it's obvious." Bilbray also cited cases of hepatitis in several children at a beachfront school in Tijuana that authorities there have to problems with hygiene. Bilbray said he hopes his action will draw enough attention to the problem that funds for stopping the flow of sewage at other poi valley will be made available. ng sewa Asked if he was staging a publicity stunt, Bilbray replied, "I'm snowing action has to be taken. When your back's aga wall you've got to do something." Earlier this week Bilbray proposed the construction of an interceptor system that would use aquaculture treatment to deco the sewage. In response to a question from The Star-News, he said the action might hurt his chances for unseating County Supervisor Tom Hamilton in Nov he believes he has to respond to the needs of his constituency now. "Sometimes you have to do what your gut tells you." Bilbray is not a declared candidate supervisor's race. He said in an earlier interview he ge to Me would decide next month. Councilmembers J.B. Bennett, Sharon Spurck and Henry Smith wer present during the dam building. All said they supported Bilbray and felt that the use of city trucks, a bulldozer and employees was fiscally responsible. Councilmembers cited severe financial woes during the past two years when they approved major employee layoffs, cutbacks in services and replaced the p department with the sheriff's department. Bilbray estimated the use of city equipment and employees would cost about $200. Smith said, " I t is fiscally resp because our whole city is at stake. Our businesses are going broke. This will at least exico draw attention to the probl Spurck and Bennett fA Smith's reason Vance White, president! Evergreen Homeowners As t i o n a n d m e m b e r o f a conn of community activists who! Bilbray a mandate to s them on the sew "I'm nottoosureIsupi action but I understand in Bilbray acknowledged thei was not "diplomatic, but a fine line betweenJ diplomacy and being so you allow y beaJ| " I ' d rather have-f dent now than a large one* child gets sick with hepatilj the long run, we'll get m icans' cooperation. TIKII is getting their attention. Imperial Beach Star-News, Jan. 22, 1984) 1984/01/23 - Five area farmers reap only frustration. Nick Cappos can only shake his head when he thinks about polluted 60-acre plot behind his house that was once a fertile cabbage farm. Only six acres are productive today. The rest is contaminated, unfit to use to grc for humans. "The ground is all black. You can smell it," he says. "It's a losing proposition." The farm once produced four crops a year in its sandy soil, soil t perfect for growing cabbages. His attorney estimates Cappos grossed $100,000 a... (San Diego Evening Tribune, Jan. 23, 1984)

1984/01/26 - Sewage pond almost complete. (photo) Bulldozers complete dikes and ready 13-acre pond for sewage flow. A 13-acre sewage holding pond at international border is expected to be complete today o n the U . S . side, with pipes from Mexico's pumping plant installed by tomorrow. The pond, a grassy omplete tilled with' wild, celery and other vegetation, trnH hold aproxiraatcly 3 million gallons o f sewage daily from Mexico. At night a gate wiB be opene sewage will flow by gravity into pipes to divert tbe effluent into the San Diego Metropolitan | sewersystem. Currently the untreated effluent is pouring acros border at several sites and consummating the Tia Juana River Valley and the ocean at Imperial Beach. The ocean has been quarantined for nearly a month. M already sends 13 1 million gallons of sewage daily I into the Metro sewer system for treatment at the Point Loma plant. Capacity to treat the remaining efflu available except during the hours of midnight to 5:30 a.m. The 3 million gallons of sewage is supposed to be pumped from a Mexican plant near Stewart's D outfall 5.6 miles south of the border, but pipeline breaks along the border have been directing the sewage into the U.S. instead. The holding pond was initiat Congressman Duncan Hunter and Joseph Friedkin of the International Boundary and Water Commission last weekend as an emergency measure. Imperial B Mayor Brian Bilbray told the city council this week he hopes to see the quarantine of the beach lifted within at week after the pond begins to operate. Georg principal engineer for the commission, said this week the estimated total cost I of the pond is $50,000-p!us. He said the commission spent $25,000 last year constructing dikes until local opposition put a stop to the project. The pond is located at Stewart's Drain near Dairy Mart and Monument Road, directly acro Mexico's sewage pumping plant. Baumli said Mexico will lay pipes from the pump station into Stewart's Drain. Without those pipes, the sewage would bacl Mexico's sewer system before it overflowed again into the U.S. Bob Hudson, aide to Hunter, said aproximately 600 feet of pipeline will be laid in Mexico w help of the United n States. Hudson said the California Regional Water Quality Board e set several conditions on the construction of the pond, including a -

prohibition on creating problems r with odor, mosquitos, bacteria l and weed growth in the valley. But Baumli said those conditions were set by the board la and they may be reviewed. In an interview, Bilbray said he would like to see the pond sealed with a clay sealer to help protect against percolation into the gr water. He also suggested the walls of the pond be bolstered with rip rap to avoid future flooding problems. Bilbray said, "The key is to make sure the pond i permanent solution. This is a tourniquet approach. You don't keep a tourniquet on permanently." Richard Reavis, local representative of the Environmental l Agency, said concern over ground water contamination is misplaced because, "If it was going to be polluted, it was a long time ago. The pond doesn't repres hazard that hasn't existed." He added that with the daily draining of the pond, "At least it will stop percolation (into the ground) during some hours." Reavis responded to concerns about mosquito breeding with the same logic. He pointed out there won't be anymore standing water with the pond than without it an will make it easier to treat for vectors. Fears the pond will become a permanent solution are groundless, Reavis said. " I'm hopeful that within the next few w will come up with the best stop-gap solution." Reavis said that although the major part of the flow contaminating the valley and the beach will be diverted in holding pond there will still be sewage flowing across the border because of areas of Tijuana that have no plumbing. "This is an emergency reaction only," h (Imperial Beach Star-News, Jan. 26, 1984) 1984/02/05 - Despite early leaks, sewage pond working. (photo) Robert Baker of the Regional Water Quality Co Board checks levels at sewage holding pond. Meanwhile, Baumli said, some sewage continues to flow through Smugglers Gulch from Mexican neighborho nearby that are not hooked up to the main Tijuana system. Imperial Beach Mayor Brian Bilbray said he is working with Congressman Duncan Hunter to obt funding for a pond and pipeline at Smugglers Gulch to channel that sewage into the San Diego sewer system as well. Meanwhile, San Diego officials will tr Washington, D.C., to request $50 million for the construction of the first phase of a sewage treatment facility that would handle sewage from Tijuana and O The city already treats about 13 million gallons a day through an emergency pipeline that went into use in 1965. Some South Bay residents and officials are the holding pond may become the same kind of permanent "emergency" solution. Imperial Beach Star-News, Feb. 5, 1984) 1984/02/05 - Sewage hassle not problem is 50 years old. (photo) Stewart's drain , where sewage regularly flows Into U.S. from Mexico. What many tend to forget, or perhaps never knew, is sewage pollution problem is not new. It was 50 years old in 1983, and both Mexico and the U.S. have been working out various stop-gap solutions since 19 Meyer, an associate water resource control engineer for the Regional Water Quality Control Board, outlined the history of the problem in a recent interview. clear the unspoken issue is population growth in a developing nation where economic growth is losing the race to keep up. Meyer said in 1928 Mexico insta septic tank for a community of 500 in Tijuana, but by the early 1930s the population outgrew the tank's capacity. In 1933 the valley around San Ysidro was and crops, along with some early wells, were contaminated by sewage seeping across the border. In the mid-1930s Mexico installed a larger septic tank with capacity for treating sewage from a population of up to 5,000. By 1939 the International Boundary and Water Commission had coordinated construction of international outfall in the Tia Juana River Valley. Meyer said sewage treated in the septic tank system was discharged south of Imperial Beach. Later, as Sa developed, that city too began using the outfall. By the early 1950s Tijuana's population had once again outgrown the capacity of its sewage system, and the were contaminated with effluent, Meyer said. As a stop-gap solution the San i)lc$n County Health Department chlorinated the sewage as it left the outfall, a continued into the late 1950s. By 1962 Mexico had constructed the system of pipes, pump stations and channels currently being used. Meyer said the outfall discharges 5.6 miles south of the border today, was supposed to extend to Rosarito Beach, but Mexico ran out of money. Problems with the system continue 1965 another stopgap solution was implemented ‹ an emergency hook-up from Tijuana's sewer lines to San Diego's sewer system. By 1978 the emergency s being used on a daily basis. Today 13 million gallons of effluent from Tijuana is treated daily by the San Diego Metropolitan sewer system. An additional 3 million gallons daily is supposed to be pumped through to the outfall south of the border, but breaks in the lines near the border have instead deposited the u sewage in the UiL Last year the ocean at Imperial; Beach was quarantined three times, and the southern portion of the beach. (Imperial Beach Star-News, F 1984) 1984/02/16 - Sewage problem - pt. 1 Imperial Beach Mayor Brian Bilbray said he is working with Congressman Duncan Hunter to press for the use o aquaculture treatment in the ponds, with chlorine used only as a backup. George Baumli, principal engineer for the U.S. International Boundary and Water Commission (IBWC), said this week the agency i s seeking permits from the state Coastal Commission and the Regional Water Quality Control Board to bu earthen ponds at Smugglers Gulch. Baumli said one pond will be used to settle out solids in the flowing effluent while the other will be used to chlorinate th untreated sewage. Chlorine, Baumli said, will kill any bacteria in the water and hah the danger o f encephalitis o r hepatitis epidemics. The ponds would be step taken by the agency to control untreated sewage flowing into the valley from broken Mexican pipelines. Aproximately 2 million gallons of sewage dair channeled mm a holding pond at Stewarts Draine and piped to the Metropolitan Sewer Syetsas ^ frearmeas. Meanwhile, Up to fallout daffy now* into the ri Smuggler* Gulch and even* tuatty make* Hs way into the ocean SI imperial Beach, The beach was gjuarantincd for At weeks this- year bacteria level*. due The quarantine was lifted shorfly after the Stewart's Drain holding pond went into operation. However, valley farmer* continue to suffer from the remaining /ay Wilkinson, aide to Hunter, said he hopes construction on the two new ponds win begin this week or early next week to give relief to nearby turner*. But said it would pro~ babfey take longer to get the necessary permit*Together, the two new ponds would take up 2.4 acres of land about 650 feet north of the b 800 feet south of Monument Road, he said. Baumli estimated the cost of the two ponds at $60,000. He said they would be paid for by the JBWC. Unlike the holding pond at Stewart's Drain further east, the ponds proposed for Smugglers Gulch would only slow the sewage as it flows into the valley and the river. H said the Environmental Protection Agency (EP A) is aware of the proposal and approves of it. But when informed of the proposal by The Star-News, repres of agencies responsible for the estuary, through which the river flows, were concerned about the possible effects of chlorine on wildlife. "That could be disa the estuary. My gut reaction is it's not a good idea. Chlorine is bad for critters," said Susan de Trcvillc of the slate Coastal Conservancy. Paul Jorgcnson, estu manager, was also concerned about the effects of chlorine on the wildlife and said the IBWC is sending him a copy of the proposal for review. De Trcvillc a Jorgcnson both agreed that any damage from the chlorine would depend on how much was used and follow long, Baumli said the IBWC wflg nvmttor down flows of the river mid waH adjust amounts of chlorine to avoid damage to aquatic life. The pondt wiH be about three quarters of a mile front tfce river, Bau giving time for the chlorine to be diluted, lo addition, he said natural ponding that takes place at the bottom the gulch wfH also allow dse chlorine to dissipa it de-chlorinating the river before fa reaches the estuary would be required of the IBWC, Arthur Coe of the Regional Water Quality Board said such a requir would be unlikely. Coe said de-chlorination would generally be required only if the IBWC asked for a permanent permit for the ponds. He acknowledged th would probably be used intermittently until a permanent solution is in place. A permanent solution is at least five years away. Coe said the board would turn EPA as the interpreter of the Clean Water Act to determine which regulations will apply to the ponds. "This situation doesn't fit any molds we have." Bilbra hopes to conviaco the 18WC;. to use nraaaculi uti&aar Masaaf m the pood*, wall the eUerime used oniy a* a backup €ysteas. fliiaenihurf atir wascrhyaenas poflotaots, De Tftstte said water byacuv fhs ere useful as a treatateat method became they also absorb toxic materials and cast be harvested for bsogas asaur she was worried that if hyacinths art wed they could end up at the mer and the estuary. The plants ate exuemety proB&c and could di»ptajce native ptaats. S Natioaal Aeronautics and Space Agency (NASA) ha* been using a different type of aquacuhure with reeds instead of water hyacinths. The reeds have been wastewater treat meat in Get' marry for 20 years, de Treviflc said, Baumli said the ponds would be additional stop-sap measures until long-range solutions a place. But Ruth Schneider, president of the Otay Mesa Homeowners Association, was skeptical, "The ponds will be a real fiasco. Everyone thought the first would do the job but it didn't. They'll put in two ponds, then three ponds then four ponds. This is (Congressman Duncan) Hunter's way of solving the proble we'll see is ponds up and down the border, I think we should say just as loudly as we can, 'No.'" Eddye Martin, owner of a farm just below Smugglers Gulch favored the use of the pond. "The second pond would be terrific but the rain will wipe it out." Martin has been unable to raise crops on her land since 1980 c flooding and subsequent sewage pollution. Baumli said the ponds will be out of the way of run-off from all but major rainstorms. Danny Marshall, another farmer, said, "Anything they do will help," but said sewage coming across the border is still plaguing his strawberry crop. "You go down to my strawberry p the people can't work because of the gnats. It's swimming in insects that have come off the sewage. The stench is getting worse and worse." (Imperial Beac News, Feb. 16, 1984)

1984/03/11 - Mexicans repair sewer line break , just as U.S. dollars run out.Mexico may finish repairs on its border sewer lines next week, just as funds to t Tijuana sewage collected in a South Bay holding pond run out, it was disclosed at a conference this week. The conference on "The South Bay Sewage Probl held Friday in San Diego. It included a panel discussion involving state and federal agency representatives, elected officials and university experts. Topics i the sewer line repairs, the holding pond, testing for toxic chemicals, disease control and interim and long-range solutions to the problem. The atmosphere te between condemnation of Mexico and warnings that name-calling is not productive. € The panel., included Imperial Beach Mayor Brian Bilbray, Jay Wilkir to Congressman Duncan Hunter; state Senator Wadie Deddeh, Ladin Delaney of the Regional Water Quality Control Board and Drs. Abram S. Berenson an Conway of the graduate school of public health at San Diego State University (SDSU). Wilkinson said he expects an official announcement next week that t Mexicans have completed repairs on the border sewer lines that have sent sewage spewing into the U.S. at the rate of 2-3 million gallons a day. Wilkinson s repairs should halt up to 80 percent of the sewage flowing across the border. Wilkinson said the repairs would relieve the need for what several jokingly refe "On Duncan's Pond." A 13-acre holding pond was constructed at Stewart's Drain at Hunter's request. It catches most of the freeflowing sewage before it rea Tia Juana River and the ocean, channeling it into the metropolitan sewer system. Bilbray said before the discussion that funds from the federal government Diego to treat the sewage are due to run out next week. During the discussion he and several members of the audience were worried that breaks in the lines continue to occur. He urged elected officials not to abandon the pond for use in the future. Wilkinson credited 'the pond with relieving bacterial pollution at Berenson of SDSU downplayed the danger of possible epidemics of hepatitis and encephalitis caused by bacteria. "To get sick from the Tia Juana River you have to drink it,'* he said. He explained that surfers do run a risk, but the county health department has not documented any incidents of disease from the po ocean water . He also said there is no danger from bacteria from fish as long as St is cooked. Conway, also of SDSU, added, however, "We are dealing with bomb." In recent weeks fears of pollution from toxic, chemicals have also worried officials. Recently testing began for heavy metals and pesticides in both animal tissue, but Delaney said results of the testing are not yet complete. Retired Admiral J. William Cox of SDSU urged panelists not to gloss over polluti water table and the food chain by toxic wastes. Bilbray said the danger to the food chain is particularly severe. He pointed out that the Tia Juana River Natic Estuarine Sanctuary was given protected status in part because it is an important fish hatchery. Microorganisms and the fish that feed on them retain danger chemicals in their tissues, sending them up the food chain in ever more concentrated amounts. Bilbray warned, "When you go to Anthony's (Restaurant) do sure the fish you're eating doesn't contain Lord-knows-what.' Berenson said clams and oysters particularly concentrate dangerous chemicals, .and one memb audience pointed out that the offshore areas of the estuary are favorite harvesting spots for lobster and sea urchins, which are shipped to Japan. Panelists als discussed solutions to the sewage problem, Delaney stressed that regardless of what the long-term solution is, it must include a long, deep ocean outfall. "A must be incorporated into any solution," he said. Estimated costs of an ocean outfall vary from $100 million to over $250 million. Since the state is currentl ocean discharge standards, the outfall Delaney proposed would have to be granted a temporary waiver from the Environmental Protection Agency (EPA). T would discharge water that would, under current plans, receive only primary or basic levels of treatment and therefore not meet the new standards. Dr. Mich McCoy, member of the estuary management authority, asked Delaney if he could guarantee such a waiver. Delaney said discussions are being held with the Bilbray, however, pointed out that current legislation allows waivers only for already existing outfalls, not new ones. McCoy asked if that meant the outfall have to convey water that had received secondary or higher level treatment. Bilbray said that was one alternative. The other alternative, he said, would be to the legislation. Doug Perry, president of the San Ysidro Town Council, asked Delaney whether hydrasieve or aquaculture technology could be implemented acceptable interim solutions. Sewage treated by such facilities would be discharged to the river. Both sewage treatment technologies are touted as less exper more effective treatment methods than conventional chemical treatment. South Bay activists have pressed for the use of aquaculture technology. "I understa would take only six to nine months to construct hydrasieve or aquaculture plants to relieve of us Hunter's vs. coope folly... I mean pond," Perry said. Area re have complained the holding pond creates an intolerable stench and increases the risk of disease. Delaney said he is not opposed to aquaculture or hydrasiev interim solutions, but that any long-term solution must include a deep ocean outfall. Throughout the discussion speakers and audience members permeated t atmosphere with both confrontational and cooperative attitudes toward Mexico. Deddeh cautioned against "emotionalism and name calling." A member for of the Commission on the Californias, Deddeh warned against threatening Mexico. Recently, there have been threats to redirect funds slated for Colorado R desalinization to the proposed $731 million sewage treatment plant. Colorado River water is too salty to use for agriculture by the time it reaches Mexico, a to build a desalinization plant is already in place. Bilbray declared that at times only confrontation can work.“" He said, "I represent...the victims (of the sew pollution), so my approach to the less than traditional \il absuMtotumtowhatS^ Wfi tion has called fori, Bilbray has advocate) H theborderand back^f of sew mtoMeaicojlfe hedammedtherheraC! Drain to gain attention!?! problem Wilkinson but we need more coop^ from Mexico." WilkinsW m the U.S. is building desalimW tion plant along the CoIoS River and the second boi crossing and, "It shouldn't) one-way street." The panel discussion J however, on a morecoaT Dennis O'Leary the engineering team that S ed the Lowry Report, poind that the most expensivepari the ultimate solution will Mexico's shoulders. "We mus Mcxi pay attention to their ow| system, but we must realize the bigger problem," he said. (Imperial Beach Star-News, Mar. 11, 1984)

1984/04/22 - Sewage pond Pressed into Service again. Mexican workers accidently ruptured a 20-inch sewer line near Goat Canyon. Mexican officals suspe pumping of sewage through the Tijuana sewage treatment plant as a result of the break. Sewage from the Tijuana line was then pumped into the holding por treated at Diego's Point Loma Sewage treatment Plant during the night. The city of San Diego has allowed the Point Loma plant to be used to treat overflow from Mexico during non-peak hours. The IBWC was granted a 30-day permit April 2 to use the plant for emergency sewage treatment to the ocean. The hol received about 1.5 million gallons o f sewage from Mexico during the less than three days it was in operation this week, Ybarra said. Officals of the IBWC Wednesday that approximately two million gallons of sewage would be held in the pond until the Mexican sewage line could be repaired. Ybarra also said t appeared to be working as planned and there have been no further problems with leaks like those that occurred in January after it was constructed. Imperial Mayor Brian Bilbray informed the city council at its meeting Tuesday night that he had talked with Congressman Duncan Hunter about finding a permanent to the sewage problem. Bilbray told the council Hunter was working on a plan for a back-up "fail safe" system for bypassing the Tijuana treatment plant. (Ir Beach Star-News, Apr. 22, 1984)

1984/06/14 - Wetlands group pushing hyacinth sewage plant. (full page article) (Imperial Beach Star-News, June 14, 1984)

1984/06/14 - Sewage pond in use once again. (photo) Tijuana River Valley sewage pond catching Mexican spillage again. A sewage holding pond in the Tij River Valley Is once agahfc'Hn operation, funneiing about 1.3 million gallons of Tijuana effluennt daily away from Imperial Beach and into the metropolita system. The pond was built earlier this year by the International Boundary and Water Commission (IBWC) as a stop-gap measure, The ocean at Imperial Be been quarantined several times due to sewage pollution. Robert Ybarra, spokesman for the IBWC, said this week the pond was used for two days last month been in continuous use since June 2. Ybarra said the pond was used May 30 and 31 when a valve gain broke in a Mexican pW Canon del Sol. The pond wer two days later during rcpttf on two other pipe*' (Imperial Beach Star-News, June 14, 1984)

1984/08/02 - Treatment plant building to start this month. Southwest Wetlands Interpretive Association will begin construction of a down-scale wastewater plant in the Tijuana Estuarine Sanctuary by the end of August, SWIA president John Rieger said. The demonstration project is made possible through a $95 California State Coastal Conservancy grant and donations of time and equipment by area businesses. The plant will be a basic filtration and clarification fac

similar to larger plants used to treat industrial wastewater and will treat up to 75,000 gallons of primarily Tijuana sewage a day. The project will utilize stati wedgewire screens, plastic media filters and one of several kinds of final clarification processes. According to the conservancy, "This low-cost alternative fo sewage treatment, if proven effective, should provide a long-term solution to the sewage problem." While there is no suggestion, that additional funds will b available from federal or state sources to build additional treatment plants of the demonstration type or otherwise, the conservancy's Oakland office has rele information indicating " A permanent facility utilizing this treatment method might be built in the future if the demonstration project is successful." The con grant to date covers only those funds for construction, operation and evaluation of the project. The plant is to be located at the end of Dairy Mart Road on th side of the Tijuana River adjacent to the sewage intercept lateral canal. Rieger said construction is expected to begin in late August with start-up of the filtra equipment scheduled for early September. "This will do what we wanted to do and show the value of teamwork," Rieger said, adding the donation of time a equipment on the part of private business for the project pushes the cost value of the plant to about $150,000. "The beauty of this (type of facility) is that wh only treat 75,000 gallons a day, it's not large at all, about 25 by 35 feet," he said. The association has retained the services of civil engineers from Mexico as the San Diego area. The conservancy grant is predicated on the association's plan to operate the plant for a year, to implement water quality testing by takin at three separate locations within t h e sanctuary, and to prepare interim reports on the project's progress. "We will be submitting reports to a laboratory in Sa to the Water Resources Control Board and to (the city of) Tijuana," Rieger said. He added the WRCB will be testing the plant's effluent to determine levels metals and other contents of the water that will be s month put back into the sewage canal. "We really don't have a good handle" on what comprises Mexica which is considerably more concentrated because Tijuana uses less water to flush waste away. "If the project works, we wilt be conducting a series of works international field trips" to show the feasibility of the treatment process. The conservancy grant was necessary* Rieger said, because there were and are no f available from the federal government. Environmental Protection Agency, or anywhere else. The demonstration project is not intended to be a permanent fa Imperial Beach Star-News, Aug. 2, 1984)

1984/08/05 - House earmarks sewage money A supplementary appropriation bill to pay for design of a waste water treatment plant t o handle Mexican sew be on President Reagan's desk later this month or early in September, said a spokesman for Rep. Duncan Hunter. The $5 million appropriation has passed th of Representatives and the Senate Appropriations Committee. The full Senate is expected to act on the measure after House and Senate conferees iron out lo details of the design of the plant, primarily the facility's overall size, Hunter aide Chris Warden said. The bill is part of fiscal year 1984 appropriations, whic the Environmental Protection Agency will be able to begin design work as soon as the president signs the bill. Opponents to paying for such a project have i they would not vote for such a measure unless the United States receives assurance that Mexico will reimburse in some way at least partial costs of design a construction. The plant in question would treat only waste water produced out of Ciudad de Tijuana, effluent which has been responsible for beach closings Imperial Beach and Silver Strand as sewage finds its way down the Tijuana River into the Pacific Ocean, "This is on a fast legislative track," Warden said, a traditiionally funding for design of similar public works projects is followed by construction appropriations, in the case of the treatment plant some $27 mill Congress ultimately approve the action. Congressional debate over whether to fund design and construction of a means to treat overflowing Mexican sewag centered around Mexico's ability to repay or at least augment costs. The appropriation, assuming complete passage through Congress, cannot be spent by EI plan until the president gives Congress some kind of assurance that Mexico agrees to remuneration for the federal expenditure, "either through a trade agree some other reimbursement,"Warden said. The plant is necessary because the City of San Diego, which has been treating Mexican sewage for several years, continue to handle the increasing volume of effluent from Tijuana, one of the fastest growing cities on the North American continent. Studies conducted by consultant for the Southwest Wetlands Interpretive Association indicate only about half of Tijuana has modern plumbing, and Mexican sewage is more conc because of the country's low water supply. San Diegp receives almost $2 million a year in federal reimbursement for treating Mexican sewage and the cost i climbing. The full Senate is due to consider the appropriation as early as next week. In a related development, the Southwest Wetlands Interpretive Associat received a $95,000 grant from the California Coastal Commission for construction of a demonstration treatment plant in the Tiajuana OKd River Valley clos Imperial Beach. The demonstration plant should be under construction by September and will be designed around industrial treatment facilities. It will be ab about 75,000 gallons of Mexican sewage a day and is being constructed with the conservancy grant and assistance from area businesses and contractors. (Im Beach Star-News, Aug. 5, 1984)

1984/08/12 - $32 million allocation for sewage not enough. The substance of a press briefing Friday by State Senator Wadie Deddeb (D-Chula Vista), State Assemblyman Steve Peace (D-Chula Vista) and San Diego City Councilman Uvaldo Martinez changed in midstream when reporters informed the participa Senate-House conference committee action. The committee, considering sewage treatment plant funding for Southern California, had just approved a total $ appropriation, far less than officials say is needed to meet the growing problem of Mexican sewage. The problem, Peace said, "is that once the federal gove commits itself to a certain amount, we may have to wait a long time before we can get any more, if we can get anymore." The $32 million amount includes million appropriation already approved by the House and Senate for desC work on a facility to treat Men lean sewage, primarily from Tijuana. That sewage way into the Tia Juana River Valley, has caused beach closings locally and continues to pose a health and safety threat. The three local officials beganj their conference by saying they would use all means at their disposal to encourage California congressmen and senators in Washington to lobby for increased fun underwrite what Martinez said needs to be a treatment plant capable of handling some 60 million gallons a day of raw sewage. Tijuana, home to about three people, is one of the fastest growing cities on the North American continent. Only about half of its homesteads have modern plumbing, a fact that explains updating Mexican treatment plants that exist only would address half of the problem. The local officials were urging California U.S. Senators Pete Wilson a Cranston to push for a $55 million appropriation, for which the state assembly and senate has approved a 10 percent state match, or $5.5 million. The larger would underwrite construction of a facility capable of treating at least 60 million gallons of sewage a day, the amount of effluent predicted within the next fi The first House version and apparently like the one approved Friday by the joint conference committee caps the amount of funding at $32 million. (Imperia Star-News, Aug. 12, 1984)

1984/10/01 - TV show focuses on TJ sewage. The Tijuana children play in it barefoot,.and the animals dripk from it. But what Tijuanans probably don't real the black river flowing along side their homes is a river of contaminated raw sewage that has been flowing through their city for years. "I would say from th 100 percent, every child, or almost every child, has a disease," said Dr. Jose Martinez Ramirez, director of local clinic in Tijuana. The current and potential the growing invasion of sewage from Tijuana is reported on in a new KPBS‹produced documentary, "Aguas Negras: Black Water Time Bomb," which airs t from 8:30 to 9 on KPBS TV. It will repeat Sunday, Oct. 7 at 4:30 p.m. Reporter Gloria Penner focuses on the sewage crisis in the 100,000 population of Col Obrera and its impact on the people both sides of the border. Tijuana currently produces about 20 million gallons of sewage each day, of which 13 million g treated in San Diego. Each day almost 7 million gallons of raw sewage is released into the Pacific Ocean and San Diego's Tia Juana River Valley, forcing th quarantine of more than two miles of South Bay beaches just north of the border. "The potential for disease that is associated with the contact with waste wa from Tijuana can probably best be characterized as a ticking time bomb," says Richard Reavis of the Environmental Protection Agency. The potential of an of malaria, hepatitis, typhoid fever, spinal meningitis and polio is increasing as the sewage continues to flow into the country and aliens that sneak into the every day are carriers of the diseases* The sewage problem in the San Diego area is approaching a crisis point. "You can expect (the sewage) to go to Coron Coronado, certainly, if we don't do something," Reavis said. While California beaches are quarantined and warning signs are posted about the con-taminate the Tijuana government does not warn the Mexican people and Tijuana beaches are full of swimmers and body surfers every day. Since 1980, when Tijuana

flood gates and allowed the sewage to gush into San Diego, 50 percent of the farmers have left the area bankrupt and are still waiting for their $723,000 sett from the government, the documentary indicates. Jim Martin and Vance White, residents of the Tia Juana River Valley who have had their land quarantined are tired of it all. Says Martin, "I'm so sick of our politicians grandstanding on my property at our expense, telling us what they will do and what they shoul never doing a damn thing about it." (Imperial Beach Star-News, Oct. 1, 1984)

1984/11/11 - River Valley dike builders get citations For years, farmers in the Tia Juana River Valley have suffered from winter floods and Mexican sewage across their land. Recently, they've been trying to remedy the situation themselves by building makeshift dikes. A week ago, the city of San Diego put an en issuing citations to live drivers of trucks caught hauling loads of dirt and rubble into the area for that purpose. Deputy City Attorney John Reese said the cit were issued for doing land development in a floodway without a permit. The drivers cited will be arraigned in court later this month. Reese's opinion is that will be likely to put them on probation, or order a fine to be paid, or both. If the drivers plead not guilty, there could be a trial "whether it's worth it or not,** Reese, referring to the amount of time and money it would take to contest the charges. According to Vance White of the Otay Mesa-Nestor Planning Comm flood control channel was supposed to have been built 15 years ago. However, the funds for it were diverted into other projects, he said. The city then put in "dissipators," which only served to dissipate the flood water over the entire valley, according to White. In the past few years crops have been destroyed and pipes ripped up, White €aid. Though the farmers won $700,000 lawsuit against the city for crop damage, actions from both sides are still in litigation. The f then began bringing in fill to build their own dikes for protection. "Our concern," said White, "is what they're doing is going to create more problems.** Ac Ruth Schneider, chairman of the planning committee, the dike building has been going on for about a year. "It is illegal," said Schneider, "and we have repe reported it." "If there is any flooding, there will be a bigger problem this year because of the amount of loose dirt, stones and rubble srtfifig* around,** Schr said. "When that river rises and starts flowing, it has a pretty good velocity and just tears out anything in its path." Schneider said since it had been going on she didn't believe the dike-buiiding would stop just because of the citations. However, Eddye Martin thinks the rubble-hauling has "all come e to a screechir since the n o n citations were issued. (Imperial Beach Star-News, Nov. 11, 1984)

1984/12/16 - Tijuana River mouth opening frees flood waters. Homeowners at the south end of Seacoast Drive in Imperial Beach can breathe easier for the being, since the mouth of the Tijuana River has been opened, allowing backed up storm water to rush out to sea. The water level in the estuary had begunris the rains at a rate of about two inches an hour by Tuesday. When crews from the federal Fish and Wildlife Service arrived to continue an on-going dredging they saw that flooding had already begun. Working into the night with their bulldozers, they succeeded in opening the river mouth to about a 30-foot width. open, the water level in the estuary went down seven feet, according to sanctuary manager Paul Jorgensen. By Thursday wind-whipped waves had widened channel to approximately 200 feet. Jorgensen said it is fortunate the crews returned from other work at the Salton Sea in time to see the flood water backing Seacoast Drive. Otherwise, it might have taken days to alert authorities and get help, Jorgensen said. But whether or not the river mouth stays open is uncert "We're totally at the mercy of the elements," said Jorgensen. He terms the rough winter of 1982 "the storm of the century," which pushed two and a half mil dunes into the river, blocking off the channels. Jorgensen says he has photographs of the estuary dating back to 1849, which show the closure problem is on recent phenomenon. The river mouth had been completely closed off since April of this year, said Jorgensen, when two attempts to re-open it failed. The fe have been dredging the estuary on and off since September, Jorgensen said, in an attempt to remove some of the sand. "We're hoping that with enough dred mouth will begin staying open on its own." The sand will then be used to reconstruct sand dunes which, it is hoped, will serve as a natural flood control. Th will be planted with native vegetation, Jorgensen said, to anchor them in place. However, the dredging operation will only continue another week, after whi will have to be closely watched in case of storms. Jorgensen expects the crews to return two weeks later, and estimates the new dunes may be finished by la Even though there is a possibility upcoming storms may be destructive, Jorgensen said, "there's really no time that's better than another, as far as the seasons Imperial Beach Star-News, Dec. 16, 1984)

1985 - Mexico's Stage I Facilities The Government of Mexico under the terms of Commission Minute No. 270 constructed between 1985 and 1990 a new s conveyance system generally following the alignment of the 1965 system and a new treatment plant at a point directly 4.0 miles south of the international b The system consisted of a new Pumping Plant No. 1 near the border in Tijuana with a design pumping capacity of 64 mgd, and an average daily operational capacity of 48 mgd. The pumping plant was followed by a 42 inch diameter concrete asbestos lined steel pressure line near the boundary extending westwar approximately two miles. The pressure line discharges to a 60 inch gravity line and then to a concrete lined conveyance channel. The collection system also sewage flows from developments in the canyon areas known in Mexico as Canon de los Mataderos and the Canon de los Laureles (Smuggler's Gulch and G Canyon in the United States), from a pumping station in the Playas de Tijuana part of the Mexican city, and from Maquiladoras in the western part of Tijuan Estimated sewage contributions to the collection system, other than Pumping Plant No. 1, are from 5 to 7 mgd. The gravity pipe and open canal system cont siphons before the Tijuana treatment plant, and there are four siphons after the treatment facility. The treatment plant, know as the San Antonio de los Buen Wastewater Treatment Plant, provides treatment of 25 mgd of Tijuana sewage before discharging to the surf zone. An additional 17 mgd second module wa in favor of joining the United States in the construction, operation and maintenance of the South Bay International Wastewater Treatment Plant (SBIWTP) u terms of IBWC Minute No. 283. (South Bay International Wastewater Treatment Plant, http://www.ibwc.state.gov/mission_operations/sbiwtp.html)

1987/06/26 - Raw sewage continues to foul Tijuana River. Despite the opening six months ago of a major treatment plant in Tijuana, 100,000 gallons of raw continues to flow down Smuggler's Gulch nearly every day, fouling the Tijuana River Estuary and forcing a permanent quarantine of the beach along the bo Mexico. The flow in Smuggler's Gulch, one of the two westernmost canyons at the border, is caused by breakdowns in small pumping stations and pipes me carry the sewage to Tijuana's main treatment system, according... (San Diego Union, June 26, 1987)

1988/03/15 - City's sludge is sought for sod cultivation. That patch of new grass where you spread your next picnic blanket or swing a golf club may owe its lushness to the sewers of San Diego, thanks to a new use being cultivated here. But not to worry. City officials say you would never guess by smelling it tha lawn sprouted from night soil. Since late last September, processed sewage from the city system has been trucked to the Tijuana River Valley, where folks a American Sod Farms say it makes their commercial sod flourish. Floyd Wirthlin, president of American Sod Farms, will be able to continue their businesse as they are compatible with the "passive recreational use" the city of San Diego has deemed appropriate for the valley. "We're not interested in putting in big fields," Massey said. "We're interested in low-key, very passive recreation activities like bird-watching areas, horseback riding and hiking trails." Wirthlin, v acre sod farm provides a habitat for birds and other wildlife, said there are about 70 property owners in the area, and "basically they would like to keep thing they are." (San Diego Union, Mar. 15, 1988) 1988/06/07 - Officials frustrated in bid to rid valley of illegal dikes. Like corrugations on cardboard, illegal di concrete, asphalt and steel furrow the flat farmlands and marshy expanse of the Tijuana River Valley. Blanketed with blooming flowers or disguised by a lay the seemingly innocuous berms protect the valley's farms from floods but threaten the fragile ecosystem there. Simply put, the innumerable illegal dikes are salvation of private property and the bane of the flood plain. Valley property holders regard... (San Diego Evening Tribune, June 7, 1988.)

1989/07/06 - Tijuana: Mexico's city of the century Few could have known, 100 years ago, vast plains would become megalopolis. The 54-year-old Indian w briskly at dawn along the path through the hills and valleys leading to the San Diego de Alcala Mission, where later that day he would be baptized with the

name Antonio Maltas. It was 1809. The region, which then belonged to Spain, was inhabited by several thousand Indians and 200 to 250 colonizers. At the was a wondrous, empty expanse of hills and valleys. From the shores of San Diego Bay, newcomers could see miles of grassy,... (San Diego Evening Tribu 1989)

1989/11/14 - Tijuana sewage is flowing faster, killing estuary. An increasing amount of raw sewage flowing across the border from Mexico is killing marine threatening birds in the Tijuana River estuary, according to a newly completed study of the huge saltwater marsh. The increase is the result of the continued Tijuana, where many neighborhoods are not hooked up to sewers. The sewage flow in the river now averages nearly 10 million gallons a day, up from about gallons a day two years ago. (San Diego Evening Tribune, Nov. 14, 1989)

1990/04/12- Construction of the largest sewage pipe in the city -- which initially will not connect to anything but is designed to help dispose of the raw Mex wastewater that fouls the Tijuana River Valley -- could begin as early as this summer, officials say. Big enough to drive a bus through, the 12-foot-diameter cross shrubland and willow woodland in the Tijuana River Valley in San Diego's southernmost point, just north of the Mexican border. It will span the area Monument Road at Goat Canyon east almost to Dairy Mart Road. About 12 million gallons of mosquito-breeding wastes from the drains and toilets of Tijua daily across the border, downhill into the low-lying river valley in the United States. The raw sewage is ravaging the Tijuana River Valley's national estuary. endangered birds, such as the least Bell's vireo, the light-footed clapper rail and the California least tern, make their home. Worse yet, the pathogen-bearing a health risk, capable of passing on malaria or encephalitis. A trickle of Mexican sewage spilling into San Diego was first noticed in the early 1930s. Over tl half-century, there have been stopgap measures taken to try to curb the flow and there have been several aborted attempts at a permanent solution. But the fl sewage has only gotten worse as Tijuana's population has increased and new homes have sprung up on the east side of the city. (San Diego Tribune, Apr. 12

1990/04/12 - Construction began on the largest sewage pipe in the city, a 12-foot-diameter outfall pipe from Goat Canyon east to Dairy Mart Road. (San Di Tribune, Apr. 12, 1990)

1990/06/12 - The United States and Mexico approve Minute No. 283, agreeing to construct an international wastewater treatment plant in San Diego. The S International Wastewater Treatment Plant will be built on a 75-acre site near the international boundary in the U.S. immediately north of Tijuana's main was pumping station. (The South Bay International Wastewater Treatment Plant Timeline, http://www.ibwc.state.gov/Files/south_bay.pdf)

1990/06/13 - In a major breakthrough on one of San Diego's most persistent problems, final agreement was announced yesterday on construction of a borde plant to stop Tijuana sewage from washing up on county beaches. The product of years of painstaking talks, the agreement between the U.S. and Mexican governments was completed at a meeting on border water pollution held Monday in San Antonio, Texas. It was announced yesterday in Washington by mer the San Diego County congressional delegation and Republican Sen. Pete Wilson. As envisioned, the "joint international" plant could treat 25 million gallor raw Mexican sewage, more than twice the flow now spilling into San Diego County. Construction of the facility in south San Diego near Dairy Mart Road i to start in 1993 and is slated for completion in 1995. About 12 million gallons of raw sewage flows each day from the hills of Tijuana, across the border and Diego's low-lying river valley, where endangered birds such as the least Bell's vireo and light-footed clapper rail make their home. The sewage wreaks envi havoc on an estuary and farms that lie within the Tijuana River Valley. Bush took a major step toward breaking the impasse in January when he included $1 million in the fiscal 1991 budget to pay the United States' share of the first phase of the project, the construction of an ocean outfall connection. "It's been ov years that we've been trying to deal with the problem," said Susan Hamilton, a deputy director of the city Water Utilities Department. "This is the closest we to actually solving it." (San Diego Tribune, June 13, 1990)

1990/07/08 - The South Bay International Wastewater Treatment Plant (SBIWTP) was designed to deal with the growing demand for the treatment of waste resulting in the contamination of the Tijuana River in the United States. It has been an ongoing concern since 1934 when the International Boundary Comm (IBC) was instructed by the United States and Mexican governments to cooperate in the preparation of a report on the Tijuana sewage problem. The SBIWT capable of providing secondary treatment for 25 million gallons per day (mgd) average daily flows of sewage in excess of the Tijuana sewage system capac expansion capability of up to 100 mgd. The SBIWTP was built on a 75-acre site near the international boundary in the U.S. immediately north of Tijuana's r wastewater pumping station. Resulting from the establishment of a binational interagency "Clean Water Partnership," the United States and Mexico approve Minute No. 283 dated July 8, 1990. This Minute authorized the construction of the SBIWTP. The Government of Mexico contributed $16.8 million toward construction of the SBIWTP and currently contributes $1.1 million toward the annual operation and maintenance costs. Funding for the U.S. share of constr costs was appropriated through the Environmental Protection Agency in the amount of $239.4 million. Of that amount, $225.5 million had been obligated a of which $89.2 million was given to the City of San Diego and the Corps of Engineers to construct the South Bay Ocean Outfall; $8 million was given to th Engineers for environmental work; and $127.4 million was given to the USIBWC for the costs associated with the construction of the SBIWTP and related infrastructure. Mexico's share is that amount that Mexico would have had to pay to construct and maintain a plant at the Rio Alamar. At the same time, Mex expanding its sewage collection system, and constructing additional works necessary to collect and convey Tijuana's sewage. These facilities will be operate maintained at Mexico's expense. Both countries share in the operation and maintenance of the SBIWTP. (South Bay International Wastewater Treatment Pl http://www.ibwc.state.gov/mission_operations/sbiwtp.html)

1990/09/10 - Tijuana River Valley Sewage Problem. San Ysidro businessman Joseph Garcia looks at the 40 acres he leases in the Tijuana River Valley and s litter-strewn, sewage-swamped breeding ground for mosquitoes. Ecologists and government officials cast their gaze over the same landscape and see an environmentally sensitive area battling for its life, a place that some call the richest riparian habitat in the southwestern United States. Lately, those officials Garcia they want him to see things their way-or else. A coalition of county, state and federal agencies have targeted Garcia and his landlord, Nelson & Sloa mining company, because their activities are believed to threaten two obscure man-made ponds that are nesting sites for an endangered bird, the least Bell's These officials, some who eventually hope to transform the ponds and the surrounding land into a 2,900-acre regional park, say Garcia has shown blatant di the wetland area by illegally grading and building a parking lot about a mile from the ponds. And they are threatening to take legal action to keep him and h landlord, who is mining in the area, from grading in the future. But Garcia, who runs an international trade center on his landlord's property in San Ysidro, s being singled out unfairly. In contrast to the many people who use the estuary as a dump, he says he has tried to improve his parcel-despite the confusing, a sometimes conflicting, advice he has received from competing bureaucracies. "I was told by the city (San Diego) to clean up my property and proceeded to Then the state Fish and Game Department came by and stopped me from picking up the trash," he said. "Have they seen the ponds and the area around them People dump oil and other trash in them . . . . There are dirt roads leading to the ponds that are heavily traveled by people who aren't suppose(d) to be there. bothers to stop them." Regulatory officials admit there is some confusion over who is responsible for the ponds. Owned by the state but managed by the cou ponds have attracted a tangle of advocates from various bureaucracies, from the U.S. Army Corps of Engineers, to the state Fish and Game Department to t Parks and Recreation Department. They also admit that Garcia's allegedly illegal grading and leveling is just one of many problems that plague the area. Re Langis,a researcher with the Pacific Estuarine Research Laboratory, which studies the Tijuana River Valley, said that sewage contamination and mounds of threatening the delicate balance of what he calls one of the most ecologically sensitive salt marsh areas in California. "The main problem is the sewage inflo

is diluting the salinity of the marsh," said Langis, noting that raw sewage from Tijuana flows directly into the Tijuana River, which follows a course just nor U.S.-Mexican border and empties into the Pacific Ocean below Imperial Beach. And then there's the garbage. "There's stuff coming in with the tide and a lo that's dropped there by people. There's a lot of people walking across the valley and their trash is having a damaging effect," Langis said. But officials see G his landlords as a significant threat to the environment in the area. And they intend to do something about it. The U.S. Army Corps of Engineers is preparing and-desist order against Nelson & Sloan, said Corps spokeswoman Mary O'Keefe, that would halt the grading and filling of the wetlands, which the compar allegedly doing without a permit. According to O'Keefe and Ann Rast, chief of special operations for the County Parks and Recreation Department, Nelson has been violating the federal Clean Water Act by destroying the habitat in and around the ponds. The order does not mention Garcia, since he is a tenant on Sandra Gabler, a state Fish & Game Department warden, said that the company is also suspected of dumping fill dirt in the surrounding wetlands, but both (Rast said their agencies are still investigating those alleged actions. Nelson & Sloan officials declined several requests for interviews and did not return pho But last month, company general manager Ken Monson told the San Diego Tribune that the only grading done by his company was in sand pits and areas w city had issued orders to clean up the property. That explanation echoes Garcia's concerns and part of the problem seems to be that the company, Garcia and county officials all seem to mean different things when they refer to "cleaning up" the property. When Garcia was reprimanded by the Fish and Game Depa month, for example, he told them he was only following orders. "I'm being given different instructions by the state and the city," Garcia complained. "They me to stop the cleaning, but I have an order from the fire marshal and the city to clean up the place." According to Garcia, he has already spent $100,000 to the property and an additional $20,000 to fence part of it to keep out dirt-bike riders. He denied leveling the property but admitted covering six acres with ei of compacted dirt. "I talked to the city before I covered it with dirt. I told them what I wanted to do and they told me I didn't need a permit. I've got the pape my office if anybody wants to see it," Garcia said. Gabler, the state warden, acknowledged that Garcia has been ordered by several city agencies to clean up littered over the 40 acres he leases. However, Gabler charged that Garcia has gone beyond just tidying up the area and has illegally bulldozed and graded th without the necessary permits. "When you pick up debris, level the area and put on top soil for a parking lot, it's a different thing as far as we're concerned," Gabler. "We've told him that we don't mind if he cleans up the property, we just don't want him illegally dozing and grading. This poses a great danger to ou Part of the problem with the pond-saving effort is that much of the area involved simply doesn't look worth saving, making it doubly difficult to persuade pe use it to be careful. Home to migratory birds such as ducks and egrets, it is an invaluable environmental resource, Rast said-but Garcia says it looks like a d can understand the Fish and Game Department's position and concern for the wildlife," Garcia said. "But the ponds are about a mile away from us. There is out there, but most of the wildlife is mosquitoes." Gabler acknowledged that the poorly maintained and patrolled area "is not the prettiest picture in the worl addition to being heavily traversed by illegal aliens on their trek northward and pursuing Border Patrol vehicles, the river valley is also littered with every ir piece of garbage-from abandoned cars to rusting refrigerators. Gabler blamed the "shortage of personnel at every level" for the failure to detect the alleged earlier. And until recently, communication between city and county agencies has been anything but clear, said Rast. "That's changing," she said. "We're atter develop a better communication with the city to see how we can handle violations and see what we can do. But we can only prosecute people who dump on county land." If the dream of a regional park is ever to become real, Rast said, "we have to take a leap of faith that in the future we can . . . be able to restore Currently, the county only owns about one-fifth of the land proposed for the park, she said. While it may not seem fair to Garcia that the crackdown begins officials say they have to start somewhere. "I'd like to be there and cite people every time they dump stuff in the ponds, but I can't," Gabler said. "But we've aggressive enforcement program and we are going to save those ponds from further destruction." "It's going to take a long time to iron out this mess," she sa it's got to be done for species like the least Bell's vireo. You just can't take a species and place it somewhere else." PHOTO: A housing development pushes pond west of Dairy Mart Road in the Tijuana River Valley. Some officials envision establishing a 2,900-acre regional park in the wetlands area. At right, a d shopping cart fouls the same pond. (Los Angeles Times, Sep 10, 1990)

1991/04/22 - City Of San Diego Memo of acquisition costs for right-of-way across 14 properties: -To: Ann Sasaki, Clean Water -From: B. Lane MacKenzie Department -SUBJECT: South Bay Land Outfall -The acquisition costs for the required right-of-way for this project are as follows. Also,keep in mind that t not include the costs for the existing crops for Am-Sod and Yamamoto that will be impacted by construction: -1. City $0 -2. U.S. Savings -11,000 -3. Airrie -48,875 -4. Calmat & Sons -72,600 -5. Am-Sod -49,800 -6. Yamamoto -53,020 -7. City -0 -8. Kimzey 52,400 -9. Spurling -55,965 -10. Strange -122,171 -1 -1,000 -12. Spurling -73,720 -13. Shelton -190,758 -14. GTE -13.075 -Total $744,384

1991/05 - groundbreaking for IWBC with Bob Filner.

1992/06/02 - Imperial Beach Opens Decade-tainted Shore. By LILLIAN SALAZAR LEOPOLD IMPERIAL BEACH ‹ The coastline here will no longer be the place where the sewage meets the sea ‹ at least for the summer. For the first time in 12 years, county Environmental Health Services yesterday opened a mile section of beach at the south end of the city. The sandy stretch has been off limits to swimmers and surfers for more than a decade because of the raw s flows into the ocean from Tijuana. A year of diverting the sewage from the Tijuana River, which eventually flows into the ocean, has apparently made a trer difference, county officials said. The federal government allowed this water to be contaminated," said county Supervisor Brian Bilbray, who, along with Im Beach Mayor Mike Bixler, wielded bolt cutters yesterday to help take down the signs that prohibited swimming in tie area near the end of Seacoast Drive. " needed to get the government to find answers instead of finding blame," Bilbray said. The answer came last year when Mexico and San Diego struck an agr that allows Tijuana to pump 15 million gallons of sewage a day to Point Loma to be treated, Bilbray said. Weekly water samples taken from the waves of In Beach have tested clean since April, said Gary Stephany, director of county Environmental Health Services. In addition, county officials also walked the dry the Tijuana River last Friday to verify an unofficial end to the rainy season. "We've been discussing opening the beach for a month," Stephany said, "but we waiting for the rainy season to be over. We figured it would take a hurricane-type flow to force the closure of the beach." Even a breakdown last week in a d on the Tijuana side that channels sewage into the San Diego system did not prevent the opening of the beach. "(The breakdown) did not have an effect. As a fact, it reconfirmed our decision," Stephany said. (The San Diego Union-Tribune, June 2, 1992)

1992/06/23 - Hyacinths suffocate lake in pretty, perilous bloom. Seemingly overnight, Carolyn Powers has watched an 80-acre lake in the Tijuana River Val disappear underneath a lush green cover of water hyacinths. "Six months ago, it looked like you could go out there on a Hobie Cat," said Powers, an Imperi resident who rides horses in the valley. Now, the water at Shelton's Pond is completely hidden under the purple-flowered plants, one of the largest blooms o hyacinths ever known in San Diego County waters. "It started off as one little small patch," said Dave Gomez, a San Ysidro resident. "Now, it's 100 acres of hyacinths, bank to bank." Pretty as the purple posies are, they are perilous. They can choke fish by depleting oxygen in the water, and they create an ideal br spot for mosquitoes. Unfortunately, getting rid of the hyacinths won't be easy or cheap. Clearing them out of a North County lagoon cost about $500,000. Th pond in the Tijuana River Valley lies in a basin scooped out by Nelson & Sloan, which leases the property to mine sand. Known as Shelton's Pond after the locals nicknamed it Tijuana Lake after it filled with an overflow of raw sewage from Mexico. Raw sewage has flooded property in the river valley for more a century, although most of the flow was stemmed last fall with a special pipeline that diverts the sewage to Point Loma Wastewater Treatment Plant, owned Diego. Gomez and Ken Monson, Nelson & Sloan executive vice president, suspect that a single water hyacinth carried in with the Mexican sewage gave the start in the pond. But biologist Marilyn Corodemas, who heads vector control for the county's Environmental Health Services, said the water hyacinths are n occurring and have grown near Shelton's Pond since at least 1990. However the hyacinths got there, once Nelson & Sloan quit mining the basin in January,

proliferated "like a metastasizing cancer," said Ted Powers, Carolyn's husband. A Louisiana study has shown that 25 water hyacinths can multiply into 2 mi plants in one growing season. If controlled, the plants can be a benefit, said Ed Heidig, a biologist at the Mission Valley aquaculture plant, which uses water to clean waste water. As the dirty water flows through huge aquaculture ponds, the hyacinths use the sewage-borne nutrients for nourishment. But, Heidig n water hyacinths at the aquaculture plant are cut back 60 percent every other week to keep them under control. In the Tijuana River Valley, as the plants rapic so do the worries of residents and people who use the area for recreation. The pond used to be a stop for migratory water birds, but there's no room for the b anymore, Carolyn Powers said. Neighbors wonder how far the plants will spread. Already, they've reached the Hollister Street bridge, near an organic farm. next winter, when the valley floods, it's going to carry the seeds and spread them," said Ted Powers. Most troubling to Gomez is the health risk posed by mc which can breed out of control under the protective leaf cover of the water hyacinths. "We thought we had gotten rid of the problem down here as far as mos were concerned, and now we have a whole new mosquito problem," he said. Mosquitoes, which can infect humans with serious diseases, such as encephalit malaria, have long been attracted to stagnating pools of sewage in the Tijuana River Valley. Now, with the water hyacinths, the pests have an even more hos environment. The county can't control mosquitoes as it usually (U-T San Diego, June 23, 1992)

1992/06/23 - The giant pond in the Tijuana River Valley lies in a basin scooped out by Nelson & Sloan, which leases the property to mine sand. Known as S Pond after the landowner, locals nicknamed it Tijuana Lake after it filled with an overflow of raw sewage from Mexico. Now, the water at Shelton's Pond is completely hidden under the purple-flowered plants, one of the largest blooms of water hyacinths ever known in San Diego County waters. "Now, it's 100 a water hyacinths, bank to bank." Most of the raw sewage flow was stemmed last fall with a special pipeline that diverts the sewage to Point Loma Wastewate Treatment Plant. Water hyacinths are naturally occurring and have grown near Shelton's Pond since at least 1990. However the hyacinths got there, once Ne Sloan quit mining the basin in January, the plants proliferated. The pond used to be a stop for migratory water birds, but there's no room for the birds anymo Already, the plants have reached the Hollister Street bridge, near an organic farm. (U-T San Diego, June 23, 1992)

1994/01/08 - Governmental officials tour border teeming with sewage. A busload of local officials saw -and smelled -firsthand the continuing environmenta problems at the border yesterday. Much of the tour focused on the sewage flowing from Mexico daily, though organizers offered no new information on the Participants included County Supervisor Brian Bilbray, San Diego City Councilwoman Valerie Stallings, the mayors of Imperial Beach and Coronado, and representatives from several congressional offices. Bilbray and Stallings said local representatives must band together and keep the heat on state and federal to ensure that a long-planned treatment plant at the border is constructed on time. The tour, organized by the Imperial Beach Chamber of Commerce, started Hollister Street where participants had excellent views of flood-damaged homes and ranches that have yet to be rebuilt. It ended at Stewart's Drain near the fence, where the giant federally funded sewage treatment plant is scheduled to break ground this summer. In the meantime, smelly sewage-holding ponds ar defense against sewage flows from Tijuana. "This is an embarrassment to both countries, and a thorn in transborder relations," said Bilbray, who lives in Im Beach. "If we don't take care of this now, my grandchildren will be swimming in sewage." Some 10 million to 15 million gallons of sewage flow into the Ti River Valley from Tijuana, and eventually empty out into the Pacific Ocean near Imperial Beach. The morning tour also stopped at Goat Canyon, where sev into the United States daily. Despite the noxious fumes, Bilbray jumped down on a sewage drain to play up what he termed a "highly concentrated public he threat." Minutes later, Bilbray playfully jumped on a section of border fence at Smuggler's Gulch, where tour participants walked into Mexico through an uncompleted section of the fence. "It is overwhelming when you think of all the problems" along the border, said Coronado Mayor Mary Herron. "Seeing it is critical." (U-T San Diego, Jan. 8, 1994)

1994/02/18 - Mexican officials completed their end of the agreement - a $55 million channelization project -and warned of dire consequences. This time arc environmentalists again are voicing opposition to carving a wide swath across the valley and willow forests that serve as a habitat for many species of wildl including the endangered least Bell's vireo. The district's proposed channel, they say, would dump fresh water into the last undamaged estuary in the county, salt-water species of vegetation grow and fish breed. The proposed channel is just too big, they say. Jim Peugh, president of the National Audubon Society's Diego chapter and a task force member, would rather see the city buy all private property in the valley and let the river meander at will. "We ought to be pro flood plains and rivers, and we're not doing it," Peugh said. "We're channelizing them. "I hate to see the wildlife lost. We need to live with the rivers and let what they're supposed to do. We're continually trying to outsmart them, and we're being hammered in the process." Unlike the concrete channel once propos area, Tia Juana officials say, their earth-bottomed channel project would be "environmentally sensitive." Although bulldozers would be used to carve its pat said construction could be staggered around breeding times for wildlife. Regardless of what proposal ~ if any ~ is carried out, taxpayers and ratepayers will consultants up to $627,000 to explore the various alternatives and write the environmental document necessary to obtain federal reimbursement for the proj Tia Juana district paid WEST Consultants of Carlsbad $27,000 to develop the channel proposal, while San Diego has budgeted $600,000 for BSI of Rancho to study five alternatives that would be outlined in the environmental report, said task force Chairman Frank Belock. Letter acknowledged that finding funds channel would be no easy task. The district, he said, has suggested that an international bank that is supposed to be set up as the result of the North America Trade Agreement cover the cost. The district's move to release its proposal to the public before presenting it to the task force angered some task force memb of whom have privately accused the district of showboating. Don Opel, a valley rancher and task force member, said there will be no conflict between the ta and district if he has anything to say about it. "I suspect that it has already started, but I think we're going to put a stop to it," Opel said. "It certainly isn't nec and it will destroy any chance of getting some flood control down here." (San Diego Union-Tribune, Feb. 18, 1994) 1994/02/18 - Channel to control flood pushed. A small water district, tired of waiting for some government agency to stop the devastating floods in the Tijuana River Valley, is fighting an upstrea push through its own plan. "What we've had in this valley for the past 30 years is a bunch of nonworkable solutions that were called solutions," said Art Let general manager of the Tia Juana River Valley County Water District. "This district doesn't want to see this happen again." For the past month, district offici been trying to drum up support for their proposed $30.8 million earth-bottomed channel. They have presented their plan to community groups and a task for last year to find a long-term solution to the flooding. But before the proposal can become a reality Tia Juana officials must overcome several major challeng environmental concerns, financial roadblocks and a potential battle of egos with the task force over what is the best flood-control plan. District board memb "Danny" Marschall is pessimistic about going up against the dozen or so agencies that have jurisdiction over the valley, but he said the board will not give u keep the pressure on," Marschall said. "That's all we can do." When rain began yesterday and word came that authorities in Tijuana might release water fron Rodriguez Dam, residents and ranchers prepared for another flood. "People are terrified," said Carolyn Powers, a task force member and valley resident wh horses during last year's floods. "We really need a bigger channel. We need a flood-control channel right now." Letter said his district's proposed channel is workable solution." Four miles long and 1,000 feet wide, it would be big enough to hold the volume of floodwaters expected every 25 years. Since 1980, ho three floods of this magnitude have ravaged the valley, with last year's disaster causing $25 million in damage. The task force is studying four alternatives o in addition to the channel. These are to build a much shallower channel, buy out all property owners in the flood-plagued area, make permanent the pilot ch constructed after last year's floods and remove some berms, or do nothing. Mayor Susan Golding, who formed the task force with county Supervisor Brian I and Rep. Bob Filner, D-San Diego, said she is striving to reach a balance between protecting private property and protecting wildlife in the valley. "It's quite in this decision it will be difficult to please everyone," Golding said. But she added, "I wouldn't have asked that this task force be set up if I wasn't serious al something to solve the problem in the river valley." Tijuana River Valley residents have seen flood-control proposals for their area come and go for decades time, they say, they are more optimistic that something will be done. "I realize it's a gamble doing business in the Tijuana River Valley, but I think now . . . t

going to do something serious about having a proper channel down there," said David Gomez, president of Citizens Revolting Against Pollution and a task member. Task force member Powers supports the Tia Juana proposal but concedes that others particularly environmentalists -will be harder to convince. In the protection of homes and property should come before that of wildlife habitat. Environmental issues helped derail a proposal 20 years ago to build a $30 mile-long concrete channel that would have linked up with a similar structure carrying floodwater from Mexico into the estuary. In 1967, the United States Mexico signed a treaty to that effect. But, heeding environmental concerns about the project four years later, the San Diego City Council withdrew its suppo chose instead to build a $14 million concrete dike that disperses floodwater from Mexico into the valley. (San Diego Union-Tribune, Feb. 18, 1994)

1994/02/18 - Environmental issues helped derail a proposal 20 years ago to build a $30 million, 5-mile-long concrete channel that would have linked up wit structure carrying floodwater from Mexico into the estuary. In 1967, the United States and Mexico signed a treaty to that effect. But, heeding environmental about the project four years later, the San Diego City Council withdrew its support and chose instead to build a $14 million concrete dike that disperses floo from Mexico into the valley. (San Diego Union-Tribune, Feb. 18, 1994) 1994/03 - The effluent conveyance system for discharging effluent from the SBIW Pacific Ocean consists of the South Bay Land Outfall (SBLO) and the South Bay Ocean Outfall (SBOO). Construction of the SBLO, a 2.5 mile Section of 1 diameter pipeline from Dairy Mart Road to Goat Canyon, was completed in March 1994. The SBLO was designed by Boyle Engineering in 1989. The rema portions of the conveyance system were designed by Parsons Engineering Science, Inc. through a contract administered by the USIBWC. The City of San D Metropolitan Wastewater Department is overseeing the construction management of the projects and issues a detailed periodic status report. Listed below ar highlights of the effluent conveyance system. (South Bay International Wastewater Treatment Plant Status Report, Part 1, April, 1998)

1994/03 - Construction of the South Bay Land Outfall (SBLO), a 2.5 mile Section of 12-foot diameter pipeline from Dairy Mart Road to Goat Canyon, was in March 1994. (South Bay International Wastewater Treatment Plant Status Report, Part 1, April, 1998)

1994/04/10 - Officials heap scorn on plan to clean up border sewage. While raw Mexican sewage continues to flow daily across the international border into Diego, city and civic groups say a sewagetreatment project to clean up the mess by October 1995 is mismanaged and ill-planned. One San Diego city waste official even doubts the agency building the plant can meet the promised completion date. "It's just so frustrating," said David Schlesinger, director of the ci Metropolitan Wastewater Department and an outspoken critic of the International Boundary and Water Commission's U.S. sector (IBWC), which is in charg building the sewage-treatment plant. Schlesinger said there appears to be no budget for operating and maintaining the plant once it is built. And, he said, the decision on how to dispose of the treated sewage for the first three years of operation. A congressional subcommittee will hold a hearing Wednesday about other problems that have dogged the project. The IBWC, a joint U.S.-Mexican agency that addresses water and boundary issues along the nearly 2,000-mile border shared by the two countries, says the 75-million-gallon-a-day sewage-treatment plant is on a "fast track." Grading of the treatment-plant site, at the c Monument and Dairy Mart roads in the Tijuana River Valley, is scheduled to begin in June, said IBWC spokesman Rene Valenzuela. But an increasing num leaders, including some from the city of San Diego and the local chapter of the Sierra Club, criticize the commission's handling of the project, the biggest pu works effort in IBWC history. Among their criticisms: The cost of the facility is likely to exceed the U.S. spending limit of $239 million, city and Sierra Clu say. But the IBWC refuses to divulge its cost estimates. There is no formal plan to dispose of the treated sewage for the first three years of the plant's operat city and the Sierra Club say. Completion of an undersea tunnel to dispose of the effluent is not scheduled until 1998. There appears to be no budget, or any appropriated, to operate, maintain and staff the plant, says the city. Operation costs are estimated at $9 million to $10 million annually. There is no apparent deal with toxic chemicals, heavy metals and other industrial wastes that are in Mexico's sewage, the city and the Sierra Club say. Narendra N. Gunaji, comm for the IBWC's U.S. sector, did not agree to an interview, but through his office he did issue an 11page written statement addressing some of the concerns. A tight-lipped on cost Rep. Bob Filner, D-San Diego, said he requested Wednesday's hearing by the Investigations and Oversight Subcommittee of the House Committee on Public Works and Transportation to look into the IBWC's handling of the project. "I'm not confident of their management skills and oversight Filner said of the IBWC. He sits on the subcommittee. The city of San Diego was so concerned about the IBWC's ability to complete the project that the city take over. The federal government rejected the request. Many agencies and groups asking the IBWC for information about the project complain that the age provides few or no answers. One of the major unanswered questions, for instance, is the project's cost. Both Schlesinger and Sierra Club attorney Robert Sir who say they have been refused detailed cost estimates, suspect the project will far exceed the $239 million cap set by Congress. The IBWC's Valenzuela cl federal law prohibits public disclosure of the estimated costs. (San Diego Union-Tribune, Apr. 10, 1994) 1994/05/21 - Border official retires under fire. Op get wish for new manager of sewage-treatment plans. Amid mounting criticism, the U.S. official in charge of efforts to build a massive sewage-treatment pl the border has informed the Clinton administration that he will retire at the end of the month. The decision by Narenda N. Gunaji, U.S. commissioner of the International Boundary and Water Commission (IBWC), was welcomed by those who have campaigned for years to end the flow of raw Mexican sewage in country. "He made too many mistakes and that's why he's not here anymore," said David Gomez of Nestor. He heads a group called Citizens Revolting Aga Pollution. Rep. Bob Filner, D-San Diego, who represents the border area, has been sharply critical of the IBWC. Filner couldn't be reached yesterday, but hi staff, David Ginsborg, commented on his behalf. "I think you could say we welcome the opportunity for the Clinton administration to leave its imprint on th We hope (the retirement) won't cause any further delays," Ginsborg said, emphasizing the "further." Ginsborg said White House officials have assured Filne are aware of the importance of the issue and that a new appointment will come quickly. Filner, as well as San Diego municipal officials and others, has publ criticized the management ability of the IBWC. Filner helped arrange an April hearing by a congressional subcommittee into the agency's handling of the b project. Gunaji could not be reached for comment yesterday. Joe Valdez, a top IBWC official who works closely with Gunaji, said the commissioner was no out. "No. He was not asked to retire," Valdez said. But he added that Gunaji, as a 1987 political appointee of then-President Reagan, could have continued i under President Clinton. Valdez also discounted the criticism from Filner and others. "In the type of position that he has, certainly there are always going to out there who criticize your actions," Valdez said. "He's done the best he possibly could under the circumstances. He's not the only one who has a say on thi the city, the state, the (federal Environmental Protection Agency)." In statements, Gunaji has placed part of the blame for delays in the project on the city. V noted that Gunaji is 64 and eligible to retire. The IBWC is a joint U.S.-Mexican agency that addresses water and boundary issues along the nearly 2,000-mil between the two countries. The planned 75 million-gallon-a-day sewage treatment plant, to be built at Monument and Dairy Mart roads, will be the biggest works project in the IBWC's history. Congress has a $239 million spending limit on the project, but critics of Gunaji have said the real cost will be far great of Gunaji also have alleged that there is no formal plan to dispose of the treated sewage for the first three years after the plant is in operation. Completion of undersea tunnel to dispose of the effluent is scheduled for 1998, but the treatment facility is supposed to be in operation by October 1995. Also, critics say, have been identified to operate and staff the plant once it is built. Nor, they contend, is there any apparent plan to deal with toxic chemicals, heavy metals ar industrial wastes in the Mexican sewage to be treated. (San Diego Union-Tribune, may 21, 1994) 1994/06/09 - Legal action planned by Sierra Club could l sewage cleanup. As residents of the Tijuana River Valley prepare for a temporary deluge of up to 20 million gallons a day of Mexican sewage, the Sierra Cl file a lawsuit that could delay construction of a treatment plant intended to clean up the overflow waste permanently. For two days, up to 20 million gallons Mexican sewage will flow into San Diego, through the Tijuana River Valley and out to sea as Mexican crews repair waste-water pumps near the border, the International Boundary and Water Commission (IBWC) announced yesterday. The flow could start as early as Monday. The wastes flowing through the Tiju will be chlorinated to kill some of the potential disease-causing bacteria and viruses, but county health officials aren't sure whether San Diego's southernmos will have to be quarantined as a result of the sewage contamination. Mexican sewage overflows have contaminated the Tijuana River Valley for more than 6

The IBWC, a joint U.S.-Mexican agency that handles boundary and water issues along the border, plans to break ground later this month on a sewage-treatn that would treat the overflow Mexican sewage and dispose of it at sea through an ocean tunnel. The first phase of the plant is scheduled to be completed by 1995. But the local chapter of the Sierra Club, which says the plant is poorly planned. It has threatened to sue the U.S. government, and said in a news relea night that it will make good on its promise. The club plans this morning to announce its filing of a lawsuit to force the U.S. Environmental Protection Agenc IBWC to consider alternatives to the planned $240 million sewage-treatment system, the news release said. Barry Hite, chapter chairman, earlier yesterday comment on the potential lawsuit. Lori Saldana, a Sierra Club representative, would not confirm that a lawsuit will be filed. She did say, however, that the c not want to impede a cleanup of the river valley. "We want to get these sewage flows cleaned up," she said. "It's an emergency public health problem." She s club wants to help the federal government save money and better protect the environment. "We want to get it (the sewage plan) on a track that we think will hundreds of millions of dollars and do a better job of cleaning up the mess. We're focused on alternative treatments." Nestor resident David Gomez, presider Citizens Revolting Against Pollution, said he and other members of his group who must suffer with the raw Mexican sewage almost daily are upset with the Club's plans to sue. "They say it's the worst environment impact report they've ever seen," Gomez said. "If they look in the valley, it is one of the worst envi disasters." He added: "We feel they're being very impractical in their efforts to solve this sewage problem. We're forced to live with sewage down here in the We can't wait to get the problem taken care of." In the short run, repairs to Mexican Pump Station No. 1, near the U.S. border, could begin as early as Mond Bill Ruth, IBWC project manager. An exact date has not been scheduled, he said. Mexico replaced two of the four pumps at the station in early April, but nc manual valves in all of the station's pumps must be replaced, Ruth said. One of the valves failed Monday, and, although the pump station is still operating, M officials drew up a plan to immediately replace the valves, he said. The repairs require the shutdown of the pump station for approximately 36 hours. During conditions, the station pumps raw Mexican sewage to San Antonio de los Buenos treatment plant, which treats Tijuana's sewage six miles south of the borde cut down on sewage flows out to the ocean off San Diego's coast, a pipe will be put into operation to convey up to 13 million gallons a day of Mexican sewa Point Loma Wastewater Treatment Plant, said Ann Sasaki, senior civil engineer for the city Metropolitan Wastewater Department. (San Diego Union-Tribur 1994) 1994/06/17 - Border sewage plant scheduled for July 15 start of construction. Construction of a San Diego sewage-treatment plant to clean up overflo from Mexico will begin July 15, Reps. Bob Filner and Lynn Schenk announced yesterday. Vice President Al Gore is scheduled to attend a ground-breaking along with local elected officials. The first step of the project is preparation of the site at the intersection of Dairy Mart and Monument roads in the Tijuana Valley. Completion of the plant is projected for October 1995. The $240 million plant is intended to treat raw Mexican sewage like that which has flowed in United States and out to sea for more than 60 years. The wastes contaminate the Tijuana River Valley and San Diego County's southernmost beaches. Mean Dion McMicheaux, supervisory civil engineer of the International Boundary and Water Commission, said the agency did not know when key waste-water p Tijuana will be shut down for repairs. Earlier, the commission said the repairs, which would last up to two days, would start as early as last Monday. Officia Tijuana could not be reached. As much as 20 million gallons a day of Mexican sewage will flow into San Diego, through the Tijuana River Valley and out to Mexican crews repair waste-water pumps near the border, the binational agency said. The wastes flowing through the Tijuana River will be chlorinated to k the potential disease-causing bacteria and viruses, but county health officials are not sure whether the county's southernmost beaches will have to be quarant result of the sewage contamination. (San Diego Union-Tribune, June 17, 1994) 1994/07/15 Vice President AI Gore was the featured speaker at the IBWC groundbreaking ceremony July 15, 1994, for the federal sewage-treatment plant, the biggest public works effort in the history of the International Boundary Commission. (The South Bay International Wastewater Treatment Plant Timeline, http://www.ibwc.state.gov/Files/south_bay.pdf)

1994/07/15 Sierra Club suit muddies treatment plant outlook U-TSan Diego (CA) (Published as San Diego Union-Tribune, The (CA)) July 15, 1994 Author KATHRYN BALINT Staff Writer As Vice President Al Gore and other officials celebrate a groundbreaking today on a $388 million facility that would trea sewage flowing in from Mexico, no one is sure exactly what kind of plant will be built. Looming over the start of construction, which officially begins Mon lawsuit by the local chapter of the Sierra Club challenging the U.S. government's plans to build a conventional sewage-treatment plant just north of the inter border. The Sierra Club says it doesn't want to delay cleanup of the Tijuana River Valley, but people on both sides of the border who desperately want to enc decades of Mexican sewage flows in San Diego fear the lawsuit could kill the long-awaited sewage-treatment plant. "We definitely want a treatment system Tijuana River Valley," said Sierra Club member Lori Saldana, who is named as an individual plaintiff in the lawsuit filed in federal court last month. "The q simply, 'What kind?'" The suit contends the U.S. government failed to thoroughly consider alternative sewage-treatment technologies, particularly the use of made ponds to cleanse the wastes. "We're horrified to see the Sierra Club come in at the last minute and say, 'Hey, wait a minute, folks, we don't like your pl you don't do it our way, we're going to file a lawsuit,'" said Nestor resident David Gomez, president of Citizens Revolting Against Pollution. Carolyn Power Imperial Beach resident who keeps a horse in the waste-plagued Tijuana River Valley, is circulating a petition denouncing the Sierra Club's lawsuit. "All we pray for is a judge throws the suit out," she said. "I think at this point, public opinion is totally against them." Roberto Espinoza, a representative of the Com Internacional de Limites y Aguas (CILA) in Tijuana, expressed concerned that the intervention of environmental groups could sink the border sewage-treatn CILA is the Mexican counterpart to the U.S. International Boundary and Water Commission (IBWC), which is building the treatment plant. State Sen. Steve D-Chula Vista, said he worries treatment plant project could "blow up overnight" as a result of the legal action. Bob Filner, D-San Diego, who claims Sierra membership, said he is "outraged" by the lawsuit and County Supervisor Brian Bilbray called it "well-intentioned but grossly misguided." While opposition lawsuit grows, the Sierra Club is gaining support of its own. The Surfrider Foundation plans to announce today that it has joined the case as a plaintiff. Mex wastes began trickling north into the Tijuana River Valley more than 60 years ago. As Tijuana's population burgeoned in the 1980s, 10 million gallons a day of sewage spewed across the border from unconnected sewer lines, aging pipes and overburdened sewage facilities. Most of it enters San Diego via the Tiju The wastes flowed through a valley of farms and an estuary where endangered plants and animals live, then out to sea, resulting in quarantines of beaches a as Coronado. Over the years, numerous proposals to deal with the Mexican wastes failed because of political snags or lack of money. The U.S. and Mexican governments embarked in 1990 on plans to build a border sewage treatment plant by the end of 1995, but the project has been dogged by delays, increasing changes in plans. The latest plans call for a "return-to-sender" pipeline to be built in the Tijuana River Valley by December 1995 to convey raw Mexican sev to Tijuana. While the pipeline will resolve the immediate problem of sewage flows in San Diego, a 25-million-gallon-a-day, advanced-primary treatment pla planned to begin operating in February 1996 is intended to protect San Diego when Tijuana sewage flows increase, said IBWC project manager Bill Ruth. A of the plant to secondary treatment is slated for 1997, followed by construction of a 3.5-mile-long tunnel to dispose of the treated sewage in the ocean by Fe 1998. (San Diego Union-Tribune, July 15, 1994) 1994/07/15 - (photo) Bob Filner, D-San Diego, gave Gore a pair of red boxing gloves to thank the vice pre "delivering a knockout blow to Tijuana sewage in this river valley." Vice President Al Gore joined other public officials yesterday in celebrating the start of construction of a binational sewage-treatment plant, saying, "We have found a solution to a problem which has afflicted our common border for six decades facility will treat raw Mexican sewage flowing into San Diego. "We can see a vision of better lives for those who live on the border on both sides," Gore tol 800 people attending the groundbreaking ceremonies in the Tijuana River Valley, just north of the international border. On Monday, construction crews will grading the 26-acre site at the corner of Dairy Mart and Monument roads. (San Diego Union-Tribune, July 16, 1994)

1994/07/16 Democrats flush with success Taking credit a matter of timing. To the victors belong the spoils of the enemy -and sometimes those spoils includ sewage. Which is why U.S. Reps. Lynn Schenk and Bob Filner shared the spotlight yesterday as ground was broken in the South Bay for an international se treatment plant that has been long in coming but which finally is arriving on their watch. The two San Diego Democrats co-hosted the afternoon event at the future site, onetime pasture land between the international border and the Tijuana River. Schenk invited a third Democrat, Vice President Al Gore, to give th

principal address. As nearly every speaker noted during the 45 minutes of oratory, hundreds of people have toiled to bring about the day when raw sewage r flows from the homes of Tijuana onto the beaches of San Diego County. Yet, as usually happens in such ceremonial settings, the people in power got the lio of the credit. Thus, it was that the crowd of 800 heard Filner praise Gore and heard Schenk praise Filner and Gore. And it heard Gore praise Filner and Sche dynamic duo" -and it heard Gore extend a modicum of credit to almost every Democrat who was in the audience and some who were not. The mutual accol reached their zenith when Gore announced: "There is not a city in this nation, anywhere, represented by two members of Congress who fight more aggressiv more effectively for their constituents than Lynn Schenk and Bob Filner." The underlying, if barely concealed, theme: Two Democrats in Congress working Democrat in the White House accomplished in 18 months what a slew of Republican congressmen and two Republican presidents could not accomplish in r a decade. "This has been a 10-year effort by hundreds and hundreds of people," Filner said before the ceremony. "But the fact is that ground was broken tod for the first time you had two members of Congress and a president of the same party. "We were able to get an incredible amount of focus on this. We persua president of the United States, who told the OMB (Office of Management and Budget), who told the EPA (Environmental Protection Agency), who told the Department to get this thing done." It is a point that voters in the 49th Congressional District are likely to hear again as Schenk seeks re-election this fall aga county Supervisor Brian Bilbray, a Republican who has fought the battle against Mexican sewage since he was mayor of Imperial Beach and who watched y festivities from the cheap seats. And it is a point that Clinton and Gore will be making two years from now when they seek California's 54 electoral votes fo time. As Gore said yesterday, "I don't know if you noticed this, but we've been trying awful hard in California." While the Democrats drove home their poin however, others were left to stew. "This has been my No. 1 project for 14 years," said Bilbray, who drew national attention to the problem by mounting a sk and trying to dam off the polluted Tijuana River before it reached the ocean. "Everybody loves to show up and get credit for getting something done. It's jus It's expected, I guess." Nonetheless, Bilbray insisted, "I could care less who gets credit for it. I have no fear about this issue being stolen from me. People ar to forget the image of me on that bulldozer. I don't need to stand on any podium." And while a representative of Republican Gov. Pete Wilson was allowed t the governor's office had to fight off a last-minute effort to remove Wilson's proxy from the agenda. A letter had to be sent to Tom Epstein, President Clinto assistant for political affairs, reminding him of "the depth and duration" of Wilson's involvement with the issue as a San Diego mayor, U.S. senator and gov reported to be less than thrilled with her station was the current mayor, Susan Golding, whose staff briefly feared she, too, might be excluded from the ceren owing to her icy relations with Schenk. Golding was invited to kick off the event by welcoming the crowd and introducing the people on the dais. However, Republican mayor's remarks more than exceeded those duties ~ as well as the three-minute limit set for her ~ as she gave her own thoughts of the day's sign and sought to spread credit in directions it otherwise would not have headed: toward Bilbray, state Sen. Steve Peace and Rep. Duncan Hunter. (San Diego U Tribune, July 16, 1994)

1994/07/16 - Ground broken for plant to treat Tijuana overflow. Vice President Al Gore joined other public officials yesterday in celebrating the start of con of a binational sewage-treatment plant, saying, "We have found a solution to a problem which has afflicted our common border for six decades." The facility raw Mexican sewage flowing into San Diego. "We can see a vision of better lives for those who live on the border on both sides," Gore told about 800 peop attending the groundbreaking ceremonies in the Tijuana River Valley, just north of the international border. On Monday, construction crews will begin gradi acre site at the corner of Dairy Mart and Monument roads. "It marks an end for the citizens of San Diego of being forced to live with raw sewage flowing in back yard," said Mayor Susan Golding. J. Arturo Herrera Solis, commissioner of the Comision Internacional de Limites y Aguas (CILA), said the presence highest U.S. authorities" at the ceremonies shows the United States' firm commitment to the project and to the well-being of residents of San Diego and Tiju CILA is the Mexican counterpart to the U.S. International Boundary and Water Commission (IBWC), which is building the treatment plant. Plans, which be 1990, call for a $388 million primary sewage treatment plant, a secondary treatment plant and a 3.5-mile tunnel to discharge the treated sewage into the ocea paid for by the United States. The first phase includes construction of a 42-inch-diameter pipeline by December 1995 to return overflow sewage to the Tijua system. The pipeline will end the immediate problem of raw sewage in the river valley, said IBWC project manager Bill Ruth. An advanced primary treatm capable of treating 25 million gallons a day, is scheduled to begin operating in 1996. That is to be followed by a secondary treatment plant in 1997 and the s discharge tunnel in 1998. Speakers at the ground-breaking expressed gratitude to those responsible for getting the project off the ground. Gore singled out a group, Citizens Revolting Against Pollution, for prodding politicians to clean up the sewage-plagued valley. Reps. Lynn Schenk and Bob Filner, both D-San credited President Clinton for listening when they brought the issue to his attention a year ago aboard Air Force One. "He followed through," Schenk said. F Gore a pair of red boxing gloves to thank the vice president for "delivering a knockout blow to Tijuana sewage in this river valley." Standing quietly on the were Sierra Club member Lori Saldana and the club's attorney, Thomas Penfield, who were not invited to the event. The Sierra Club outraged people who h years trying to solve the border sewage problem when it filed a lawsuit last month challenging the U.S. government's plan to build a mechanical sewage-trea plant. The Surfrider Foundation has joined the lawsuit as a plaintiff. The suit seeks to stop construction of the plant, saying that a series of ponds would mor effectively and less expensively treat the sewage by using natural processes. (San Diego Union-Tribune, July 16, 1994)

1994/07/16 - Vice President Al Gore joined other public officials yesterday in celebrating the start of construction of a binational sewage-treatment plant. Fi Gore a pair of red boxing gloves to thank the vice president for "delivering a knockout blow to Tijuana sewage in this river valley." (San Diego Union-Trib 16, 1994)

1994/07/17 - Construction Contract 1 (CC-1) - Site Preparation. CC-1 covered the site preparation, including deep dynamic compaction, grading, and flood protection, of a 35-acre site for the SBIWTP . Construction contract awarded to: Fleming Engineering, Cerritos, CA Notice to proceed: July 17, 1994 Const Cost through modification 9: $4,873,615 Completion date: February 23, 1995 (South Bay International Wastewater Treatment Plant Status Report, Part 1, A)

1994/11/02 - Despite misgivings, Coronado won't fight border sewage plant. The Coronado City Council yesterday pledged not to impede construction of a treatment plant at the border, but the council expressed concern that treated wastes discharged from the new plant might flow north and contaminate the city Mexican sewage has flowed across the border into the Tijuana River Valley in San Diego for more than 60 years, fouling beaches as far north as Coronado a For years, the city of Coronado remained uninvolved as plans were drawn up for construction of a 25-million-gallon-a-day treatment plant in the Tijuana Ri to handle overflow Mexican wastes. "I'm embarrassed for the city that we're jumping into this so late," Councilman Thomas Smisek said. "We do have legit concerns, but I'm hesitant to jump in to stop or delay this thing. I just don't feel comfortable with the information we've received so far to get into any kind o litigation or to put any kind of hold on this plant at this time." The council voted 4-0 not to impede progress on the plant, now under construction, but asked keep close watch on the project. The $388 million facility, largely paid for by the United States, is intended to treat the Mexican sewage that flows into San discharge it 4.5 miles offshore. The first phase of the plant is scheduled to be begin operation in 1996. However, the local chapter of the Sierra Club and the Foundation have filed a lawsuit challenging construction of the sewagetreatment plant, saying it will cost too much, won't effectively treat the sewage and w adequately reduce industrial toxic metals and compounds found in Mexico's sewage. Richard Odiorne of the city of Coronado's Engineering Services echoe the Sierra Club and Surfrider Foundation concerns. Even though Mexico has agreed to force its industries to pretreat their sewage to eliminate potentially ha toxic compounds and metals, Odiorne said, little has been done toward that end. He also expressed concern that the sewage-outfall tunnel planned to dispos treated sewage beginning in 1998 may not be long enough, allowing ocean currents to carry the wastes to Coronado's shoreline. Odiorne suggested several o

action, from requesting more studies of the proposed treatment process and disposal plans to suing to stop the plant. Though the council said it wasn't prepa action to halt the project, City Councilman Robert Chamberlain said he has some concerns. "I certainly want to see this as a high priority for our staff," he s not want to blindly keep going. Something like this is going to have an impact on Coronado for generations to come. I can't think of anything that would be important to us." The cities of San Diego and Imperial Beach, whose beaches have been fouled by the Mexican sewage, are pushing for a speedy completio treatment plant. Democratic Reps. Lynn Schenk and Bob Filner of San Diego, county Supervisor Brian Bilbray and Imperial Beach Mayor Mike Bixler all u Coronado City Council not to impede the project, saying it is in Coronado's best interest. Sierra Club attorney Thomas Penfield warned that for the first cou of operation of the treatment plant, the outfall tunnel will not be built and that the treated sewage may be allowed to simply flow out the Tijuana River and i surf. "There will be beach closures, we fear, 365 days a year," he said. (San Diego Union-Tribune, Nov. 2, 1994)

1994/11/24 - Residents have 2 flood control options. South San Diego residents once hoped that the Tijuana River Valley would become "Mission Bay Sout wonderland replete with aquatic parks, inland harbors and a direct link to San Diego Bay. Almost 30 years later, the valley remains an undeveloped marsh, a Mexican sewage and scores of unfulfilled promises. Wedged between two teeming metropolises, the 17,500-acre valley is home to dozens of farms, an estu endangered plants and animals live and the county's worst sewage problem. Open sewage runs near homes at the valley's edge, and periodically rains spread beyond its banks, threatening structures with waste-laden floodwater. Two new projects pledge to wrest the valley from the brink of a sewage disaster. Drea water park have long faded, but officials and residents would be happy just to clean things up. "Our intent is to improve conditions in the valley where they at the whim of nature and victims of poor planning," said San Diego City Councilman Juan Vargas. "We don't want a sewer-based ecology." The first projec with the raw sewage that flows from Tijuana through the Tijuana River. The riverbed on the Mexican side is a concrete channel that empties at the border. " channel is like the open barrel of a gun pointed right at the valley," Vargas said. Under construction is a $388 million facility that will treat the raw sewage a reduce pollution. The plant should be on line by 1996. In the second project, the city plans to improve a flood control channel to prevent flooding like that o which caused more than $25 million in damage. Heavy rains last year filled reservoirs in Mexico and resulted in massive flooding along the valley as waters released. The river, normally a meek trickle, swelled over into a white-water sledgehammer, destroying farms, stranding residents and endangering homes. anti-flooding plans will try to prevent that, said Frank Belock, a city engineer and chairman of a river valley flooding task force. The task force is to make a recommendation next month, and the City Council will consider it in January. Valley residents are not enamored with the proposals, which they say don't go enough. "This isn't going to prevent the flooding," said David Gomez, president of Citizens Revolting Against Pollution. "We would love to see a proper flo channel that takes this stuff right out to the ocean." After culling a list of 13 proposals, the city is offering two options for the valley. The first option costs $ and involves improving dikes and berms along the sides of the valley that would allow the river to seek its own path. Under the second option, costing $78 m the city would improve an earthen pilot channel that runs along the south side of the valley next to the border. A 1,000-foot-wide swath, 1.8 miles long, wou on each side of the channel to create a catch basin for floodwaters. The second option would also include a system of low berms to protect homes and the po filling of the river's old northern path, which carved up South San Diego neighborhoods. Under either alternative, the city would try to build a channel far sl than desired by residents, Gomez said. His group last week endorsed the city's second option but will also push for a full channel to the ocean. "There's no g that the river will stay to that (south) side of the valley," Gomez said. "In 1993, the flood spread through whole valley. That's why homes on the north side w flooded." The incursion of Mexican waste is a decades-old problem that worsened in the 1980s as Tijuana's population boomed. (San Diego Union-Tribune, 1994) 1994/11/24 - The 17,500-acre valley is home to dozens of farms, an estuary where endangered plants and animals live and the county's worst sewage Two new projects pledge to wrest the valley from the brink of a sewage disaster. The first project is a $388 million facility that will treat the raw sewage and reduce pollution. The plant should be on line by 1996. In the second project, the city plans to improve a flood control channel; the city is offering two optio valley. The first option costs $33 million and involves improving dikes and berms along the sides of the valley that would allow the river to seek its own pat the second option, costing $78 million, the city would improve an earthen pilot channel that runs along the south side of the valley next to the border. A 1,0 wide swath, 1.8 miles long, would be cut on each side of the channel to create a catch basin for floodwaters. The second option would also include a system berms to protect homes and the possible filling of the river's old northern path, which carved up South San Diego neighborhoods. (San Diego Union-Tribun 1994) 1994/12/01 - Sewage plant delayed again. A promised treatment plant that was to begin cleaning up raw Mexican sewage flowing into San Diego has delayed another year, leaving people who live near the contamination frustrated and outraged. Estimated completion of the plant just north of the border nov postponed from December 1995 to December 1996. It is the latest in a series of delays that have dogged the $403 million project, which is being largely pai the United States to end more than six decades of Mexican sewage flows into the Tijuana River Valley in San Diego. The plant will treat 25 million gallons a day. "It's not good news at all for us down here in South Bay," said David Gomez, a Nestor resident who is president of Citizens Revolting Against Polluti have two more years of sewage coming down the river." Top officials of the U.S. sector of the International Boundary and Water Commission (IBWC), the Texas-based agency in charge of building the plant, refused over the past three days to explain the delay. The IBWC is a joint U.S.-Mexican agency that add water and boundary issues along the nearly 2,000-mile border of the two countries. Robert Ybarra, secretary to the IBWC's U.S. Commissioner John M. Be the agency is consulting its attorneys before disclosing any information. However, Bill Ruth, the IBWC's project manager based in San Diego, said the agen pledge made a year ago to have the plant running by the end of 1995 was too ambitious. "There were a lot of problems trying to meet that type of schedule f project of this size and complexity," Ruth said. Even now, the IBWC is setting an ambitious schedule. An independent consultant hired by the IBWC to revi plant's specifications told the agency that construction of such a project would normally take between 28 and 32 months. Ruth said the IBWC plans to direct contractor it hires to complete the project in 21 months. Grading of the plant site, at the corner of Monument and Dairy Mart roads, began in July. Construct expected to begin in March 1995, Ruth said. Since the IBWC embarked on the project in 1990, cost estimates have nearly doubled and the completion date, in 1994, has repeatedly changed. When the IBWC announced last year that it could not finish the project until December 1998, the cities of San Diego and I Beach and the state of California declared states of emergency. Residents living near the Tijuana River Valley expressed outrage at having to put up even lo the smell, mosquitoes and health hazards of the sewage. As a result, the IBWC then agreed to a fast track for construction by initially building a facility that sewage to a lesser degree than originally planned. That plant was to be completed in August 1995, but the schedule later slipped to October 1995, then Dece 1995. Gomez said he can no longer remember how many delays have beset the project. "We can't rely on them (IBWC officials) anymore," he said. "Each ti keep changing." Imperial Beach resident Carolyn Powers said she does not blame the IBWC for the delay. Powers said she believes that the fast track was n feasible timetable but a ploy to make politicians look as if they were solving the border sewage problem. "I would say it was a political issue, without pointi to individuals," she said. "It really looked good but, when it came down to it, it was an impossibility. It's sad to me to see a federal agency like IBWC left ho bag." Frustrated by the repeated delays, San Diego said earlier this year that it could complete the project faster than the IBWC and asked to take over const the border sewage project. The federal government rejected the request. "We're going in the wrong direction," David Schlesinger, director of the San Diego Metropolitan Wastewater Department, said of the latest delay. "The city will continue to offer whatever assistance it can to the feds to make sure this schedu not slip any further." (San Diego Union-Tribune, Dec. 1, 1994) 1995 - Sewage Expansion of Tijuana, Mexico to the hills and mesas south of the Tia Juana caused additional problems besides seasonal flooding. One of the most serious was the spilling of raw sewage. From the late 1930s through the 1960s an int collector and septic tank system with a shoreline discharge in the ocean off the mouth of the Tia Juana River dealt with Tijuana Mexico's sewage problems a border (Miscellaneous Survey NO.74 1937; IBWC 2005). In the '60s Mexico constructed two pump stations and two pressure line systems along the south s border that provided ocean discharge of untreated sewage 5.6 miles south of the international boundary. The city's infrastructure could not cope with the rat growth and the new system soon became overtaxed. In 1966 an emergency collector line between the main sewage line of Tia Juana and San Diego City's tr

facility on Point Loma was completed to provide backup service for periods when the Tijuana system was not functioning (IBWC 2005). In spite of these ef Tijuana's sewage collection facilities continued to fail and by the 1980s 12 to 20 million gallons of raw sewage a day were pouring into the Tia Juana Valley Goat Canyon and Smuggler's Gulch as a result of broken or plugged up lines, or simple overcapacity. Some relief has come over the years as a result of a 16 dollar bi-national project to construct cross border sewage collection and treatment stations along with a parallel conveyance system. This basically produce up line so if one broke the waste could be transferred to the other (Powers 2005; IBWC 2005). Between 1995 and 1997 the United States section of the Inte Boundary and Water Commission constructed the South Bay International Wastewater Treatment Plant (SBIWTP), at the east end of the Tia Juana Valley, s Dairy Mart Road. This 25 million gallon per day advanced primary plant treats sewage from Tijuana, Mexico and discharges it to the Pacific Ocean through Bay Ocean Outfall, a four and one-half mile long 11-foot diameter pipe completed in January 1999. Completed at a cost of $42,000,000, the project was fun Environmental Protection Agency (IBWC 2005). In spite of these efforts sewage contamination from south of the border remains a problem in the Tia Juana Valley. Although millions of gallons may no longer flow daily, seasonal rains still cause the systems in Mexico to fail and spillage into the valley during the is substantial. (Van Wormer, Stephen R. "A Land Use History of the Tia Juana River Valley," California State Parks, Southern Service Center, June 2005.)

1995/05/19 - Mexico sewage accord reported But activists say not all suit issues are set. U.S. officials say that they tentatively settled a lawsuit this week fil environmental activists who sought to stop construction of a sewage-treatment plant that would clean up raw Mexican wastes flowing into San Diego. But t plaintiffs, the local chapter of the Sierra Club and the Surfrider Foundation, deny the federal defendants' reports of an accord. The two environmental advoc filed suit in federal court here against the U.S. International Boundary & Water Commission (IBWC) and the U.S. Environmental Protection Agency (EPA) binational plan to build a conventional sewage-treatment plant just north of the international border. "Now that we've got this settled, we can go forward and project constructed," said Bill Ruth, IBWC project manager. The U.S.Mexican commission addresses water and boundary issues along the nearly 2,000-mil Sierra Club member Lori Saldana, an individual plaintiff in the lawsuit, said an announcement is premature. "We had thought we'd keep this low-key becaus settlement is not complete," she said. The 25-million-gallon-a-day plant is being built on 26 acres at the corner of Dairy Mart and Monument roads to end a decades of Mexican sewage contamination along San Diego County's southernmost beaches. The often-delayed treatment plant has again fallen behind sche two months. The primary-treatment part of the operation is now scheduled for completion in February 1997 instead of December 1996 due to a snag with co bids unrelated to the lawsuit, Ruth said. In their yearlong legal action, the Sierra Club and Surfrider Foundation contend that a series of ponds that imitate na of purifying water would cleanse the Mexican wastes more effectively and less expensively than conventional sewage treatment, which uses screens, filters, and microorganisms to remove solids from the wastewater. The lawsuit also raises concern that industrial toxic metals and compounds will continue to cont the ocean. After months of negotiations, the IBWC and EPA said Wednesday they had resolved all of the points of contention, except for payment of the Sie and Surfrider Foundation attorneys. The agreement is subject to final approval by all parties, the IBWC and EPA said. According to Ruth and the EPA's Cla Tenley, the reported tentative settlement calls for the U.S. government to conduct two supplemental environmental impact statements that address: [] Where sewage will be discharged in the year after the sewage-treatment plant is complete but before a 3.5-mile undersea tunnel to dispose of the wastewater into th complete. [] How Mexico will dispose of the sludge, or the black solids left over after sewage treatment. [] Plans to keep industrial toxic agents out of Mexi water. [] Whether pond technology could be used instead of conventional secondary treatment. Primary treatment operation would use conventional technol planned. Nestor resident David Gomez, president of Citizens Revolting Against Pollution, said he welcomes a settlement enabling construction to move for unimpeded. "One of our greatest concerns was that the Sierra Club would hold up the project," he said. Ruth said the construction of the primary treatment set to begin next month, would not be affected by the settlement. He said the secondary treatment operation could be delayed if the sewage-treatment ponds Gomez and Imperial Beach resident Carolyn Powers expressed concern that settlement leaves the door open for ponds, to which they object. Powers said sh suspects the Sierra Club and Surfrider Foundation attorneys will be paid out of the U.S. fund to build the treatment plant, which, at $239 million, already is the estimated construction costs. "There is money there in the pipe, and they are getting their hands into it," said Powers, adding that she believes money, no environmental concern, was the ulterior motive behind the lawsuit. (San Diego Union-Tribune, May 19, 1995) 1995/05/19 - Sierra Club attorney Thomas and Surfrider Foundation attorney Gary Sirota declined to discuss any settlement terms. "I would hate to see the thing blow up," Penfield said. If the case is in six weeks, Sirota said, "we're going to trial." Meanwhile, U.S. and Mexican officials continued this week to negotiate Mexico's contribution to the treatm Previous estimates assume Mexico would pay $16 million, as well as dispose of the sludge. Ruth said a recent report that Mexico is considering reneging or commitment to border clean-up projects as a result of the peso's devaluation does not apply to the sewage-treatment project. "That's what's coming out of bi meetings in Washington, but it's not in our discussions with Mexico," he said. "There has been no indication that they will not, or do not, have the funds to participate." (San Diego Union-Tribune, May 19, 1995)

1995/06/12 - Construction Contract 2 (CC-2) - Advanced Primary Treatment Facilities. CC-2 covers the construction of a 25 mgd average flow advanced pr wastewater treatment facility, including headworks, chemically enhanced primary sedimentation facilities, solids dewatering and processing systems, and oc reduction systems. CC-2 also covers the construction of interceptor-collection systems and conveyance pipelines for Stewarts Drain and Canyon del Sol. Co contract awarded to: Western Summit Constructors, Denver, CO Bid Price: $40,698,000 Cost through Modification 77: $41,183,427 Notice to proceed: Jun Contract completion date: June 19, 1997 (South Bay International Wastewater Treatment Plant Status Report, Part 1, April, 1998)

1995/07/07 - New suit challenges S.D. plans for sewage. Surfrider Foundation seeks in-depth study, attorney, court costs. In another legal challenge to a pro intended to clean up raw Mexican sewage that flows across the border, the Surfrider Foundation has sued San Diego, saying wastewater contamination will even after the city builds an ocean outfall to dispose of sewage. The lawsuit, filed last week in San Diego Superior Court, takes aim at the city of San Diego build an undersea tunnel that would discharge the sewage 3 1/2 miles offshore. The 60-page lawsuit says the city inadequately assessed the environmental i the tunnel. For instance, the lawsuit contends the city failed to thoroughly study whether a gyre, or swirling ocean current, could wash the treated sewage ba shore. "Through the lawsuit, the Surfrider Foundation is attempting to get the city to simply do its job," said the organization's attorney, Rory Wicks. The la the court to require the city to prepare a more in-depth environmental impact report and to reimburse the Surfrider Foundation for court costs and attorney f envisioned, the treatment plant would process up to 25 million gallons a day of Tijuana sewage. It is being built by the U.S. section of the International Bou Water Commission at the corner of Monument and Dairy Mart roads in the Tijuana River Valley, just north of the international border. San Diego was put in constructing a tunnel to dispose of the treated Tijuana sewage, and, in the future, San Diego's treated sewage. The Surfrider Foundation, a group of surfers a ocean users that advocates protection of beaches, states in the lawsuit that members have been "damaged" by pollution from Mexican sewage along San Die County's southernmost shores. "The city's operation of the project will cause further damages . . . ," the lawsuit contends. But proponents of the $380 millio say it will end six decades of Mexican sewage flows into San Diego during dry weather. The project has been planned and largely paid for by the U.S. gove Proponents who learned yesterday about the latest lawsuit say it is another attempt by the Surfrider Foundation to thwart the cleanup effort and make money taxpayer expense. In the past, Surfrider Foundation members have said their attorneys do the work pro bono, out of concern for the environment. A lawsuit year ago against the U.S. government by the Surfrider Foundation and the Sierra Club to stop construction of the treatment plant is pending in federal court. major issues have been tentatively settled, except for attorney fees, federal officials said. Whether the environmental groups' legal costs will come out of pro is undetermined. "It appears to me that someone in the attorney community has a vested interest in continuing this sewage litigation," said David Schlesinge of San Diego's Metropolitan Wastewater Department, which plans to begin constructing the tunnel in August. Imperial Beach resident Carolyn Powers calle

lawsuit "environmental blackmail," adding, "They're going back after more money." Rep. Brian Bilbray, R-lmperial Beach, said he is baffled why surfers w a project intended to clean up the ocean. "It looks like a full employment act for lawyers, rather than trying to take care of the surf," he said. (San Diego Un Tribune, july 7, 1995)

1995/09/28 - Bid Package/Contract #2 (BP2) - SBOO Drop Shaft/Tunnel/Riser Marine Construction. Bid Package/Contract #2 covers the construction of a the SBOO, including a seawater anti-intrusion structure, drop shaft, tunnel and riser pipe. The drop shaft/tunnel will commence at the western terminus of t Status: The tunnel boring machine has set 3586 precast concrete rings (14344 feet of tunnel). Precast concrete segment fabrication continues; approximately rings (20,500 segments) have been fabricated. Riser work has been completed and Case Foundation has demobilized. Construction contract awarded to: Tra Brothers, Inc./Obayashi Corporation J.V. Bid Price: $88,285,000 Notice to proceed: September 28, 1995 Construction completion: July 17, 1998 (South Ba International Wastewater Treatment Plant Status Report, Part 1, April, 1998)

1996/01/08 - Bid Package/Contract #3 (BP3) - SBOO Marine Construction. Bid Package/Contract #3 covers the construction of 4660 feet of sea floor pipeli structure, and two 2000 foot diffuser legs for the SBOO. Construction contract awarded to: Fletcher General Construction Bid Price: $36,442,000 Contracte awarded: November 29, 1995 Notice to proceed: January 8, 1996 Construction completion: January 7, 1998 (South Bay International Wastewater Treatmer Status Report, Part 1, April, 1998)

1996/03/21 - Construction Contract 1A (CC-1A) - Deep Dynamic Compaction of Corridor. CC-1A covers the deep dynamic compaction of the corridor bet advanced primary treatment facilities and the South Bay Land Outfall, near Dairy Mart Road. The structures and pipeline that will be constructed in this cor under Construction Contract 2B (CC-2B) and Bid Package/Contract #1 will connect the advanced primary treatment facilities to the South Bay Land Outfal Construction contract awarded to: Fleming Engineering, Inc. Construction Cost through modification 3: $804,082 Notice to proceed: March 21,1996 Contra completion date: July 18, 1996 (South Bay International Wastewater Treatment Plant Status Report, Part 1, April, 1998)

1996/04/17 Bid Package/Contract #1 (BP1) - SBIWTP to SBLO Structures/Pipeline. Bid Package/Contract #1 covers the construction of an effluent distribu structure, energy dissipator, entrained air vent, and piping that will connect the SBIWTP to the east terminus of the SBLO pipeline (near Dairy Mart Road b The effluent distribution structure will receive treated effluent from the SBIWTP and from any future City of San Diego wastewater treatment plants constru the South Bay area. Status: The punch list items are now essentially complete, with the exception of the installation of pressure gauges, transmittal of remai parts and lock keys, submittal of as-built drawings, required bonds and warranties, training, start-up and testing, The project is now in the mothball or preve maintenance period until start-up and testing which will take place on or about September 19, 1998. Construction contract awarded to: Colich and Sons, Ga Bid Price: $9,950,000 Notice to proceed: April 17, 1996 Construction completion: July 27, 1997 (South Bay International Wastewater Treatment Plant Stat Part 1, April, 1998)

1996/06 Design work for the SBIWTP and all SBIWTP-related projects was essentially completed in June 1996. (South Bay International Wastewater Trea Plant Status Report, Part 1, April, 1998)

1996/06/11 Construction Contract 2B (CC-2B) - Primary Effluent Discharge Connection. CC-2B covers the construction of structures and a pipeline to con advance'd primary treatment facilities to the effluent distribution structure. CC-2B also covers the construction of improvements to the Silva Drain intercept collection system that were deleted from CC-2, as well as construction of roads and levees, and mass grading of the corridor prepared under CC-1 A. Consti contract awarded to: Nielsen Dillingham Builders Bid Price: $11,044,000 Cost through modification 72: $11,607,762 Notice to proceed: June 11, 1996 Con completion date: January 30,1998 (South Bay International Wastewater Treatment Plant Status Report, Part 1, April, 1998)

1996/07/03 Construction Contract 5 (CC-5) - Remote Dechlorination Facility. CC-5 covers the construction of a dechlorination facility in Goat Canyon to r residual chlorine from wastewater effluent from the SBIWTP before discharge through the ocean outfall. Status: Design of the remote dechlorination facilit completed on July 3, 1996. Construction is on hold pending completion of the Supplemental Environmental Impact Study for the SBIWTP Long Term Trea Options. (South Bay International Wastewater Treatment Plant Status Report, Part 1, April, 1998)

1996/09/24 Construction Contract 4A (CC-4A) - Smugglers Gulch Interceptor-Collection System and Hollister Street Pump Station. CC-4A covers the cons of an interceptor-collection system to capture fugitive surface sewage flows from Smuggler Gulch, and a pump station to convey these flows to the SBIWT Construction contract awarded to: Reza Inc./Dennis J. Amoroso Construction Co. Inc. a joint venture Bid Price: $3,979,000 Cost through Modification 18: Notice to proceed: September 24, 1996 Contract completion date extension: April 5, 1998 (South Bay International Wastewater Treatment Plant Status Rep April, 1998)

1996/09/24 Construction Contract 4B (CC-4B) - Goat Canyon Interceptor-Collection System and Pump Station. CC-4B covers the construction of an interc collection system to capture fugitive surface sewage flows from Goat Canyon and a pump station to convey these flows to the SBIWTP . Construction cont awarded to: Reza Inc./Dennis J. Amoroso Construction Co. Inc. a joint venture Bid Price: $3,735,000 Cost through Modification 12: $3,744,330 Notice to p September 24, 1996 Contract completion date extension: February 14, 1998 (South Bay International Wastewater Treatment Plant Status Report, Part 1, Ap

1997 - The South Bay International Wastewater Treatment Plant (SBIWTP) is located on a 75-acre site near the international border and provides for advan primary treatment of 25 mgd of Tijuana sewage. The SBIWTP construction was completed in April, 1997; the South Bay Ocean Outfall was completed in J 1999, at which time the SBIWTP became fully operational. . The Government of Mexico contributed $16.8 million toward construction of the SBIWTP and contributes $1.1 million toward the annual operation and maintenance costs. Funding for the U.S. share of construction costs was appropriated through the Environmental Protection Agency in the amount of $239.4 million. Of that amount, $225.5 million had been obligated as of 2002, of which $89.2 million w to the City of San Diego and the Corps of Engineers to construct the South Bay Ocean Outfall; $8 million was given to the Corps of Engineers for environm work; and $127.4 million was given to the USIBWC for the costs associated with the construction of the SBIWTP and related infrastructure. Mexico's share construction cost was that amount that Mexico would have had to pay to construct and maintain a plant at the Rio Alamar, and the construction of a 144 incl land and ocean discharge outfall with canyon collectors. Both countries share in the operation and maintenance of the SBIWTP. Mexico is expanding its sev collection system, and constructing additional works necessary to collect and convey Tijuana's sewage. These future facilities will be operated and maintain Mexico's expense. (South Bay International Wastewater Treatment Plant, http://www.ibwc.state.gov/mission_operations/sbiwtp.html)

1997 - Tijuana Parallel System Works The State of Baja California has constructed a parallel conveyance and treatment system in Tijuana similar to that cor under IBWC Minute No. 270 which includes pumping facilities, pressure lines and rehabilitation of the San Antonio de Los Buenos Wastewater Treatment rehabilitation of the treatment plant provides secondary treatment to an average daily flow of 25 mgd discharged at the shore at a point 5.6 air miles south o

international boundary. The system will be interconnected with the (SBIWTP) and will follow safeguards against transboundary pollution established by the States and Mexico in Commission Minute No. 298 signed on December 2, 1997. The system was developed in a partnership coordinated by the Border Env Cooperation Commission (BECC)and the North American Development Bank (NADBANK), the IBWC, the Environmental Protection Agency (EPA)and M Comision Nacional del Agua (CNA) , with support from the State of California and the City of San Diego. (South Bay International Wastewater Treatment http://www.ibwc.state.gov/mission_operations/sbiwtp.html)

1997 - Minute No. 296, relating to distribution of construction, operation, and maintenance costs for the plant, is agreed to by the U.S. and Mexico. (The So International Wastewater Treatment Plant Timeline, http://www.ibwc.state.gov/Files/south_bay.pdf)

1997 - Advanced primary plant opens with discharge through an emergency connection to the City of San Diego Point Lorna treatment facility. (The South International Wastewater Treatment Plant Timeline, http://www.ibwc.state.gov/Files/south_bay.pdf)

1997/10/29 - Working hard on the border environment WRIGHT, a professor of geography at San Diego State University, is chairman of the Transboundary Inventory. The report on the North American Free Trade Agreement released recently by the Clinton administration has sparked debate about the pact amon United States, Mexico and Canada. It has also ignited discussion on the performances of the Border Environment Commission (BECC) and the North Amer Development Bank (NADBank). These are the first binational institutions authorized and funded by the United States and Mexico to develop and finance environmental infrastructure projects to help clean up the border. What have they accomplished in the first three years of their existence? The BECC has wo communities on both sides of the border to approve 16 infrastructure projects representing a potential investment of $230 million to the benefit of more than million people. These projects will resolve critical water and waste-water problems. Of the 16 projects, seven already are under construction, and three more scheduled to start construction soon. Five of the 16 projects certified by BECC are in San Diego and Imperial counties and adjoining sections of Mexico. Th the Brawley water treatment plant, the South Bay water reclamation plant being pushed by the city of San Diego and other local agencies, the Ensenada was treatment plant, the Tijuana parallel conveyance system and treatment plant rehabilitation, and the Ecoparque Tijuana waste-water treatment pilot project. S when BECC and NADBank were established, they have faced significant challenges in carrying out their mission on both sides of the border. During their f years of operation, both the institutions have had to develop tools to deal with high project costs and insufficient community resources, the lack of adequate limited development of projects and the inefficiencies of water, sewage and sanitation utilities. Despite these challenges, an enormous amount of collaborati good will has evolved between the United States and Mexico at the federal, state and local levels since these institutions were created. It is difficult to solve transboundary border problems environmental, social or otherwise -and move toward common solutions without this basic foundation of mutual respect, tru understanding. From a global perspective, there is increasing recognition that these institutions the first environmental institutions resulting from a trade agr are becoming models for how transboundary environmental problems can be addressed in a fundamentally sound, transparent and participatory manner betw countries with disparate economies and different languages, cultures and political systems. They have set an important precedent for how future trade agreer might address trade-related environmental and social issues. However, concerns have been raised that the pace of these institutions is too slow, that the BEC to work closer with existing border entities, and that the NADBank needs to make its financing more affordable for poor border communities. In fact, in the existence, BECC and NADBank have instituted a number of programs and activities. In addition to the 16 projects certified, BECC established its office and binational staff, developed its rules and procedures and created unique project certification criteria that allow for extensive public comment. With this groun place, BECC and NADBank are moving projects through the certification process more efficiently, including better coordination with federal, state and loca In addition, BECC has provided technical assistance to communities over the last 2 1/2 years (more than $800,000 thus far) and created an even larger assis program, thanks to a $10 million grant from the Environmental Protection Agency. In parallel, the NADBank has established a program aimed at providing to communities in areas of institutional strengthening and financial development to ensure long-term viability of projects. This program has committed a tot million to 12 communities during its first six months of operation. NADBank is leveraging the financing needed for environmental improvement projects. T its leveraging capability and to make financing affordable for communities, the NADBank has established an initial fund of $170 million. This fund can pro money for construction to make loan financing more affordable. The BECC and NADBank are doing their jobs, doing them well and taking steps to make th processes work even better. This "experiment" in international trade environmental agreements is working and has set a positive precedent. Most important, between the United States and Mexico is beginning to obtain the infrastructure needed to make our border region a clean and safe place for residents now ar future. (San Diego Union-Tribune, Oct. 29, 1997)

1998/02/22 - Sewage treatment project set to begin Tijuana River Valley is site of water plant. Construction crews are set to begin building a sewage treatme the Tijuana River Valley that will produce 7 million gallons a day of reclaimed waste water that can be used to irrigate landscaping. San Diego city officials celebrate the $125 million worth of new plumbing and machinery with a groundbreaking ceremony tomorrow. But critics of the city's water reclamation pla be cheering. "I'm not up to celebrating something that I think is an absolute mistake," said Elmer Keen, who sits on San Diego's Citizens Oversight Commit advisory group on city sewage projects. "The reclamation plant just isn't needed. We need a plant down there, but it doesn't need to be a water reclamation p officials and environmental activists, however, laud the idea. "I vehemently support the plant as an essential and very prudent strategy to supplement our dir water supply," said Bob Simmons, a University of San Diego law professor. Simmons, who has sued the city in the past over its sewage treatment plans, adv water reclamation as a means of producing a locally controlled source of water. He says San Diego County imports 90 percent of its water from Northern Ca and the Colorado River. The new plant will treat wastes generated from San Diego and South Bay communities that contract with the city for sewage treatm not intended to handle raw Mexican sewage that has flowed for years into the Tijuana River Valley and across the border into San Diego. The plant is being 80 acres near the border, at the intersection of Dairy Mart and Monument roads, next to the International Wastewater Treatment Plant, which does treat sewa Tijuana. David Schlesinger, director of the city's Metropolitan Wastewater Department, said pipes that convey raw sewage from South County to the Point L Wastewater Treatment Plant are nearing capacity. He said the new plant is necessary to relieve those pipelines, as well as to accommodate growth in the Sou "During the big rainy season in 1993, we almost exceeded the capacity of Pump Station No. 1 and the line coming into it," Schlesinger said. But instead of b conventional plant that would treat the sewage and dispose of it into the ocean, the city decided on a more expensive water reclamation plant that would trea to an even greater extent. Schlesinger cited the federal Ocean Pollution Reduction Act as the reason for building a reclamation plant. The law, enacted in 19 allowed San Diego to avoid a $3 billion upgrade of the Point Loma Wastewater Treatment Plant on the condition that the city built water reclamation plants total capacity of at least 45 million gallons a day by Jan. 1, 2010. The city's North City Water Reclamation Plant, which opened last year in University City, capacity of 30 million gallons a day. Keen, the critic of the South Bay project, says city officials should lobby Congress to change the law to remove the wa reclamation requirement. "We can change the Ocean Pollution Reduction Act if the mayor and everybody gets behind it," said Keen, a former San Diego St University geography professor specializing in marine resources. One reason that Keen opposes the water reclamation plant is the expense. He says there ar expensive and better alternatives. "There's no question at all that desalinating ocean water is cheaper, environmentally and economically, than cleaning up o water," he said. "It simply is not rational to clean up waste water for irrigation." But Schlesinger, who remembers how difficult it was to get the votes to pas in the first place, thinks getting support to eliminate the water reclamation requirement is "politically impossible." Simmons said the treated sewage is a pre commodity that should be sold and reused. He said it "makes absolutely no sense, economically or environmentally," to treat sewage and then dump the effl

the ocean. (San Diego Union-Tribune, Feb. 22, 1998) 1998/11/12 - Tijuana treatment facility is proposed. Last month, the U.S. government proposed that a open-air ponds be created here to treat sewage that flowed in from Mexico. The plan immediately drew fire from residents, who worried about the odors and mosquitos the ponds might generate. A binational team of entrepreneurs has now floated an alternate proposal, one that would place the ponds in Tijuana. B privately financed treatment project, would pump sewage partially treated at the new South Bay International Wastewater Treatment Plant to a site south of where it would be further cleaned. The effluent would then be sold to the maquiladora industry to use in manufacturing. "In Mexico, it is not considered a se problem, but a problem finding ways to harness new sources of water," said Enrique Landa, a partner in AguaClara, a San Diego firm that is proposing the p "Instead of dumping it in the ocean, we recycle the water. We take it to where it's most needed ~ south of the border." This is being touted as private industry solution to sewage problems that have plagued the river valley since the 1930s. All of the sewage treated at the new waste-water plant originates in Mexico north over the border, sometimes contaminating the Tijuana River and neighboring beaches. The Bajagua proposal is built around selling the treated waste v alternative to dumping the effluent into the ocean. It must be approved by state water-quality officials, the International Boundary and Water Commission, o in this country and its counterpart in Mexico. Their representatives could not be reached for comment yesterday. Mexican officials have already given their letters of encouragement, Landa said. Officials with the IBWC, which built the international plant and which oversees its operation, are also studying the pr The existing sewage treatment plant at the border is designed to provide what is known as primary treatment, in which solid wastes are separated from the w water. Its effluent, however, has consistently failed laboratory tests for acute toxicity. Experts say that providing secondary treatment, such as a system of op ponds, would solve the problem. However, construction of the secondary treatment facilities has been delayed because the IBWC and the U.S. Environment Protection Agency argued over the type of secondary treatment to use. The delays ended last month when the EPA announced tentative plans to install more dozen open-air sewage treatment ponds on the U.S. side of the border, next to the international plant. The U.S. pond site is just a half-mile from a new resid development and has been opposed by community groups. Under the Bajagua plan, the company intends to use open-air sewage treatment ponds, Landa sai However, the ponds are to be created in a rural area on about 200 acres at the city's eastern edge along the Alamar River. The Bajagua project is estimated to about $63 million, compared with about $19 million for the ponds in the United States. However, because the Tijuana pond system would be privately finan up-front costs of construction would be paid by the Bajagua group, Landa said. They would recoup their investment by charging the IBWC for the secondar treatment and by charging companies when they buy the treated effluent. Any excess effluent would be sent back to the U.S. side of the border for disposal ocean. Environmentalists north of the border were encouraged by the news. "It represents a superior alternative to what is now being considered," said Gary immediate past president of the national board of the Surfrider Foundation. "It's a treatment (plant) and it is located next to a potential reclaimed water mark project is worth considering, said Carolyn Powers, an aide to state Sen. Steve Peace, D-San Diego. "The concept has tremendous merit," Powers said, "and looking at the details of the matter." (San Diego Union-Tribune, Nov. 12, 1998) 1998/11/12 - A final decision is to be made next year by U.S. federal offici what is the best alternative for secondary treatment. A public meeting has been scheduled for tomorrow at 7 p.m. at Southwest High School, 1685 Hollister the Bajagua proposal will be discussed. (San Diego Union-Tribune, Nov. 12, 1998) 1999 - Plant begins discharging through the South Bay Ocean Outfall. South Bay International Wastewater Treatment Plant Timeline, http://www.ibwc.state.gov/Files/south_bay.pdf)

1999/01/10 - Mexican sewage flows across border. Millions of gallons of raw Mexican sewage flowed across the border yesterday, contaminating the Tijuan Valley in San Diego. Officials were unavailable for comment, and it was not clear what caused the flow. Carolyn Powers, who lives in the valley, and David who owns a farm there and lives nearby, said the spill was the largest in months. Gomez estimated that more than 5 million gallons flowed through the valle yesterday. He said the spill began Friday afternoon and was continuing last night. "We'd like to rid ourselves of this sewage in the valley," said Gomez, who board of directors of the Tia Juana County Valley Water District. A new $100 million sewage-treatment plant and a $160 million undersea disposal tunnel w expected to begin working Friday. But, according to Ron Kole, spokesman for the city of San Diego's Metropolitan Wastewater Department, the operation v delayed because of technical problems. (San Diego Union-Tribune, Jan. 10, 1999) 1999/01/12 - New system not ready for Tijuana spill Millions of gallons sewage flows into San Diego. Despite a new $100 million sewage-treatment plant at the border and a new $160 million undersea disposal tunnel, millions o of raw Mexican sewage flowed into San Diego over the weekend, contaminating the Tijuana River Valley. It was the same kind of mess that has plagued the southernmost portion of San Diego for six decades. And it was the same sort of problem that the expensive new treatment plant and ocean outfall were supp alleviate, if not end altogether. But things went wrong. "If the canyon (sewage) collectors had been fully operational and if the sewage-treatment plant had b operational and if the ocean outfall had been operational, then I think it most likely would have contained this kind of spill," said Art Letter, executive direc Tia Juana Valley County Water District. Others agree that if the new plumbing and machinery on the U.S. side of the border had been fully functional, then Mexican sewage might have been curtailed or at least not have been nearly as bad as it was. The spill occurred Saturday, when an aging, 24-inch pipeline th Tijuana sewage to its treatment plant six miles south of the border, broke at Goat Canyon, near the international border. By all accounts, the sewage started through Goat Canyon, then at Smuggler's Gulch. Carolyn Powers, who lives near the border in the Tijuana River Valley, was riding her horse about noon wh noticed it. "It's the worst spill in years, literally," she said. The flow of sewage was so heavy, Powers said, that she watched as a car stuck in the muck at Bor State Park had to be towed out Saturday afternoon. Letter, however, said it wasn't that bad and that the severity of the spill has been "very overblown." At an new sewage-treatment system at the border wasn't ready to deal with the problem. First, the tunnel that was built to discharge treated sewage from the treatm into the ocean 3.6 miles offshore was out of operation. The tunnel, which had been completed in November, was supposed to begin operating Friday, the da the spill. However, a leak had been found in a valve that connects the outfall to the treatment plant. David Schlesinger, director of the city of San Diego's M Wastewater Department, said a new gasket had been flown in from the East Coast. He now hopes to have the outfall operating tomorrow. The treatment plan operating Saturday, but it couldn't run at its full, 25 million-gallon-a-day capacity because the ocean outfall wasn't in operation. Instead, the treatment plant limited to treating 13 million gallons a day, said Dion McMicheaux, project director for the International Boundary & Water Commission, or IBWC, which operates the treatment plant. The plant's capacity was limited because sewage treated at the plant had to be sent to the city of San Diego's Point Loma Waste Treatment Plant for disposal. The pipeline connecting the border plant with the Point Loma plant can't carry more than 13 million gallons a day. When the M sewage flows were discovered Saturday, there was a delay in turning on the new pumps that the U.S. government built to collect sewage at Smuggler's Gulc Goat Canyon. That's because, McMicheaux said, he had to find someone with a key to operate the pumps. When he finally did turn them on, the pumps wor while, but sometime over the weekend, the pump at Smuggler's Gulch failed because of an electrical problem, McMicheaux said. By yesterday morning, M crews had completed repairs to the pipe and the flow of sewage had stopped. But many questions and concerns remain. (San Diego Union-Tribune, Jan. 12. 1999/01/12- No one knows for certain how many gallons actually spilled into the Tijuana River Valley. Letter said the Mexican government told him that 2 gallons had spilled. McMicheaux said he doesn't know exactly how much spilled, but he thinks it's far more than what Mexico reported. It's uncertain how m the sewage actually flowed into the ocean. County health officials yesterday took water samples and expect to have test results today. Letter, of the Tia Juan County Water District, said he's upset because his agency wasn't notified by the federal government of the spill. And Schlesinger, of San Diego's waste-wate department, wonders why his offer to the IBWC to send city crews to Mexico to help was never acknowledged. Meanwhile, in the wake of the weekend sew the San Diego City Council's Rules Committee yesterday asked the U.S. government to consider a private company's proposal to take the Mexican sewage f U.S. border plant and recycle it in Mexico for irrigation or industrial use. "People in the United States, including the federal government, have been arguing Mexico should take responsibility for its own sewage," Mayor Susan Golding said. She said the Bajagua proposal, as it is called, would provide that chance Diego Union-Tribune, Jan. 11, 1999)

1999/05/01 - Latest Mexico sewage spill almost 12 million gallons. Nearly 12 million gallons of raw sewage from Mexico spilled across the border and into Tijuana River yesterday, according to county officials -only the latest in a decades-long series of cross-border messes. San Diego County environmental health officials announced the newest spill in a short news release late yesterday. The two-paragraph statement said the leak began about 12:30 p.m. and was expected continue through the weekend. Not until Monday at 3 p.m. will work crews from the Mexican waste-water facility turn off their pumps to make repairs to the statement said. "That's a pretty big spill, even by their standards," said David Schlesinger, director of the city of San Diego's Metropolitan Wastewater Dept which is under contract to perform ocean and shore-station monitoring for both Mexico and South Bay. County environmental health officials did not make themselves available for questions or comment. Their statement said the International Boundary and Water Commission reported that the spill was caused when diversion system in Mexico became blocked, and that pushed millions of gallons of untreated sewage into the environmentally sensitive Tijuana River Valley. Schlesinger, who said his agency has a standing offer to help in such emergencies, said last night that the spill may have been caused by something else. "The diversion system they're talking about is a series of three suction pumps in the low-flow portion of the concrete channel," he said. "I'm a little surprised they've been blocked because there hasn't been any rain in a while. "The problem may be in the Mexican pumping station." Sewage from Mexico has been spilling into Tijuana River Valley an ecological wetland that serves as home to a number of federally protected wildlife species for more than six decades. In January, more million gallons of untreated waste leaked into the same estuary ~ another case prompted by faulty sewagetreatment systems south of the border. "It's the worst years, literally," nearby resident Carolyn Powers said at the time. Powers could not be reached for comment last night. But former Imperial Beach Councilman Hall blamed federal officials on both sides of the border for the continuing spills. (San Diego Union-Tribune, May 1, 1999)

1999/05/04 - Sewage spill from Mexico less than officials feared. While initial reports were that 12 million gallons of sewage had spilled into the Tijuana River last week, the actual amount was less than 2 million gallons, officials now say. That's the amount of sewage estimated to have spilled when the flow was stopped about 3 a.m. Saturday, according to a report filed with the Regional Water Quality Control Board. Art Letter, general manager of the Tia Juana Valley County District, said the 12 million figure was a projection, not an actual amount of sewage flow, and was based on the belief that the spill could not be controlled for days. When sewage began spilling from Mexico into San Diego on Friday, U.S. officials were told that Mexico could not solve the problem for three days. But Mexican crews stopped the flow of waste in one day, on Saturday. Dion McMicheaux, project manager for the International Boundary & Water Commission, to state water quality officials yesterday that Mexican sewage pumps which divert the wastes from San Diego apparently became clogged, causing the untreated sewage to flow across the border. He said Mexican crews apparently were able to get the pumps working sooner than expected, although, as of yesterday afternoon they were pumping only at half of capacity. Although there were still problems with silt in the pumps yesterday, the report said, Mexican officials were expected make further repairs without shutting down the pump station. "The timeliness and response of Mexico is an example of the new efforts at coordination between Mexico and the United States," said Carolyn Powers, who lives in the Tijuana River Valley, which has been plagued by Mexican sewage flows for more than decades. (San Diego Union-Tribune, May 4, 1999) 1999/06/23 - Sewage ponds at the border. At a recent Regional Water Quality Control Board hearing, the of Imperial Beach was quoted as saying that the city had been hoodwinked into supporting the board's earlier decision to allow the use of the ocean outfall to the International Wastewater Treatment Plant to treat and dispose of Mexican sewage. He stated that city officials would not have endorsed the plan if they could feel assured that a secondary treatment facility to treat the effluent to Ocean Plan standards would be forthcoming in the near future. Official EPA studies seem indicate that a sewage treatment ponding system would be built in the Tijuana River Valley, despite opposition to the sewage ponds from valley residents, the San Diego City Council and Congressmen Brian Bilbray and Bob Filner. The Supplemental Environmental Impact Study, the most recent environmental plan document referred to, published this year, omitted several important considerations that should have been primary drivers to decisions leading to the siting and construction of the secondary treatment facilities. Although the EPA has held repeated public workshops and hearings on secondary treatment, with a bent to ponding system to be constructed in the United States, there has never been a public participation meeting held in Mexico. The Final Environmental Impact for secondary treatment ponds states that the nearest residence is 1.3 miles away, at the Coral Gates residential subdivision. In reality, there are already existing residences plus the major tourist artery to the beaches in Mexico located a scant 300 to 400 feet from the proposed ponds in the United States. The EPA's cur "seamless border" rhetoric seems to be just hot air. It is not adhering to its public policy for binational transparency of information and public input. The additional time requested to study a request for the Bajagua concept plan should include binational public hearings and input on the siting and technical alternatives and secondary treatment. The Bajagua concept plan calls for the primary treated waters (processed at the International Wastewater Treatment Plant in the Tijuana Valley) to be pumped 8.5 miles southeast to a Mexican agricultural area and treated with the same sewage-pond technology contemplated in the United States. advantage of this siting is that there is room for expansion for future (needed now) treatment capacity, and also room for the addition of tertiary treatment facilities that the waters can be reused by the maquilla industry. The proposed concept plan also sites the plant at a higher elevation, allowing for gravity-fed delivery of reclaimed waters to the Maquillas, non potable agricultural users and landscaping needs without the need for pumping costs. (San Diego Union-Tribune, July 1999)

2000/01/13 - Risk of contamination keeps some beaches closed. Contamination recorded in the Tijuana River Valley last week prompted San Diego County to beaches from the south end of Seacoast Drive to the U.S.-Mexico border. The beaches have remained closed, despite a preliminary analysis of samples taken coastal waters near the mouth of the Tijuana River on Monday that gave no indication contamination had spread that far. Bacteria counts in the coastal waters were well below levels considered unsafe for recreational use in the state of California, said Clay Clifton, recreational water program coordinator for the county Department of Environmental Health. Clifton said the beaches will remain closed, however, as long as there is the risk that the contaminated water in the valley flow into the ocean. "There are high (bacteria) counts in the Tijuana River itself, so we have to be ready for the possibility of those contamination flows getting into the river mouth and effecting the ocean," Clifton said. The high bacteria levels in the Tijuana River were recorded at Hollister Street and Dairy Mart Road Jan. 4. Officials attribute the influx of contamination to sporadic flows of contaminated water from Mexico after the rain on New Year's Eve. Dion McMichaux, project manager at the International Boundary and Water Commission, said the major flow of contaminated water across the border had stopped last Friday, but added that some small new flows had been recorded as recently as Tuesday morning. There is a diversion system set up on the Mexico side of the border to divert contaminated water in the Tijuana River back into Mexican sewage pipes, where it can be diverted to the International Wastewater Treatment Plant for treatment before being pumped out into the ocean. But this system has been working at only about 70 percent of its 13 million gallon a day capacity, according to Robert Espinosa, engineer in Mexico for the Boundary and Water Commission. Espinosa said the New Year's rains were "brief but intense" on the Mexican side. Erosion flooding carried large quantities of silt and garbage into the river, clogging the entrance of intake pipes for the diversion system, Espinosa said. Carolyn Powers, spokeswoman for the Citizens Against Agricultural and Recreation Eviction, a citizens group in the Tijuana River Valley, said the polluted water is not flowing through the river on the U.S. side of the border but is collecting in a pond west of the Hollister bridge. The Tijuana River runs approximately five miles from the Mexican border to the U.S. coast. Nearly one mile of that distance consists of a channel dug by the city of San Diego after dramatic flooding in 1993 to facilitate flow of the water out of the valley and into the ocean. Frank Belock, San Diego's director of engineering, said the city was not allowed to extend the channel all the way to the ocean, or even as far as the Tijuana River National Estuarine Sanctuary, because of concerns that the estuary would be damaged. The city recently dredged out the channel itself, but Belock said accumulated silt on a flat area between the end of the channel and the estuary could be acting as a dam, preventing river water from flowing to the ocean. The result, said Powers, is a stagnant pond of contaminated water right in the middle of the Tijuana River Valley Regional Park. Belock said the city is considering how it to unclog the channel but would probably have to wait until dry weather to find a permanent solution. That is, unless a heavy rain does the work for them. "A heavy rain could flush the whole thing out," Belock said. (San Diego Union-Tribune, Jan. 13, 2000)

2001/12/08 - South Bay sewage treatment plant dedicated. Reclaimed water will be utilized. A treatment plant capable of converting 15 million gallons of s reclaimed water daily for irrigation and industry near the U.S. Mexico border was dedicated yesterday. "It's a great day for San Diego and a great day for the environment," said San Diego Mayor Dick Murphy, minutes before cutting a giant blue ribbon to mark the plant's completion. The South Bay Water Reclam Plant on Dairy Mart Road, which cost $110 million and took nearly four years to build, will help accommodate burgeoning business and residential growth Otay Mesa area. San Diego Councilman Jim Madaffer said reclaimed water produced by the plant will be available to industry at $350 per acre-foot, compa current rate of $415 to $440 per acre-foot. An acre-foot is 326,000 gallons. The plant is a milestone representing the last major facility completed under a $1 10-year capital improvement program to upgrade the region's sewage treatment system. San Diego Councilman Scott Peters said Metro Wastewater is turnir page and plans to spend an additional $1 billion over the next few decades to upgrade the city's leaky, aging sewer pipes. The plant, which also will treat sev San Ysidro, Chula Vista and eventually Imperial Beach, is scheduled to be fully operational in mid-January, said plant superintendent Alice Benson. Initially will be run by a 10-member staff 24 hours a day, seven days a week. But the facility can run itself while operations are monitored from Metropolitan Wastev Department's computerized control center in Kearny Mesa. "We have great automation here," said Benson. "Eventually, we plan to be unattended for a porti day." Sewage at the South Bay plant will receive secondary treatment, a process that removes more bacteria and microscopic solids than Metropolitan Waste Department's advanced primary facility at Point Loma, where 190 million gallons per day is treated. Though the new plant doesn't employ any new technolo be the first Metro Wastewater facility to use ultraviolet lights rather than chlorine to disinfect treated waste water, said Allan Langworthy, the agency's chief The city, which has another secondary treatment plant in Sorrento Valley capable of treating 30 million gallons of sewage per day, now will be able to produ million gallons of reclaimed water per day. That capacity is what the city was required to do under the 1995 Ocean Pollution Reduction Act, a federal law th San Diego to apply late for a waiver from requirements that would have forced it to spend billions to revamp its entire treatment system to secondary treatm Wayne Nastri, Region 9 administrator for the U.S. Environmental Protection Agency, praised the city for completing its reclaimed water system before fede deadlines. "Mayor Murphy, you and your colleagues have really become the regional leaders and examples of what should be done on water quality and wa treatment issues, not just here in Southern California, but throughout the state," Nastri told more than 100 people attending the dedication ceremony. Captio PICMike Shain, an employee of the Kiewit Co., general contractor of the new South County water reclamation plant, did some final work on the plant yeste San Diego Union-Tribune, Dec. 8, 2001)

2002/05 - South Bay Water Reclamation Plant of the City of San Diego. 2411 Dairy Mart Road. The South Bay Water Reclamation Plant (SBWRP) is locat intersection of Dairy Mart and Monument Roads in the Tijuana River Valley. The plant relieves the South Metro Sewer Interceptor System and provides loc wastewater treatment services and reclaimed water to the South Bay. The plant opened in May 2002 and has a wastewater treatment capacity of 15 million g day. The plant design incorporates the newest technologies and meets strict odor control standards. (South Bay Water Reclamation Plant, http://www.sandiego.gov/mwwd/facilities/southbay/index.shtml)

2002/05/07 - Reclamation plant up and running Water to be sold for irrigation, industry. The South Bay Water Reclamation Plant yesterday began turning se reclaimed water suitable for irrigation and industrial use. For now, the plant will treat 5 million gallons of sewage daily from San Ysidro. Eventually it will t 15 million gallons a day, including sewage from Chula Vista and Imperial Beach. The $150 million plant is in the Tijuana River Valley, next to the Internati Wastewater Treatment Plant just north of the U.S.-Mexico border. It took nearly four years to build. The city of San Diego's Metropolitan Wastewater Depa operates the plant, and the city's Water Department is marketing the reclaimed water for sale. The water is not drinkable, but can be used for irrigating parks landscapes and golf courses, and for industrial and manufacturing purposes. It will sell for $350 per acre-foot, which is about half the price of potable tap w Fabiola Amarillas of the city Water Department. An acre-foot is about 326,000 gallons. Some of the reclaimed water will be sold to the International Bound Water Commission, which will use it in the operations of the adjacent sewage-treatment plant, which processes sewage from Tijuana that flows northward a border. Other potential customers include Caltrans, the Border Patrol and the Otay Water District, Amarillas said. The city has another water-reclamation pl Interstate 805 and Miramar Road that produces 30 million gallons a day of reclaimed water. The water is sold to about 100 customers, including the municip Pines Golf Course and General Atomics. The vast majority of the reclaimed water from that plant is still pumped to sea through an outfall off Point Loma. F demand increases, the city plans to sell 25 percent of the reclaimed water from the North City plant by 2003, and half of it by 2010, Amarillas said. Health c regulations prohibit the sale of reclaimed water to individual residences, she said, so they are seeking large-scale customers. Part of the reason the city built water-reclamation plants was because it was a requirement to obtain a waiver that exempts the city from having to meet the secondary standard of sewage tr Together the two water-reclamation plants will treat 45 million gallons a day to the secondary standard, which is cleaner than the advanced primary treatme the 180 million gallons of sewage processed daily by the city's Point Loma sewage-treatment plant. The future of the waiver is in question, since the state C Commission recently refused to approve its renewal, and the Regional Water Quality Control Board tightened conditions on the city's discharge permit. The appealing. San Diego water officials say that reclaiming water makes good sense in a city that imports more than 90 percent of its water. "It will ease the de potable water, so it will help the city, definitely," Amarillas said. (San Diego Union-Tribune, May 7, 2002) 2002/05/29 - Sewer line installation to start soo Construction to last at least 7 months. A new sewer line will be installed in Nestor and Palm City soon, which means torn-up roads and possible traffic delay least the next seven months. "We're hoping to be done by the first of the year," said Craig Whittemore, senior civil engineer with the city of San Diego's Me Wastewater Department. "We're trying to accelerate as fast as we can. "We know it's an inconvenience," Whittemore told residents who came to an informat meeting about the sewer project Thursday night. "We're going to do everything we can to get in, get out and keep it as clean as possible." Whittemore said r can help construction go faster by taking alternate routes and trying not to drive on the roads where work is being done. The city is especially seeking the co of residents of Grove Avenue, asking them not to park on the street when construction reaches their neighborhood. Construction probably will begin within weeks, at the north end of Saturn Boulevard, where it meets Boundary Avenue in Egger Highlands. The 24-inch diameter pipeline will be laid underneath S south to Grove Avenue. Then construction will head east on Grove. The sewer line will end at an existing sewer pump station on Grove, just past Hollister S officials said construction crews will tunnel underground at the major intersections where Saturn is crossed by Palm and Coronado avenues to try to minimi on traffic flowing in and out of Imperial Beach. Only small sections will be done at one time, and metal plates will be laid over the open trenches at night so traffic can resume. Most of the construction will take place during the day, but there might be some nighttime construction near schools in order to avoid blo access to year-round campuses while classes are in session. Residents will be notified when construction is about to start in their area, said city public inform officer Brian Drummy. The new sewer main will send as much as 12 million gallons a day of sewage from the South Bay to the city's new South Bay Water Reclamation Plant in the Tijuana River Valley. The plant began operating May 6. (San Diego Union-Tribune, May 29, 2002) 2003/06/22 - THE LEGS OF JOURNEY. We met Bob Owings in, of all places, a gym, although a gym is exactly the kind of place one should expect to find a dedicated walker like Owi were treadmilling next to him and started chatting. Turns out he had quite a story to tell, we thought -five weeks alone walking through the English and Scot countrysides. The 60-year-old walker, whose day job is in the operations and maintainence division of the South Bay Water Reclamation Plant, thinks nothi walking 250 miles on his off hours. That's exactly what he did in Great Britain last year when he trudged through England's Lake District, Scotland's Highla the Isle of Skye. So we asked him if he'd write a travel story on his walk for us, and darn if it's not a pretty good read. So good, in fact, that we asked him to three parts over the next few weeks, beginning today with his Lake District excursion. A serious recreational walker, he says, could easily handle any one of walks. Owings is an outdoor kind of guy who has taken jaunts through, among other places, the Sawtooth and Rocky mountains and the Sierra Nevada. Not

would call a "social animal," Owings likes quiet hiking, not organized affairs. "I naturally prefer groups of two or less," he says. This is Owings first publish of writing. (San Diego Union-Tribune, June 22, 2002) 2003/08/16 - West Nile fear spurs pumping of water from Tijuana Valley. It happens almost every y of sewage-contaminated water sits beneath the Hollister Street bridge in the Tijuana River Valley long after the last winter rains have stopped. Yet, this year of the stagnant greenish pond has taken on a greater urgency with fears of the mosquito-borne West Nile Virus. San Diego city crews and contractors are no to pump out an estimated 200,000 gallons of the standing water, hoping to prevent South San Diego from becoming the first place in the county to host the lethal virus. "A lot of people are becoming concerned with that issue, so we've been getting a lot of calls about standing water," said Gus Brown, a city of Sa public works supervisor who is overseeing the removal of the water beneath the old wooden bridge. "I think it's the anticipation (of the arrival of the virus)," said. "People are nervous because they don't know what's going to happen." The West Nile Virus, which can cause fatal brain and spinal cord inflammation percentage of those infected, first arrived on the East Coast of the United States in 1999. Last year, it infected 4,156 people and killed 284, according to the for Disease Control and Prevention. This year 10 people have died of the virus, six in Colorado alone. So far there have been no confirmed cases of West Ni originating in California. A 47-year-old woman who is hospitalized with the virus in San Francisco is believed to have contracted it while visiting Colorado month. Residents of the Tijuana River Valley say it's not uncommon for water to pool under the bridge in the spring and summer, after most of the flow fron Tijuana River has dried up. It has been that way since a 5,000-foot-long pilot channel was cut into the river bed in 1994, after a disastrous flood the previous The channel was built to funnel flood waters back into the river's natural course. "That whole valley is a flood plain, so if you get any kind of storm it will e breach the banks of the pilot channel and it goes wherever it wants," Brown said. David Gomez of the Tia Juana Valley County Water District said debris an tend to back up at the channel's end. "We were starting to get mosquitos," Gomez said, and he so notified city officials. The city is responsible for maintaini channel, and the water that is pumped out is taken to the International Wastewater Treatment Plant in the river valley for treatment. The pumping began We but will be suspended next week while the treatment plant is closed for routine maintenance, Brown said. He estimated that when the pumping resumes Aug take five more days to complete. (San Diego Union-Tribune, Aug. 18, 2003)

2003/11/15 - A drop in the bucket. City program turns sewage into usable water but has few customers. On a typical day, the equivalent of 15 million flushe into a gray concrete facility overlooking Interstate 805 in University City. What happens next is a testimonial to what modern science can do -given enough The North City Water Reclamation Plant turns sewage into water. Considered the jewel of San Diego's reclamation program, the plant handles 25 million ga sewage a day, though it reclaims only 4 million. And after six years in operation, it is its own best customer -using 1 million gallons a day for plant upkeep. reclamation is a popular concept. But in practice, few potential customers want it and fewer still can afford to install the purple pipes needed to carry it. So f Diego has spent nearly $500 million on the citywide water reclamation program. It sells a gallon of reclaimed water from the North City plant for less than i produce it. Even so, the plant is outperforming a sister plant in the South Bay that has been open for almost two years without reclaiming a single gallon. Bu city's reclamation system does, it does in style. Most San Diego sewage is treated only enough to be legally dumped in the ocean. The North City plant can It produces recycled water clean enough for toilets, fountains, laundries and car washes. Clean enough to fill lakes and aquifers, mix cement and make snow clear and odorless, the plant's reclaimed water is also fit for swimming, though not for drinking. Rich in nutrients, it is especially desirable for irrigation. Bu million gallons a day, the water reclaimed is a fraction of the sewage produced by the 2 million people in San Diego and 15 other communities served by th metropolitan sewer system. North City treats the other 21 million gallons of sewage it processes daily at a lesser standard and dumps it back into the city's s system, where it mixes with 150 million gallons of raw sewage treated daily at the Point Loma sewage plant. Inefficient as this might seem, it saves resident Without the reclamation program, sewer customers would have paid $3 billion in the mid-1990s to overhaul the 40-year-old Point Loma plant to treat sewag higher standard. The U.S. Environmental Protection Agency allowed San Diego to build a reclamation system in lieu of upgrading the level of treatment at Loma. The agency says it is satisfied with the San Diego system's performance, even though the North City plant will not meet EPA performance goals this the South Bay Water Reclamation Plant has yet to produce any reclaimed water. "I think they're trying really hard," said Nancy Woo, director of the EPA's r water division. Not everyone sees it that way. Robert Simmons, a retired University of San Diego law professor, represented the Sierra Club in an eight-yea debate over the level of treatment needed at the Point Loma plant. "What good is having plants that have the potential to produce reclaimed water if you're n actually reclaiming the wastewater?" Simmons said. On Wednesday, Simmons will join a coalition of environmental activists in asking a San Diego City Co committee to authorize a oneyear study of how to increase the use of reclaimed water. In part, they want the city to revive a defunct proposal to add reclaim a reservoir and eventually use it for drinking, nicknamed the toilet-to-tap plan. Ken Weinberg, director of water resources for the County Water Authority ar of reclamation, said it is too early to pass judgment on the San Diego program. By the time the North City plant opened in 1997, the drought was over and conservation measures, primarily low-flow toilets and shower heads, had extended available drinking water supplies. However, city-funded market studies f detect a drop in interest in water reclamation. "Reclaimed water was really sexy five to 10 years ago. Now, demineralization of ocean water is sexy," said M Thornton, general manager of the San Elijo Water Reclamation Facility in Cardiff. His North County facility produces a million gallons of reclaimed water "Everyone put a lot of money into recycled water, and what they've found is it's a hard program to run. . . . It's expensive to get the customers hooked up, un in a new area," Thornton said. "If you're not, you have to go back through streets and put in pipes. It gets really expensive." By state law, reclaimed water ca sent through existing water lines. The purple pipes that carry it cost $1 million or more per mile to lay. In 1997, the San Diego Water Department raided its reserves of $65 million intended for fixing the city's crumbling drinking water system. It used that money to lay 46 miles of purple pipeline to customers in Mesa, Torrey Pines, Scripps Ranch and University City. Since then, an additional 10 miles of pipeline have been installed. The city plans to spend an additi million by the end of next year on two more miles, a storage tank and a pump station. But all of that money and equipment only gets the reclaimed water to customer's property. There, more money must be spent to retrofit the consumer's existing plumbing or irrigation system. The minimum cost for plumbing is $10,000; however, most irrigation retrofits are five times that amount or higher. Even the most ardent supporters have been stunned by the costs. The city ha up $18 million in retrofit costs for 100 customers, many of them private businesses. A retrofit of Miramar Nurseries, for instance, cost the city $300,000, ac Hossein Juybari, the city's recycled water coordinator. The golf course at Miramar Marine Corps Air Station is being replumbed at a cost of $700,000 to the Biotech businesses on Science Center Drive in Sorrento Valley had to wait six years until the city's purple distribution pipe reached the area this summer. Bu the pipe is there, the retrofit money isn't. They also looked at using the water to replenish groundwater aquifers. But San Diego County, unlike Los Angeles Orange counties, doesn't have that many usable aquifers. There has been an attempt to promote its use in industry -in air conditioning cooling towers, for ins the high salinity of reclaimed water has raised concerns that it will wear out equipment prematurely. The city is studying that issue. Water officials, looking to deliver the water beyond the reach of the purple pipe network, even calculated that it would take a total of 81 tanker truck trips to transport reclaimed wat golf course -too many to be practical. They have required new developments in certain areas to be plumbed with purple pipes, and are even talking about ru reclaimed water pipeline to Balboa Park. "I think at some point in time, we looked at pretty much everything," Water Department Deputy Director Marsi St Mandatory possibilities Water officials are revisiting a 14-year-old city ordinance that mandates the use of reclaimed water wherever it is available. The ord never been enforced, but water officials think it should apply to customers that are near a pipeline, use more than 400,000 gallons a day and stand to recoup retrofit costs in less than five years. A penalty for refusing to use reclaimed water is still under discussion, but officials are looking at a 50 percent surcharge water bill. On Monday, the city's Public Utilities Advisory Committee will hear a proposal to enforce the ordinance. The City Council will make the ultimat Some property owners object to the mandatory-use rule, citing costs. They argue that the high salt content of reclaimed water as much as 50 percent greater drinking water can kill salt-sensitive plants and cause irrigation hardware to wear out faster. The city's Torrey Pines Golf Course, which waters its fairways reclaimed water, uses drinking water on the putting greens. Erik Bruvold, vice president of the San Diego Regional Economic Development Corp., said the

shouldn't force property owners to use reclaimed water unless the city pays for the upfront retrofit costs as well as any losses in plants or machinery. The Wa Department is trying to secure $2 million in grants to establish a revolving loan program to defray the cost of retrofits. Property owners would pay off the lo paying the drinking water price for reclaimed water, instead of getting the reclaimed water at a discounted rate. Jon Jamieson, who wrote a book on San Die sewage, said water reclamation won't take off here until the time is right. "It will take another extreme drought," Jamieson said, "for everybody to wake up." Diego Union-Tribune, Nov. 15, 2003) 2004 - 'Clean Water Now' campaign. Tijuana Estuary education coordinator Anne Marie Tipton: "The majority of the water is fine. In my opinion, sewage is not our biggest issue ‹ it's sedimentation. An estuary's job is to filter pollutants and be a sponge. This is one of the las estuaries, a natural biofilter of the watershed that also helps clean runoff from our streets. When you have too much sediment in there, the coastal wetland tu solid land. That's why we're working in Mexico to stabilize the slope to stop the sediment from filling the estuary." Wildcoast executive director Serge Dedi "Ocean pollution has had a significant impact on public health in Imperial Beach and will require a coordinated transboundary effort to resolve the issue. W launched its 'Clean Water Now' campaign in 2004. Since that time, there have been a number of positive developments, including: 1) Construction of a new sewage treatment plant on the U.S.-Mexico border; 2) Construction of three new sewage treatment plants in the Tijuana-Rosarito area; 3) Improvement of management of border sewage collector systems by Veolia Water, with improved oversight by the International Boundary and Water Commission; 4) Proact leadership to deal with the tidal wave of plastic and tires coming out of the Tijuana River through the efforts of the Tijuana River Valley recovery team; 5) S legislation by Governor Schwarzenegger to provide funding through the state tire fund to deal with the issue of waste tires in Tijuana [tires and plastic clog collector systems, in addition to clogging up the Tijuana Estuary and flowing into the ocean. We have seen less pollution these days, especially since there h improvement in managing sewage collector systems." (Wycoff, Ann, "The Battle for IB," The San Diego Magazine, Aug. 2010.)

2004/06/19 - Frustration cited at border sewage meeting. Yet another meeting on the border sewage problem was held this week, and nearly all the public sp noted that they had been attending similar meetings for years. Yet the problem is still unsolved. Untreated Mexican sewage has been leaking over the border United States for decades, via the Tijuana River and sometimes through gullies and creeks. Six years ago a sewage treatment plant and outfall were built nea border on the U.S. side, but not all the sewage is captured and treated. The problem worsens during the rainy season. Beaches from Coronado to the border l closed intermittently since October by the county Department of Environmental Health. Wednesday night's meeting, called by the U.S. International Bounda Water Commission, was to give people the opportunity to comment on the commission's recently completed environmental impact statement regarding its p build a secondary sewage treatment plant. The existing treatment plant in the Tijuana River Valley treats sewage to the advanced primary level, which is not to meet state and federal clean water laws. Cleaner secondary treatment is required. The federal agency has reached the point of making plans for a seconda treatment plant at least twice before, but past projects have faltered due to lawsuits, lack of funding and political considerations. As a result of two of those l the IBWC is now under a federal court order to hold a series of hearings, come up with a plan and begin building a secondary plant by 2006. This time the I named a public-private partnership known as Bajagua as its "preferred alternative." Bajagua's backers have spent years and millions of dollars promoting th profit plant, which would be built alongside the Alamar River east of Tijuana. Wednesday night's turnout was relatively small. Only eight people spoke, and indicated they were weary of making the same public speech over and over. There has never been unanimous agreement over the best way to address the bo sewage problem. Some speakers approved of the IBWC's plan, while others did not. Ed Kimura of the Sierra Club said the environmental impact statement contain sufficient information, and he questioned the potential impacts to the environment in Mexico, near where the proposed plant will be built. Serge Dec director of the nonprofit group Wildcoast in Imperial Beach, complained that the beaches are still fouled by sewage. "Everybody thinks you've done a terrib Dedina told the IBWC officials. "You're going to spend millions, and you absolutely will not solve the problem of sewage coming over the border." On the c Mario C. Lopez, a representative of U.S. Rep. Bob Filner, thanked the IBWC on the congressman's behalf. "Congressman Filner will continue to work with community until there is a final solution," Lopez said. "As with all the meetings over the past 12 years, there are a lot of familiar faces here," said activist Ca Powers. "We all want a solution. Now, finally, I think the train has really left the station." The environmental impact statement is available at public libraries online at www.ibwc.state.gov. The public has until Feb. 28 to submit written commentsonly mailed comments will be accepted, no faxes or e-mails.(San Di Union-Tribune, June 19, 2004) 2005/02/21 - Treatment site trickles into service South Bay water facility to run at 10% of capacity. More than three years af dedicated as "an additional water source" for a thirsty city, San Diego's South Bay sewage treatment plant is about to sell its first batch of recycled water -to wastewater treatment plant. Much of that water will end up in the ocean after it is used to process sewage. It will not irrigate parks or highway medians in th fastgrowing southern section of San Diego. That kind of success is two years away, barring hiccups in a costly piping project to service eastern Chula Vista. San Diego will run the $143 million South Bay Water Reclamation Plant at about 10 percent of its recycling capacity. City water officials said they are tryin determine how long it will take for the plant to achieve its maximum production of 15 million gallons a day. To some who have followed water reuse issues Diego, the pace is hardly surprising. Despite pouring more than $450 million from federal and local sources into water reclamation during the last decade, S recycles about one-third of the water per capita as the state average, California records show. Almost all of the city's treated sewage is flushed into the ocean city has has fallen woefully behind other proactive districts around the state in its reuse of treated water," said Robert Simmons, a retired University of San l professor and a leader of the Sierra Club's efforts to boost water reclamation in San Diego. He blames the city's record on several factors: wastewater officia didn't see the potential of reclaimed water, weak enforcement of water-reuse mandates and the high cost of installing and maintaining separate pipes for recl water. Water recycling requires a step beyond conventional sewage treatment. The process removes enough impurities from wastewater so it can be safely u irrigation and industrial processes. A controversial effort to turn sewage into drinking water was scuttled by the City Council in 1999, but it will be addresse a $900,000 report on San Diego water reuse due by summer. California leads the nation in water recycling, which is recognized as a key to surviving drough serving a population expected to reach 48 million by 2030. About 545,000 acre-feet of California sewage was recycled in 2002, more than twice the volume Nearly half of the state's recycled water is used on farms, 20 percent went to landscaping and the rest was spread among other uses. State data show that San County, with a population of nearly 3 million, recycled about 15,700 acre-feet of wastewater in 2002, the most recent year for which comprehensive statewi are available. An acre-foot equals 326,000 gallons, or enough to service two typical households for a year. Orange County, with a population similar to San County's, recycled about 57,000 acre-feet. By itself, recycling by Orange County's Irvine Ranch Water District, which serves a population of 316,000, outpa San Diego County. But that district has a huge advantage: It was mostly developed in the 1960s by a development company that installed pipes for recycled along the way. These pipes were painted purple to distinguish them from pipes that transport drinking water a technique widely used today. "There is just so culture that we have in the district," Irvine Ranch spokeswoman Beth Beeman said. "Water is too valuable to be used just once." San Diego's water reuse efl been complicated by hilly terrain and a lack of aquifers for storing reclaimed water, said Fawzi Karajeh, water recycling chief at the state Department of Wa Resources. Others point to San Diego's absence of large-scale agriculture, which sops up huge volumes of treated water in other regions. "I think they have Karajeh said. San Diego's critics fear the city isn't keeping up with population growth or offsetting increasingly uncertain water supplies. The city imports u percent of its water from the Colorado River and Northern California. San Diego City Councilman Jim Madaffer likens the promise of water recycling to a p at the end of the rainbow -something that never quite materializes. "The city is still behind the eight ball with respect to getting a return on its investment," h think it will happen over time, but people aren't beating the door down to buy reclaimed water." (San Diego Union-Tribune, Feb. 21, 2005) 2005/02/21 - N to process water close to approval. Construction of a $34 million recycled-water facility, which will ensure that parks and other open spaces in eastern Chul stay green even during long droughts, could begin in about four months. This month, the Otay Water District certified the final environmental impact report project. The project is still under review but is expected to gain approval within the next couple of months. The recycled-water facility, which will be north Street near the Otay Landfill, is expected to be completed in early 2007. It will supply communities in eastern Chula Vista with 100 percent reclaimed wate

water will be used for landscaped areas such as parks and recreation fields. "For the Otay Water District, this is a big deal," said Mark Watton, the agency's g manager. "It's one of the biggest projects the district has done dollar-wise." The project calls for six miles of 30-inch-wide pipeline, a 12-million-gallon stora and a pump station. The pipeline stretches from Dairy Mart Road in south San Diego, through San Ysidro and to the eastern Chula Vista neighborhoods. Th paced development in east Chula Vista over the past few years has increased the demand for recycled water. The district currently gets recycled water from W. Chapman Water Recycling Facility in Rancho San Diego. That facility produces about 1.1 million gallons of recycled water a day. On cool winter days, Chapman facility supplies most of the recycled water for east Chula Vista. But on summer days, Watton said, the district needs 5 million more gallons a day water to meet demand. And it will need even more recycled water in the future. In October 2003, the district signed a 20-year deal with the city of San Dieg up to 6 million gallons of reclaimed water a day. The district will pay a $3.6 million hook-up fee to San Diego's South Bay Water Reclamation Plant, and it up to $2 million a year for water. The new Otay facility will process and deliver the reclaimed water, which will be used throughout east Chula Vista. The ar each day will depend on demand. Watton said the district anticipated there would be a period when the amount of recycled water needed in east Chula Vista exceed supply. "We knew there would be a mismatch in time," Watton said. The planned communities in east Chula Vista were all built with the idea of usir water in open-space areas. Beginning in 1986, Watton said, the district required pipes for reclaimed water to be installed for new parks, sports fields and lan areas. At the time, developers were not happy about the added expense, Watton said. However, with current concerns over future water supplies and a focus conservation, "We all look like geniuses," he said. The new facility, which will be financed through developer fees and federal grants, had to be altered to pr tar plants. The original proposed location of the storage facility would have destroyed a significant number of the plants. After working with the city of Chu Watton said, district officials moved the storage facility's location 60 feet south to minimize the impacts on the tar plants. The change drew praise from envi groups, Watton said. "Having a much better relationship with the city of Chula Vista has really paid off," he said. In past years, Chula Vista officials have be of the politics that have plagued the district, which serves 193,000 people in the southeastern part of the county. The 129-square-mile district includes south Cajon and La Mesa, Jamul, Spring Valley, Bonita, eastern Chula Vista and the San Diego neighborhood of Otay Mesa. (San Diego Union-Tribune, Feb. 21, 2005/07/15 - Repurified wastewater backed for home use Citizens panel forwards proposal to S.D. council. A diverse panel of San Diegans yesterday embra to recycle highly treated wastewater by piping it to the San Vicente Reservoir and eventually to customers citywide. If adopted by the City Council, the cost controversial project would be the only one of its kind in California. Forum participants said they want San Diego to become a national model for water rec "We hope it will be a historic step," said Judy Swink, a panelist who lives near Point Loma. The $210 million proposal -dubbed "toilet to tap" by opponents 1990s -was one of the options considered in a $900,000 study that the council commissioned last year. It now moves to the council's natural resources comn Securing a local water supply was a top priority for the panelists because San Diego is almost entirely dependent on imports from the Colorado River and N California. The city's water demand is expected to grow 25 percent by 2030. "For my grandchildren's sake, we need a sustainable water supply, and it's right said Gerald Handler, a panel member and dental surgeon from La Jolla. The panel consists of participants from different ethnic backgrounds and professions as environmental activist and small-business owner. Handler initially was skeptical about turning wastewater into drinking water, he said, but learning about science of water reclamation and San Diego's water needs made him an advocate. "The more you know, the more you are convinced that this is the way of t he said. Not everyone sees it that way. Former Councilman Bruce Henderson of Pacific Beach was a leading opponent of a similar water recycling project tl council spiked in the late 1990s after public outcry. He contends that San Diego should focus on water conservation, which he said is cheaper and less risky treating wastewater. He opposes drinking "repurified" wastewater because of the possibility of human error in the treatment process. Though Henderson isn citizens panel, he promised to register his concerns publicly as the city's recycling strategies move forward. "There is a simple solution," he said. "Ask the v you want toilet to tap or do you want conservation?"' The prospect of drinking highly treated wastewater makes many residents uneasy, according to a phon of 406 San Diegans sponsored by the city in 2004. Respondents heavily supported a wide range of applications for recycled water -for irrigating golf course in industrial processes and toilets -but only about a quarter of them backed its use for drinking water. The results showed that public support improved from percent to about 50 percent when respondents were given more information about safeguards and water testing standards. Yesterday, panel members said th maximize the city's use of recycled water and the best way to do that is to use a mix of strategies. Their final statement was unanimously supported by the g roughly 30 people, though one individual said he wanted to see even more aggressive water recycling goals. The statement called for getting new customers nonpotable water from the city's South Bay Water Reclamation Plant. That plan's projected cost of $1 million is the cheapest of the six options scrutinized b panel. For San Diego's North City Water Reclamation Plant, the panel wants to see highly treated wastewater piped to the San Vicente Reservoir, where it w with raw river water and eventually be distributed to faucets citywide. That effort, called "indirect potable reuse," includes building water treatment systems technology such as reverse osmosis. This project was one of the most expensive strategies examined in the city's study. However, it would maximize the No treatment plant's recycling capacity and provide the most recycled water of any option reviewed by the citizens panel. (San Diego Union-Tribune, July 21, 2007/10/12 - It's important to periodically revisit the $190 million South Bay Ocean Outfall (SBOO) project. Arguably, one of the region's most-successful, risk projects, ever. This project received at least 14 awards, including three nationals (ASCE, AAEE and APWA), and two statewldes (ASCE and CWEA). discharges effluent from the South Bay International Wastewater Treatment Plant and the South Bay Water Reclamation Plant to the Pacific Ocean, at a dep feet below mean sea level, about 3.5 miles offshore of Imperial Beach, and at a minimum initial dilution of 100:1 (most of the time it greatly exceeds that). SBOO was designed to meet the requirements of the CA State Ocean Plan (SOP); the world's strictest, most stringent, such standards. The drop shaft is 36 f internal-diameter by 200 feet deep. The concrete walls are two feet thick and the bottom slab is six feet thick. The top cover alone weighs in excess of 400 t SBOO project set a minimum of four world records, including the largest-diameter bonnetted knife gate valves (144- inch diameter), victaulic couplings (14 diameter) and driven (not drilled) steel casing (about 14 feet in diameter), and the longest earth pressure balance (EPB) tunnel boring machine (TBM) muck spoils) conveyor (126 feet). It should be noted that the casing was located about 2.6 miles offshore and In about 75 feet of ocean water. At the time, this soft tunnel was the highest-head tunnel ever constructed In all of North America, and the third highest-head tunnel ever constructed in the entire world. The Eart Balance (EPB) Tunnel Boring Machine (TBM) was manufactured by Mitsubishi Heavy Industries (in Kobe, Japan) and was formally given the name "Moli official "TBM Arrival and Name Granting" party. Not only did she bore the tunnel, but she also pulled behind her over a football field's length of trailing an gear. In fact, she weighed in at 214 metric tons and was forced to camp out in Chula Vista for several days while an evaluation and determination was made whether the existing Dairy Mart Road bridge could adequately support her, during mobilization efforts. The TBM transport trailer had 93 wheels with three tractors. She did an incredible job in boring the 3.6-mile tunnel. At one point, I was at the terminus of the tunnel (after a 30-minute train ride), standing on a taking a photo looking straight up within the riser assembly conduit. At that time, I was about 2.5 miles offshore, 240 feet below the ocean water surface, an 170 feet below the seafloor. It was really quite a moment, indeed. (Lee, Rolf "Outfall project" Oct. 12, 2007)