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COLORADO RIVER SALINITY AND NEW RIVER SANITATION

Environmental Issues in
U.S.-Mexican Relations

by Robert D. Tomasek

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The Colorado River salinity and New River sanitation issues did not involve national security. Rather, they emerge from Mexican-U.S. economic and ecological interdependence. Yet resolving the issues took political action at the highest levels to pave the way for technical solutions.

This *Report* describes the evolution of two issues, both environmental problems between the United States and Mexico, and the role of the International Boundary and Water Commission in their resolution.

In the best known case, that of Colorado River salinity, strong domestic pressures in the United States made it virtually impossible to resolve without innovative Mexican negotiation. The New River sanitation case appeared to have less significance for both governments; thus California officials had to develop a strategy for focusing attention on it at the presidential level so as to convince the Mexican government of its gravity. In both cases, presidential interest and willingness to act was necessary before solutions could be reached. In neither case was the outcome certain, as increasing politicization and involvement at higher levels progressively complicated the original issues but also provided the leverage needed for action.

The effectiveness of the International Boundary and Water Commission (IBWC) is currently being questioned by critics who feel the

commission is overly cautious: they want the IBWC to seize the initiative in resolving newly emergent problems, especially in regard to air pollution and ground water. The salinity and sanitation cases offer an opportunity to judge whether, given an opportunity to perform a role, the IBWC made the most of it. The Colorado River salinity issue represented an old-style technical problem the IBWC felt comfortable with, although it lacked the political authority to act on its recommendations. On the New River sanitation issue, representative of more policy-oriented management problems like air pollution and ground water, the IBWC was initially hesitant and, some say, too cautious. It was only after presidential directive that it acted.

The IBWC Controversy

The IBWC was created in 1894 and is extremely proud of its many achievements.¹ (The accompanying map shows the location and date of each project.) The variety of IBWC activities is impressive: implementing and administering the 1906 and 1944 treaties apportioning the waters of the Rio Grande and Colorado Rivers; deciding on the location of the Amistad and Falcon dams, which created huge reservoirs used for irrigation, flood control, hydroelectricity, and recreation; recommending measures to resolve the salinity problems of the Lower Rio Grande and deciding on interim measures for the Colorado River salinity problem; river rectification work; supervision of the flood control works of the Lower Rio Grande River; recommendations on the resolution of two border sanitation problems.

The IBWC acknowledges that on many occasions it took U.S.-Mexican governmental negotiations to resolve major issues; the IBWC's role was that of implementer and administrator. On the other hand, IBWC officials feel their experience and operating procedures make them effective problem-solvers, owing to a number of factors. The U.S. and Mexican commissioners and many of their associates and engineers are careerists: their long and mutual acquaintance in their El Paso headquarters allows them to communicate constantly and informally. They are alerted to many problems by IBWC field offices along the border. They can resolve problems by the approval of minutes which have the status of executive agreements and are never rejected by their governments. One official of the IBWC emphasizes that the commission often has great leeway, and quite often the two governments can defuse border issues that are becoming politicized by sending them to the IBWC for technical study and practical solutions.² The Mexican Foreign Ministry division head of rivers and frontiers makes the same point.³ He stresses, however, that IBWC personnel are technicians; they are not trained to handle sensitive political problems; if they attempt to do so, moreover, it would destroy their effectiveness.

The IBWC approach to problems has best been characterized as functionalist, consisting of (a) *ad hoc, case by case* approach and incremental response pattern; (b) *brokerage* in that the IBWC is an intermediary between the two governments; (c) *technical expertise*; (d) *pigeonholing political issues* meaning that the IBWC will defer controversial political questions and direct their energies toward more technically manageable concerns; and (e) *exclusive jurisdiction* meaning the IBWC retains a tight hold on policy-making, subordinating interested state, county, and municipal agencies.⁴

Those who have studied the IBWC believe that the functionalist approach has served the commission well in the past, but may now be inadequate. As cities along the border have grown, as farming has intensified, implying greater use of chemical fertilizers and demand for more water, the new problems are

perceived to be more social and economic in nature and also more complex ecologically. Some want the IBWC to be much more assertive, working closely with state, county, and municipal agencies to formulate policies on air pollution and ground water so the problems do not balloon into foreign policy issues between the two countries.⁵

Professor C. Richard Bath, a University of Texas specialist on air pollution and IBWC critic, feels that at present little is being done to improve air quality standards since economic development along the border is given a higher priority than clean air. Cooperation between the U.S. Environmental Protection Agency and its Mexican counterpart, he observes, is haphazard and not very effective. Yet, already there is a problem that is a potential *cause célèbre*. The American Smelting and Refining Company (ASARCO) plant in El Paso is allegedly responsible for lead poisoning of 8,000 children in Ciudad Juarez. A legal suit by Mexican parents in a U.S. court could lead to publicity in the Mexican press that would snowball politically.⁶ Professor Bath thus recommends that a new treaty be drawn up to give the IBWC the statutory power to deal with air pollution. At the same time, he advocates a minimal role for the IBWC: it would collect information, set standards, and perhaps investigate specific cases, but would definitely not take cases to judicial bodies.⁷ Professor Bath is really advocating that the IBWC utilize its functional approach to treat air pollution problems on a practical basis before an emotion-charged case moves everything over to the judicial and political level.

The ground water issue receives equal concern.⁸ Barbara G. Burman and Thomas G. Cornish recommend treaty negotiations between the U.S. and Mexico to apportion water equitably based on calculations of present and future use.⁹ The U.S., they observe, has utilized many of its ground waters, and will continue to do so increasingly; Mexico, although slow in the past, will require progressively more ground waters for irrigation, especially along the border. The authors want the treaty before problems develop, and feel that the IBWC is the perfect instrument for regulation.

The IBWC reaction to these suggestions is one of caution. On air pollution, it feels it lacks statutory authority and does not seek to have it. On the ground water issue, it has conducted some studies of the problem. It also manages the provisions of the 1976 treaty on Colorado River salinity that restrict both countries to a certain amount of ground water usage within five miles of the border near Yuma, Arizona.¹⁰ Thus the IBWC, when directed by both governments, has accepted responsibility for supervising an agreement. It is leery about accepting responsibility for determining fault and devising equitable solutions, sensitive areas in which it would have to deal directly with industries and landowners. The IBWC would become more vulnerable to their criticisms and perhaps sacrifice effectiveness of its regulatory activity.

Colorado River Salinity

The Colorado River salinity problem became extremely politicized in Mexico, for a number of reasons. Indeed, it may be seen as a model case for the politicization of an ecological issue. First, politicization was promoted by the visible economic damage to individuals: farmers in the Mexicali Valley of Mexico saw their crop production decrease drastically due to the increasing salinity of the Colorado River irrigation waters they utilized. Second, the damage occurred within a short time, focusing the discontent and leading the politicians to feel compelled to seek redress for the injured. The salinity damage occurred dramatically in 1961 and 1962, soon after the U.S. Bureau of Reclamation did such a poor job in constructing the Arizona Welton-Mohawk irrigation project which caused most of the salt run-off back into the Colorado River. The initial discontent of the Mexicali Valley farmers was expressed in appeals, local demonstrations, and complaints from their union. The issue then drew the attention and backing of their state governor. Third, the issue became even more politicized as mass media publicity made it a national, not merely a regional concern. Once the issue commanded national attention through the press, President Luis Echeverría immediately gave it top priority. He felt strongly that Mexico had been

wronged, but also knew that firm action would enhance his image as an activist president and improve his domestic political image.

The issues of sanitation discharge, air pollution, and ground water apportionment have a relatively reduced potential for politicization. Poor sanitation and air pollution obviously can be harmful to the health of individuals, but they are less likely to affect directly their economic livelihood. Also, the deleterious effects are of a long run nature, making it difficult to dramatize any sudden impact. These problems are also more difficult to publicize in a vivid way, and presidents would find it harder to understand how they can benefit from making these foreign policy issues. (Ground water depletion can certainly affect economic livelihood, since farmers can be wiped out; however, the depletion phenomenon is poorly understood and usually long run in nature, so it is also difficult to dramatize and publicize.)

The extreme politicization of the Colorado River salinity issue in Mexico led its government to demand remedial action from the United States. Yet from 1961 to 1972 no solution emerged, as water interests in the Western U.S. influenced key congressional committees, backed by important government departments, to block action.¹¹ These water interests had forged their governmental alliances as a result of the 1944 treaty which divided the Colorado River waters between the Western states and Mexico. By 1961 they were so entrenched in the political system that only a strong effort by a United States president could overcome domestic resistance. The U.S. president, too, had to become convinced that the foreign policy gains would be worth the political costs of attempting to resolve the issue. Even the U.S. State Department took the position that there was no legal obligation to resolve the salinity problem since the 1944 Colorado River treaty covered only the quantity and not the quality of the water that Mexico would receive.

Presidents Kennedy and Johnson found the domestic resistance too strong to overcome. There were not only the water interests and the

governors of seven Western states opposing change, but they had the chairmen of Senate Committees on Appropriations and Interior and Insular Affairs sympathetic to their viewpoint and willing to block enabling legislation. Within the bureaucracy the Bureau of Reclamation sided with the water interests, while the Office of Management and Budget for conservative fiscal reasons opposed expensive solutions such as a desalting plant.

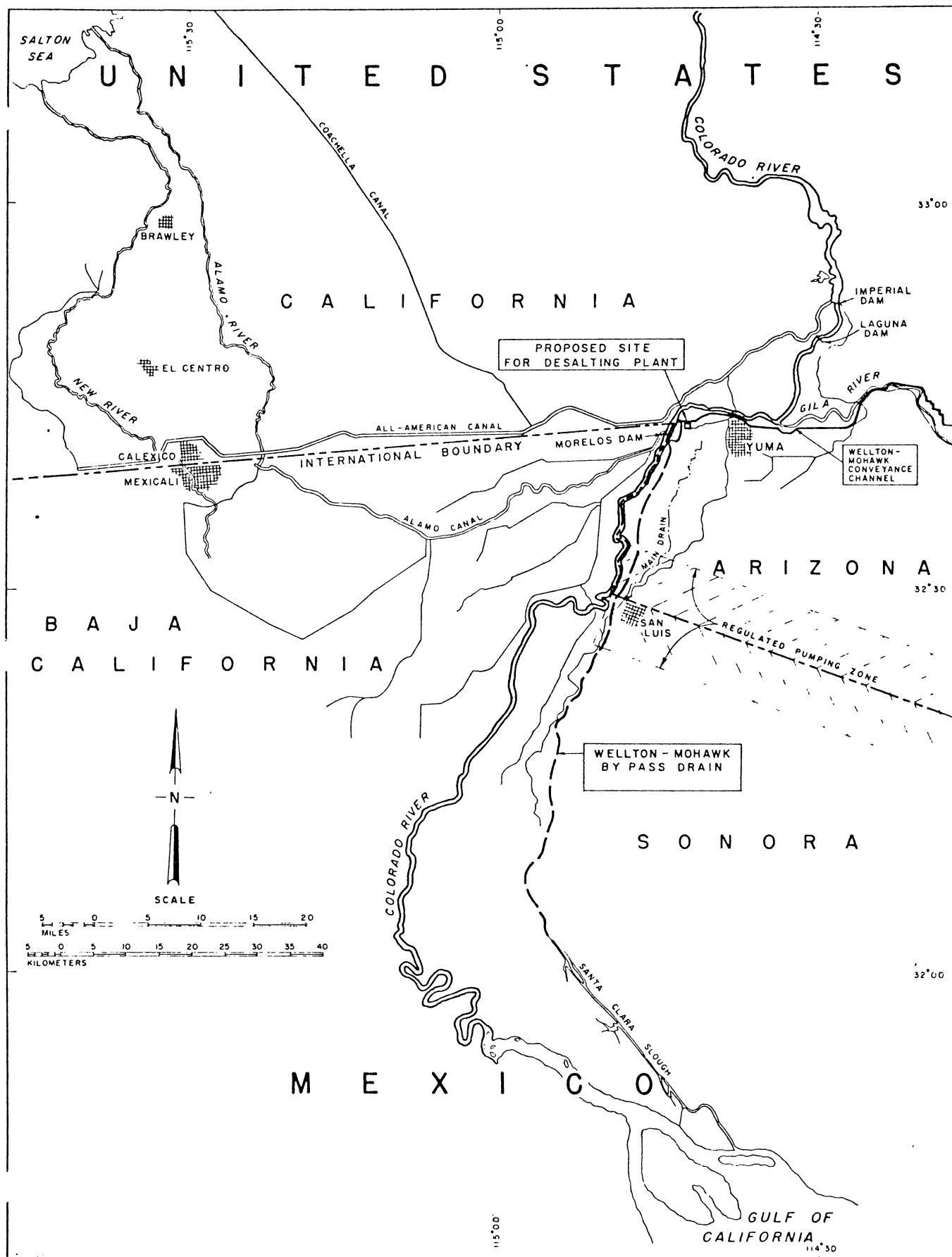
Mexico persevered, experimenting with different foreign policy strategies.¹² From 1962 to 1970, Mexican officials concentrated on enhancing the international law position that the 1944 treaty implicitly called for pure waters. During that period Mexico's Foreign Ministry wrote two legal books on the issue, contracted another work to a professor, and hired the Washington, D.C. law firm of Chapman and Friedman to write a long legal analysis on the case. All these works produced conclusions favorable to Mexico, and pointed toward submitting the case to the International Court of Justice. This legal approach had no impact on the domestic political groups in the United States, however, and Mexico eventually decided that the International Court of Justice would be too expensive, uncertain as to outcome, and slow. Officials were also concerned that making an international case would irritate the United States and ultimately reduce the chances of successful governmental negotiations.

In 1970 Mexico began an active diplomatic offensive in Washington, D.C. At first, Mexico concentrated on the U.S. State Department and worked through a newly formed bilateral commission. By late 1971 Mexico realized these were not the places to get things done. The Secretary of State was evaluated as being poorly informed, the State Department as being ineffectual, and the bilateral commission so useless that Mexico withdrew. In the first six months of 1972 Mexican officials concluded that the President and Congress were the key to a solution and set about convincing them that this was the highest priority issue between the two countries. Mexicans met with Henry Kissinger in informal surroundings and relayed their concern to him in expectation that he would convey it to President Nixon. An annual

meeting of U.S. and Mexican Congressmen was also utilized to gain support; their final communiqué backed the Mexican position. Finally, President Echeverría, with a fanfare of publicity, studied the whole problem in the Mexicali Valley before he saw President Nixon, and then in a major speech before the U.S. Congress he successfully dramatized the problem. The key to the strategy was convincing President Nixon in 1972 that he could enhance his presidential image, as in the case of U.S.-China détente, by resolving another difficult international problem.

President Nixon, acting on his desire to resolve the salinity problem, appointed former Attorney General Herbert Brownell to find a permanent solution within a year. The water interests within the Colorado basin states still had to be satisfied, however, and Herbert Brownell receives widespread approval for handling the problem well.¹³ He formed an interdepartmental committee with representatives added from all the Colorado basin states, rode herd on it, forcing members to consider systematically all alternatives, and brought Mexico in on the discussions at just the right time. His proposed solution was to build the world's largest desalting plant to purify the saline drain-off from the Welton-Mohawk irrigation project. In this way the Colorado basin states would not lose any waters. Until the desalting plant was built, the saline drainage would be run off through a canal to the Gulf of California.¹⁴ This canal would also assist Mexico's rebuilding of the entire Mexicali Valley irrigation system. Mexico would be legally guaranteed pure waters, and they would come from federal storage reservoirs until the desalting plant was built.

Even though this solution assured the Western water interests and their sympathetic Congressional committees that there would be no loss of water, they were only willing to accept it if pork barrel water projects were added to the authorization bill. President Nixon did not want to include these, but it was the price he had to pay to resolve the salinity issue. Mexico's only interest was in receiving pure water: Mexico is satisfied with the solution, but also stresses that the desalting plant is a U.S. concern, not a Mexican request.



The implementation of the solution has been satisfactory except for the controversy over whether the desalting plant is a good idea. The U.S. and Mexico constructed the drainage canal to the Gulf of California, Mexico improved its irrigation system in the Mexicali Valley without asking for U.S. financial assistance, and the water quality has improved, satisfying Mexico. The construction of the desalting plant, however, was delayed by the failure of Congress to authorize funds. Then in 1979 the General Accounting Office (GAO) issued a critical report describing in detail how inflation and poor cost estimates would more than double the cost of the desalting plant and its related pork barrel projects. Thus, the report recommended that the Western states face up to the water shortages they will confront by the year 2000, form a federal-state Colorado River Basin authority, and start practicing good water conservation programs.¹⁵

The GAO report was criticized by almost everybody with water interests—Governors of Western states, Congressmen, the U.S. State Department, and the IBWC. To add fuel to the fire, Congressman George Brown of California argued that it would be cheaper for the government to buy out the 150 farms in the Welton-Mohawk Arizona irrigation project than to build the desalting plant. The government could then grow energy-valuable desert plants such as guayule and johoba, avoiding the salinity problem since these plants require little water.¹⁶ Finally, the issue was ventilated in the Congressional hearing authorizing the added costs to the construction of the desalting plant. In this hearing all viewpoints were expressed. The representative of the Welton-Mohawk farmers described the economic loss and psychological shock that would come to the 150 farmers if they were displaced, and the IBWC argued that the desalting plant was necessary for the salinity solution to work. One environmental group argued that, besides being a robbery of the taxpayer, the desalting plant at most would solve only the Welton-Mohawk problem; other water (pork barrel) projects would increase salinity problems elsewhere within the next 20 years. Mexico would then be confronted with another

salinity problem it could not now foresee,¹⁷ and accuse the U.S. of breaking the 1976 agreement, which is very specific about what constitutes pure waters of the Colorado River.

One value in stressing the enormous politicization of the Colorado River salinity issue is that it provides perspective on exactly what could be expected from the IBWC. It becomes immediately obvious that the solution emerged from the political process. The IBWC did, however, perform two constructive roles. The first was in 1962 when the U.S. and Mexican presidents directed the IBWC to find an interim solution in as pragmatic a way as possible. Given the technical difficulties and political constraints, the IBWC action, trying to drain off some of the saline waters of the Welton-Mohawk irrigation project, was useful. The IBWC interim measures helped avoid confrontation. The other role has been to implement the final agreement, such as making sure that the drainage canal to the Gulf of California was constructed properly, and carrying out continual checks on water quality. The IBWC has the necessary technical expertise for both responsibilities.

It is doubtful that the IBWC could have accomplished much more. It does not have the statutory authority to veto poor irrigation projects such as the Welton-Mohawk one, and if it had attempted to do so on its own, it would have incurred the wrath of Arizona water interests and the Bureau of Reclamation. Similarly, the Mexican government did not feel that a technical solution through the IBWC was feasible, because, as they put it, the problem could only be resolved at the moral, political, and judicial level.¹⁸

The New River Sanitation Problem

In contrast with the Colorado River salinity issue, most of the sanitation problems arise in the booming Mexican cities and towns along the border that cannot adequately handle sewage. The effluents affect the counterpart communities on the United States side. Nogales and San Ysidro in California, for example, have received raw sewage from an overflow of sewers and channels on the Mexican side. San Diego allowed Tijuana to link up with its own municipal sewer system on an

emergency basis after discovering that the Tijuana discharge of sewage into the Pacific Ocean was polluting the San Diego city beaches.

It has been the New River, however, which heads about 20 miles south of the border, flows through Mexicali and Calexico, and then meanders for 75 miles through the Imperial Valley to the inland Salton Sea, that has received most of the attention.¹⁹ Arthur Swanjian, executive officer of the California Regional Water Quality Board, described it as an open sewer for 30 years,²⁰ and his description seemed apt since its pollution consisted of refuse from Mexicali's main municipal dump, untreated slaughterhouse and industrial wastes from the same city, and inadequately treated sewage of 370,000 residents and the untreated sewage of another 130,000 people. The New River was not merely an eyesore, but so badly polluted that health officials predicted epidemics. Residents of the Imperial Valley disgruntled about the situation, especially since they expected Mexico to solve the New River problem after the U.S. resolved the Colorado River salinity issue in 1976.

From 1960 through 1978 Arthur Swanjian saw the IBWC as the proper instrument for resolving the New River sanitation problem. The commission had been involved in similar cases earlier and sanitation is given a high priority in article 3 of the 1944 treaty defining the jurisdiction of the IBWC. Yet the many attempts of Arthur Swanjian in contacting U.S. Commissioner J.F. Friedkin of the IBWC to get something done were ineffective. These attempts involved sending him pollution reports, inviting him to regional water board meetings, sending him technical assessment reports on different ways Mexicali could resolve the problem, asking him for information as to Mexico's legal authority to use the New River as a drainage way, and informing him as to exactly when Calexico had met U.S. environmental standards in construction of its own sewage plant. J.F. Friedkin seemed at times to be helpful, such as inviting California water officials to Mexicali to show them the construction of the city's sewage treatment plant. However, as the New River problem became worse and the IBWC

appeared to do little, Arthur Swanjian changed his strategy.

It does not appear during this time that the functionalist approach was even being utilized, although there were circumstances that constrained Commissioner Friedkin's options. For example, Mexicali's population grew so rapidly, from 25,000 in the early 1950s to over 600,000 in 1979, that city officials could not keep up with adequate sewage treatment plants even though they thought they could, and may have been overoptimistic in their conversations with the U.S. Commissioner. Also, some of the Imperial Valley towns were somewhat lax about their own sewage treatment until the 1960s, and Mexico often reminded the U.S. of this. Evidently, though, the important obstacle was that the Mexican government simply decided not to bear the huge costs of resolving sanitation problems along the border. If this assessment is correct, then the U.S. Commissioner should have informed Arthur Swanjian of this financial obstacle many years earlier.

In 1978 Arthur Swanjian decided that politicization of the New River sanitation problem was the only way to get action, but here he faced a more difficult problem. The pollution of the New River in the Imperial Valley did not hurt the prosperous farming in the area, did not lead to the predicted epidemics of polio, typhoid, cholera, and tuberculosis, did not reduce tourism much since the river had never been in a pristine condition—thus it was difficult to demonstrate damage to individuals. Also, unlike the rapid salinization occurring in the Mexicali Valley in 1961-62, New River pollution was a gradual process without any particular dramatic moment. Thus publicity would be crucial. Whereas Mexican President Echeverría could envisage domestic political advantages in taking up the Colorado River salinity problem, it was difficult to show that advantage for a U.S. president on this issue. It could actually be dysfunctional in the annual meetings with the Mexican president if pressure for a solution annoyed the Mexicans and affected their attitude on more important issues such as oil exports to the United States. Thus the publicity would have to be so effective that the U.S. president would appear to

be negligent if he did not do something about the problem.

In 1978 Arthur Swanjian adopted a three-pronged, go-for-broke strategy. The first part was to make the issue one that all California would be concerned about, and specifically he focused his efforts on the governor's office and the California legislature. The second part of the strategy was for these key policy bodies to appeal directly to both the U.S. State Department and President Carter for action. In July 1978 Governor Edmund G. Brown, Jr. wrote to Secretary of State Cyrus Vance urging prompt action, and of more interest, in December 1978 the California legislature passed a joint resolution directed to President Carter strongly urging that he discuss the New River problem with President López Portillo during their scheduled meeting in February 1979. The third part of the strategy, conducted simultaneously, was to stress press coverage of the tires, dead animals, bottles, and cans that were floating down the river. Danger signs were posted on every bridge to catch press attention. *Time* magazine and the *New York Times* published articles on the New River. Television coverage was also promoted, and the issue was presented nationally on "Walter Cronkite's CBS Evening News."

All this activity led the U.S. State Department to discuss the New River issue with the Mexican Foreign Ministry before the presidential meeting. It was then put on the agenda for presidential discussion in February 1979. Arthur Swanjian and others ideally wanted the presidents to issue a directive to amend the 1944 treaty, specifying a solution for the New River problem, and setting a timetable for Mexico to construct sewage plants in Mexicali, with implementation to be managed by the U.S. State Department and the Mexican government. Instead, the two presidents, in a very short paragraph in their communique, "reaffirmed the importance of having good quality water on both sides of their border, and instructed the IBWC to make immediate recommendations for a permanent solution to the sanitation of water along the border."²¹

How well did the IBWC utilize this opportunity? In my judgment, they have acted astutely. The IBWC

realized that the presidential directive was so general that it would have to pin down both governments to prevent evasiveness and procrastination. It did this by insisting on detailed stipulations in the minute of agreement of September 24, 1979.²² The IBWC, it agreed, would give sanitation problems immediate and priority attention; to be successful, the commission noted, the U.S. and Mexico would have to make sure their respective agencies cooperated with the IBWC. It thus stipulated that, after the IBWC had prepared a minute identifying and recommending a solution for each sanitation problem, the governments would then construct the works necessary with the greatest speed and timeliness possible.²³ In the presidential meeting of September 28-29, 1979, it was stated in the communique that the presidents received the IBWC recommendation, found it satisfactory, and then instructed the IBWC to proceed with its specific recommendations.²⁴ In August 1980, the IBWC identified the New River problem as the most urgent one, specified solutions, and set a deadline of 1985 for the completion of sewage disposal projects in Mexicali. It has also given attention to other sanitation problems along the border, although the New River, which attracts more publicity, retains priority.

Reflections on the Politicization Process

For the United States and Mexico, issues such as that of the Colorado River salinity and New River sanitation do not involve national security. Rather, they emerge from the countries' economic interdependence and the interplay of domestic politics. Solution in each case ultimately required political action at the highest levels to overcome entrenched local interests. Successful politicization, however, is not automatic. Both cases indicate that interested parties had to probe for successful strategies, often changing tactics. The two cases also show the limitations of the IBWC. The commission can be effective, however, and that capacity is probably best preserved by continuing to emphasize a technical, functionalist role outside the political arena.

(November 1982)

1. See Charles A. Timm, *The International Boundary Commission: United States and Mexico* (Austin: University of Texas Press, 1941) for an older book describing each of the projects up to 1941. Also see David Herrera Jordan and J.F. Friedkin, "The International Boundary and Water Commission, United States and Mexico" *International Conference on Water for Peace* (Washington, D.C.: U.S. Government Printing Office, 1967), vol. 5.
2. This was one of the main points made by Bob Ybarra of the IBWC in a long interview in the El Paso headquarters, June 1980.
3. Interview with Luis Cabrera at the Mexican Foreign Ministry in Mexico City, July 1980. His official title is Director General de Limites y R  es. The division he heads is one of the 17 of the Mexican Ministry of Foreign Affairs.
4. A full explanation of these functional attributes can be found in Stephen P. Mumme, *Continuity and Change in U.S.-Mexico Land and Water Relations: The Politics of the International Boundary and Water Commission* (Washington, D.C.: Smithsonian Institution, the Wilson Center, Latin American Program, Working Papers Number 77, 1981). In this assessment the author is less critical of the IBWC than in a previously unpublished paper, Milton H. Jamail and Stephen P. Mumme, "The International Boundary and Water Commission as an Agent of Conflict Management in the U.S.-Mexican Borderlands," paper presented before the Western Social Science Association, April 1980.
5. The *Natural Resources Journal* has had many articles in the past decade describing technical aspects of these problems, and is an outlet for those seeking action on them. The IBWC is often mentioned.
6. Interview with Professor C. Richard Bath at the University of Texas in El Paso, June 1980.
7. For a more detailed description of his recommendations, see C. Richard Bath, "Alternative Cooperative Arrangements for Managing Transboundary Air Resources Along the Border," *Natural Resources Journal* (January 1978), pp. 181-199.
8. A good review of the literature and an analysis of the seriousness is found in Stephen P. Mumme, "U.S.-Mexican Groundwater Problems, Bilateral Prospects and Implications," *Journal of Inter-American Studies and World Affairs* (February 1980), pp. 31-55.
9. See Barbara G. Burman and Thomas G. Cornish, "Needed: A Ground Water Treaty Between the United States and Mexico," *Natural Resources Journal* (April 1975), pp. 384-404.
10. This can be seen on the detailed map of the Colorado River in this report.
11. The best account of the strength of this domestic resistance and how it operated is found in David G. LeMarquand, *International Rivers: The Politics of Cooperation* (Vancouver, B.C.: Westwater Research Center, University of British Columbia, 1977).
12. Fortunately, the Mexican Foreign Ministry has published an exceptionally detailed account of the unfolding of this strategy. See Secretar  a de Relaciones Exteriores, Serie Documental 13, *La Salinidad del R  o Colorado: Una Diferencia Internacional* (Mexico, D.F.: Mexico, 1975). This book also contains annexes including maps, treaties, presidential speeches on the Colorado River, and a copy of a presidential letter sent to President Nixon. This official account was reviewed by several persons in the Foreign Ministry before publication to make sure all involved agreed that the correct emphasis was given to the different aspects of the strategy as it unfolded. The book is very unusual in that it is unemotional, self-analytical, introspective, and inquiring. It was given to me in the Mexican Foreign Ministry with comments that they felt it was an important, solid piece of work. The book could be contrasted with a work such as Ernesto Enriquez Coyro, *El Tratado entre Mexico y los Estados Unidos de America sobre R  os Internacionales*, 2 volumes (Mexico: Universidad Nacional Aut  noma de M  xico, 1976).
13. This is done in both the Mexican official account and the LeMarquand book. For an account by Brownell himself, see Herbert Brownell and Samuel D. Eaton, "The Colorado River Salinity Problem with Mexico," *The American Journal of International Law* (April 1975), pp. 255-271.
14. See the map of the Colorado River in this *Report* which shows where the desalting plant will be located, as well as the bypass drain to the Gulf of California. A good description of the projected desalting plant is that of Burt Schoss, "U.S. Plans World's Biggest Desalting Plant to Clean Colorado River Water for Mexico," *The Wall Street Journal*, June 4, 1973, p. 10.
15. See U.S., Comptroller General, *Report to the Congress of the United States. Colorado River Basin Water Problems: How to Reduce Their Impact* (Washington, D.C.: U.S. General Accounting Office, May 4, 1979, CED-79-11).
16. For an elaboration of Congressman Brown's point of view, see U.S., Congress, House, *Congressional Record*, 96th Cong., 1st sess., Vol. 125, No. 73, June 7, 1979, p. E2779-2780 and U.S., Congress, House, *Congressional Record*, 96th Cong., 1st sess., Vol. 125, No. 83, June 21, 1979, p. H4949.
17. See U.S., Congress, Senate, Committee on Energy and Natural Resources, Hearings on Amending Title I of the Colorado River Basin Salinity Control Act, S. 496, 96th Cong., 1st Cong., 1st sess., April 12, 1979. The pages for the different viewpoints are as follows: The Arizona farmers pp. 76-92, J.F. Friedkin of the IBWC, pp. 56-63, and the environmental group, pp. 119-124.
18. Secretar  a de Relaciones Exteriores, *La Salinidad del R  o Colorado*, p. 53.
19. The New River can be seen on the detailed map of the Colorado River in this *Report*. It was singled out for attention in Gladwin Hill, "California Fights River's Flow of Mexican Wastes," *The New York Times*, November 20, 1978, p. A19 and John M. Crewdson "A Foul River, a Helpless Imperial Valley," *The New York Times*, August 21, 1979, p. A14.
20. See California Regional Water Quality Control Board of Colorado River Basin Region, *Report on Pollution of New River and Alamo River from Mexico and Proposed Best Management Practices*, May 9, 1979, 42 pages.
21. Office of the White House Press Secretary, *Joint Communiqu   of the Presidents*, February 16, 1979.
22. This analysis derives from discussion with Bob Ybarra of the IBWC, who provided me with the two full presidential communiqu  s as well as the important IBWC Minute No. 261.
23. See IBWC Minute No. 261, *Recommendations for the Solution to the Border Sanitation Problems*, September 24, 1979 for the exact wording which I have paraphrased carefully.
24. Office of the White House Press Secretary, *Joint Communiqu   of the Presidents*, September 29, 1979.