

Salt of the River, Salt of the Earth

Politics, Science and Ecological Diplomacy in the Mexicali Valley (1961-1965)

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ABSTRACT

This article examines the salinity crisis in Mexicali Valley. National and state officials from both countries saw Mexicali Valley as a ground where their theories on the causation of the crisis would be vindicated by scientific testing of water and land conditions there. Those that viewed Mexicali Valley as an international political landscape did not live there, but recognized the importance of the region in resolving the crisis. Those who lived in Mexicali Valley viewed their home as a local political landscape. For them the salinity crisis was not an abstract issue that could be reduced to statistics or policy positions, but instead represented a profound ecological transformation that affected the taste of drinking water, the fertility of land, and the bounty of the harvest. The concerns of local political organizers, such as Alfonso Garzón, founder of the State Agrarian League of Baja California (LAE), often worked at cross-purposes to those of national officials. In fact, one of the turning points in the salinity crisis occurred around 1964, when the diplomacy-driven perspective subsumed the agenda of many local officials in Mexicali Valley.

Keywords: 1. Environment, 2. Binational Relations, 3. Salinity, 4. Borderlands, 5. Mexicali

*Sal del río, sal de la tierra. Política, ciencia y diplomacia ecológica
en el Valle de Mexicali, 1961-1965*

RESUMEN

En este artículo se examina la crisis de salinidad en el Valle de Mexicali. Las preguntas que hicieron los creadores de políticas y los científicos de cada nación durante la crisis estaban, por lo general, prejuiciadas por sus percepciones de cómo y por qué surgió la crisis. Aquellos que veían al Valle de Mexicali como un terreno de política internacional no vivían ahí, pero reconocían la importancia de la región en la solución de la crisis, y aquellos que vivían en el Valle de Mexicali veían su hogar como un terreno de política local; para ellos la crisis de salinidad no era un problema abstracto que podía ser reducido a estadísticas o posturas políticas: representaba una profunda transformación ecológica que afectaba el sabor del agua potable, la fertilidad de la tierra y la generosidad de la cosecha. Las preocupaciones de organizadores políticos locales, tales como Alfonso Garzón, fundador de la Liga Agraria Estatal (LAE), con frecuencia trabajaban con propósitos contrarios a aquellos de los funcionarios federales. De hecho, uno de los momentos cruciales en la crisis de salinidad ocurrió por 1964, cuando la perspectiva motivada por la diplomacia se incluyó en la agenda de funcionarios locales del Valle de Mexicali.

Palabras clave: 1. medio ambiente, 2. relaciones binacionales, 3. salinidad, 4. franja fronteriza, 5. Mexicali

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INTRODUCTION

Throughout the twentieth century Mexicali Valley played a critical role in the struggle between Mexican and U.S. interests for control of land and water in the Colorado River Delta. During the first four decades of the century the Colorado River and Land Company, owned by private interests in the United States, exerted a firm hold over virtually every acre of productive land in the valley, as well as over the water supplies that sustained the tremendous agricultural transformation of the valley. Historians have also focused extensive attention on the expropriation of those lands by *campesinos* and the Cárdenas administration in the late 1930s and early 1940s. The expropriations, however, did not end the struggle for water resources between diverse interests in the delta. Cárdenas' efforts to increase water use in the region, at the same time that Mexican's occupied valley farmland, alarmed U.S. farmers, particularly those living in southwestern Arizona. As a result U.S. and Mexican efforts to maximize use of water from the Colorado River increased exponentially. Even the Mexican Water Treaty of 1944 encouraged both nations to exploit as much water as possible from the river, under the terms of the new treaty. Extensive urban and agricultural growth in the United States, however, led to further deterioration in water quality, namely in the form of increased salinity. In the fall of 1961, the quality of water entering Mexico through Morelos Dam drastically decreased as a result of the Wellton-Mohawk Irrigation District's (located in Yuma County, Arizona) efforts to pump highly saline drainage water into the Colorado River.¹

¹ Historians on both sides of the border have analyzed and recounted the development of the Delta prior to 1940. María Eugenia Anguiano Téllez's *Agricultura y migración en el valle de Mexicali* (Tijuana, El Colef, 1995), offers the most conclusive study of the growth of agribusiness in Mexicali Valley and its strong ties to American capital. Other studies that discuss the development of Mexicali Valley include Adalberto Walther Meade, *El valle de Mexicali* (Mexicali, B. C., Universidad Autónoma de Baja California, 1996); Pablo Herrera Carrillo, *Colonización del valle de Mexicali* (Mexicali, B.C., Universidad Autónoma de Baja California, 1976); Pablo L. Martínez, *Historia de Baja California* (México, Consejo Editorial del Gobierno del Estado de B. C. S., 1991); Fernando Jordan, *El otro México: biografía de Baja California* (México, Secretaría de Educación Pública, Frontera, 1976); *Mexicali: una historia*, tomos 1-2 (Mexicali, B. C., Universidad Autónoma de Baja California, 1991); Donald Worster discusses developments in the Imperial Valley, California, in Donald Worster, *Rivers of Empire: Water, Aridity, and the Growth of the American West* (New York, Pantheon, 1985), pp. 194-212; Norris Hundley, also traces the development of the Imperial Valley within the context of California water issues in *Great Thirst: Californians and Water, 1770s-1990s* (Berkeley, University of California Press, 1992); The creation of water policy and the growth of agribusiness in Yuma County, Arizona, are treated in Evan Ward, "Crossroads on the Periphery: Yuma County Water Relations, 1922-1928", unpu-

As the salinity of Colorado River water entering Mexicali Valley increased in the fall of 1961, the valley once again became an embattled territory. Several factors set the stage for the salinity crisis. As water use increased throughout the Colorado River basin after World War II, water supply above and beyond the 1.5 million-acre feet of water designated for Mexico by the Mexican Water Treaty (1944) declined. These excess waters were also diminished as new storage dams, such as Glen Canyon Dam, were built in the United States. As a result, Mexican officials noted a "sharp increase in the saline content of the Colorado River water reaching the Morelos Dam" at the end of 1960.² By 1961 the amount of water reaching the international boundary dropped to an all-time low. The USBR planned to send only the minimum amount of water specified by the 1944 treaty.³

This article examines the salinity crisis in Mexicali Valley from two different perspectives. First, national and state officials from both countries saw Mexicali Valley as a testing ground where their theories on the causation of the crisis would be vindicated by scientific testing of water and land conditions there. The questions that were asked by policy makers and scientists from each nation throughout the crisis were often conditioned by their perceptions of how and why the crisis had arisen. For the most part, those that viewed Mexicali Valley as an *international* political landscape did not live there, but recognized the importance of the region in resolving the crisis. On the other hand, those who lived in Mexicali Valley viewed their home as a *local* political landscape. For them the salinity crisis was not an abstract issue that could be reduced to statistics or policy positions, but instead represented a profound ecological transformation that affected the taste of drinking water, the fertility of land, and the bounty of the harvest. The concerns of local political organizers, such as Alfonso Garzón, often worked at cross-purposes to those of national officials. In fact, one of the turning points in the salinity crisis occurred around 1964, when the diplomacy-driven perspective subsumed the agenda of many local officials in Mexicali Valley.

lished M.A. thesis, University of Georgia, Athens, 1997; The U.S. origins of the salinity crisis are discussed in Evan Ward, "Saline Solutions: Arizona Water Politics, Mexican-American Relations, and the Wellton-Mohawk Valley", Autumn 1999, pp. 267-292.

² Letter from Antonio Carrillo to Dean Rusk, November 9, 1961, National Archives at College Park, Maryland (hereafter cited as NACP), RG 59, Decimal File (hereafter cited as DF 1960-1963), 611. 12322/11-961.

³ Memo from Coerr to Vallon, "Delivery of Colorado River Water to Mexico", NACP, RG 59, DF, 1960-1963, 611.12322/3-2361; Letter from Thomas Mann to Stewart Udall, March 23, 1961, NACP, RG 59, DF, 1960-1963, 611.12322/3-2361.

MEXICALI VALLEY AS AN INTERNATIONAL POLITICAL LANDSCAPE

During the fall of 1961, as water deliveries to Mexico from the Colorado River declined after summer irrigation, the Wellton-Mohawk Irrigation and Drainage District (WMIDD) began intensive pumping of their highly saline aquifers in order to create storage space for better quality water from the Colorado River. These drainage waters contained an average salinity of nearly 6 000 ppm as they entered the Gila River (which quickly joined the Colorado River). As early as November 14, 1961, Assistant Secretary of State Robert F. Woodward noted, "[T]he water now being delivered may not be useable in the condition in which it arrives at the Mexican diversion dam".⁴ At the same time the U.S. Department of State (USDS) urged the Secretary of Interior to "take any practical measures which it may to reduce the saline content of the water being delivered to Mexico."⁵

Bill Blackledge, an employee of the Compañía Industrial Jabonera del Pacífico (a subsidiary of U.S. agribusiness transnational Anderson-Clayton) in Mexicali, noted that since 1956, salinity levels had steadily increased at its local experiment station. The increased emission of drainage waters throughout the Colorado River basin, and particularly from the WMIDD, occurred at a time when river flows were particularly low. Therefore, drainage waters comprised a greater percentage of the river's water than normal. This posed a risk to domestic, agricultural, and industrial users downstream. By October 17, 1961, Blackledge found that the salinity of water deliveries at Morelos Dam averaged 2,690 ppm. "This water is not only too salty to use for irrigation but is also unsatisfactory for domestic and industrial purposes", he noted. "Practically everyone in the Mexicali Valley drinks water originating from the river and are now complaining that it is no longer potable". Blackledge further observed, "It does not seem normally right that the Mexican farmers should be expected to risk crop failures and ruin their lands by irrigating with the salty water now being delivered at the boundary".⁶ Finally, Blackledge noted, "The use of water with such a high con-

⁴ Memo from Woodward to Chayes, "Delivery of Colorado River Water to Mexico", November 14, 1961, NACP, RG 59, DF, 1960-1963, 611.12322/11-1461.

⁵ Letter from Woodward to Udall, November 17, 1961, NACP, RG 59, DF, 1960-63, 611. 12322/11-1761.

⁶ *Idem.*

tent of that coming down the river late September and October will not only render the soil useless for agriculture, but will result in failure of crops irrigated with this water".⁷

Blackledge also assessed the political implications of the increased salinity in the delta. He conceded that with so much competition for water in the U.S. portion of the Colorado River Basin, Mexican concerns would not be sufficiently addressed. Ultimately, Blackledge hoped that U.S. policy makers could improve their relationship with Mexico by expeditiously resolving the crisis. "If not", he prophetically augured, "it will not only cause dissension among the Mexican farmers and public, but will also be exploited by subversives to further create animosity towards the United States".⁸

On November 9, 1961, the Mexican Ambassador, Antonio Carrillo, lodged a formal complaint with U.S. Secretary of State Dean Rusk regarding the saline water. His arguments foreshadowed the juridical approach that the Mexican government would take with reference to the crisis. Although the Mexican Water Treaty did not explicitly guarantee a certain level of water quality to Mexico, Carrillo argued that such poor quality water could not be used for "domestic and municipal uses [and] agriculture and stockraising" as stipulated by the treaty. Carrillo expressed frustration that the US was not willing to remedy the problem since such actions might "[prejudice] the farmers of ...[The United States], who in such an event would have a legal right of action against the Government of the United States of America". As a result, he noted, Mexican farmers refused the "noxious waters... and the waters are allowed to flow into the sea without being used. The Ambassador stated that if the problem were not remedied, Mexico would be forced to take its case to the World Court".⁹

In December 1961, the Department of Interior (DOI) provided responses to Secretary Rusk concerning its role in the salinity crisis. DOI Undersecretary James K. Carr observed that the DOI had approached the Imperial Irrigation District (IID) about providing Mexicali Valley farmers access to cleaner water through the All-American Canal. However, the IID placed its own stipulations on such a request. Since the 1940s, residents in Calexico, California had complained about growing quantities of sewage emitted from the Mexicali sanitation

⁷ *Idem.*

⁸ *Idem.*

⁹ Letter from Carrillo to Rusk, November 9, 1961, NACP, RG 59, 1960-63, DF, 611.12322/11-961.

plant into the New River. The river passed from Mexicali through Imperial County on its way to the Salton Sea. IID officials proposed that Mexico could use the All-American Canal in order to obtain cleaner water as long as it fulfilled promises to construct adequate facilities to keep sewage from flowing across the border. Carr also noted that it would be difficult for the WMIDD to substantially decrease the pumping of drainage water from underground aquifers without "jeopardizing a United States investment of approximately \$50 000 000 that the project users have contracted to repay." He also pointed out that the option of releasing additional water to dilute deliveries to Mexicali Valley was not feasible. Snow run-off had been minimal during the fall of 1961, contributing to low levels of water at Lakes Mead and Mojave. Carr noted, "[R]eleases of additional stored water cannot be made without the risk of seriously damaging United States interest".

Carr concluded by suggesting actions that Mexico could take to remedy the problem. These actions included adjusting the "frequency and amount of irrigations to the available water supply", adding groundwater to supplement the winter water, changing the delivery schedule, and "[adjusting] its cropping pattern to more nearly fit the quality and quantities of water available in various seasons". Carr's response reflected the general feeling that Mexico needed to deal with a problem of its own making. He finished by noting that Mexico could expect the same quality and quantity of water from the Colorado River "for a number of years". Accordingly, he observed, "[We] believe that Mexico's greatest relief can be obtained by expediting the actions listed immediately above".¹⁰

In spite of Carr's letter, the USDS continued to apply pressure to one of the more regionally-defined branches of the federal government: the DOI. The DOI continued to insist that it could not release more water from Hoover Dam to dilute deliveries to Mexicali Valley. However, delay only increased opposition to the United States in the Mexican delta. Woodward enjoined Rusk to call DOI Secretary Stewart Udall and remind him of "the political importance of our not being held responsible for the loss of the Mexican crops and of our avoiding in Baja California the communist charge of forcing Mexico to accept unusable water".¹¹

The United States found itself in a defensive posture during the crisis, a condition that did not bode well for a decision-making process chronically inhibited

¹⁰ Letter from Carr to Rusk, December 11, 1961, NACP, RG 59, 1960-63, DF, 611.12322/12-1161.

¹¹ Discussion, Woodward to Acting Secretary, December 14, 1961, NACP, RG 59, Box 1199, 1960-1963, DF, 611.12322/12-1461.

by intra-departmental wrangling. On December 20, 1961, the USDS replied to the Mexican protest filed on November 9, 1961. Undersecretary of State Barall presented the reply in person to Ambassador Carrillo. The note exonerated the U.S. from any juridical malfeasance related to the Mexican Water Treaty. In fact, the note contended: "The drainage from the Wellton-Mohawk Irrigation Division cannot be regarded as a contamination or pollution of the stream. That drainage is a natural and normal constituent of the Colorado River waters, and is a consequence of and necessary to irrigation development of the area". No response was provided as to the usability of water for domestic and agricultural purposes as specified in Carrillo's complaint of November 9, 1961.¹²

In response, Carrillo expressed dismay that any treaty that guaranteed water for domestic and agricultural use would allow the delivery of water unfit for those very purposes, regardless of the legal interpretation of the treaty by the United States. Barall countered, noting, "there is strong opposition by users in the United States to action to alleviate the problem". Finally, Carrillo rejected the DOI's assertion that the federal government could not "compel the Wellton-Mohawk District to cease pumping salty water into the Gila [River] under the Treaty". Barall conceded that such an action could be taken if necessary for fulfillment of the Mexican Water Treaty.¹³

By the end of December the USDS and DOI were taking steps to defend their positions on the salinity issue. Secretary Rusk outlined his views in a letter to Ambassador Carrillo in early January of 1962. Rusk reminded Carrillo that Mexico had opted not to receive domestic water through the All-American Canal in exchange for completion of the sanitation plant in Mexicali. Furthermore, he noted that USDS and DOI scientists had visited Mexicali Valley and subsequently reported that the saline waters had not adversely affected crops there. In fact, the scientists recommended "that a reduction in the pumping of drainage waters in the Wellton-Mohawk Division under existing circumstance, as the Ambassador [Carrillo] proposed, would result in substantial injury to that irrigation district". Rusk further exacerbated tension between the two diplomats by suggesting that Mexicali farmers "should have used the water of which complaint was made". Recognizing that Mexico might periodically receive highly saline waters, Rusk forwarded the scientists' suggestion that "cer-

¹² Note, Rusk to Carrillo, December 20, 1961, NACP, RG 59, 1960-1963, DF, 611.12322/11-961.

¹³ Memorandum of Conversation, USDS, "Salinity of Colorado River Water", December 20, 1961, NACP, RG 59, 1960-63, DF, 611.12322/12-2061.

tain drainage and other measures should be undertaken in Mexicali Valley” to prevent the possibility of further damage. Rusk went on to assert, “[The] saline condition of the waters of the Colorado River may not improve materially during the present decade”. In an effort to ease the pains of U.S. conscience as much as the anger of the Mexicans, Secretary Rusk frankly stated, “Water users on the river in the United States are also experiencing the effects of this situation”.¹⁴ Nevertheless, Ambassador Carrillo continued to insist that releases from dams — for example, 700 000 acre-feet (af) from Lake Mead — upstream would completely resolve the salinity crisis.¹⁵

In the winter of 1962, the USDS, DOI, and the IBWC mulled over options that could be implemented to resolve the crisis quickly. Their choices included pumping Wellton-Mohawk water upstream to the Imperial Dam, where water from the Colorado River would dilute the toxic drainage. The diluted water would then be delivered to all water users —in Mexico and the United States— on the lower stem of the river. A second option included constructing a desalination plant near Wellton-Mohawk. Another proposal called for additional pumps in Wellton-Mohawk Valley that would be used during the summer months to extract even more saline drainage. The DOI contended that re-routing water to the Imperial Dam would arouse the opposition of U.S. farmers in the Imperial and Yuma valleys (who would not want the water Mexico was receiving, even in a diluted form). DOI officials also downplayed the effectiveness of a desalination plant, due to cost restraints. They felt, however, that the proposal to increase pumping in the WMIDD might be the most economical solution to the problem.¹⁶

The USDS and DOI also decided to issue a press release to Mexican newspapers in early 1962 to counteract the public relations disaster created by their previous reluctance to resolve the crisis. The statement included substantial quotes from DOI Secretary Udall, who insisted that the two nations work together to resolve the problem. It also pointed out that Mexico could have scheduled additional water to be delivered during the fall of 1961, but did not do so “possibly because the degree of salinity was not anticipated by Mexico”. The statement also made explicit comparisons between what had been done in U.S. irrigation

¹⁴ Note from Rusk to Carrillo, January 16, 1962, NACP, RG 59, DF, 1960-1963, 611.12322/11-961.

¹⁵ Memorandum of Conversation, “Salinity of Water in the Colorado”, December 22, 1961, NACP, RG 59, DF, 1960-63, 611.12322/12-2261.

¹⁶ Letter from Kenneth Hale, Assistant Secretary of the Interior, to Woodward, February 8, 1962, NACP, RG 59, DF, 611.12322/2-862.

districts to combat salinity and what Mexico might also do to improve drainage in its own fields. Suggestions included classifying lands, improving drainage systems, and selecting crops that matched the salt tolerance of available water supplies. Finally, the release cited Secretary Udall, who observed that the water delivered to Mexicali in 1961 was "usable on a short term basis for irrigation of crops such as wheat, alfalfa, and cotton under the proper drainage practices".¹⁷

Local officials in Mexicali Valley issued a swift and stinging response to the press release. Rafael Martínez Retes, representative of the Comité General de la Defensa del Valle de Mexicali, took issue with the tone and content of the release. He singled out Secretary Udall, whose ties to Arizona made him an easy, although sometimes illogical choice, for such a remonstrance. Retes statement contained few particulars, but largely focused on the unwillingness of the United States to resolve a crisis of its own making, as well as its audacity to suggest that Mexico was responsible for the problem.¹⁸

Pressure to resolve the crisis also came from the academic community in the United States. Sidney L. Gulick, Dean of Arts and Sciences at San Diego State College, informed Secretary Rusk, "With our interest in Latin-American affairs, we know that what happens here can ruin every billion spent on the Alliance for Progress". He also expressed perhaps the most horrific fear: that radical groups in Mexicali Valley might resort to terrorism because of the unwillingness of the United States to resolve the problem. Gulick conjured up images of an "embittered and ruined Mexican hothead" using a tractor to cut through the dikes in Mexican territory that protected Imperial Valley from the waters of the Colorado River. "By morning the salt torrents would bear down on El Centro", he warned, "the Salton Sea would no longer lie 287 feet below sea level". With reference to the 1906 flood, the dean queried, "When these waters last came in, U.S. Army engineers helped the Mexican government plug the holes; would we be invited in again? If not, would we go in by force? That would be an act of war, from which we could not recover in a century". The macabre Gulick closed his letter with a more practical consideration. He observed that the interests of the United States would be best served by not adding farming acres in the U.S. portion of the Colorado River Basin. This would at least stabilize water quality in the delta.¹⁹

¹⁷ USDS, "Joint Action Being Considered to Alleviate Salinity on Lower Colorado River", February 9, 1962, NACP, RG 59, DF, 1960-63, 611.12322/2-962.

¹⁸ Dispatch from Boyd to USDS, February 13, 1962, NACP, RG 59, DF, 1960-1963, 611.12322/2-1362.

¹⁹ Letter from Gulick to Rusk, March 6, 1962, NACP, RG 59, DF, 1960-1963, 611.12322/3-662.

On March 9, 1962, an important meeting took place between Senator Carl Hayden, DOI leaders and USDS officials. U.S. Ambassador to Mexico Dean Mann opened the meeting, noting that the Mexican government was willing to improve drainage works in Mexicali Valley. However, with the onset of the salinity crisis Mexican officials were reluctant to make an investment that might be rendered worthless with continued deliveries of undesirable water. He also reaffirmed his conviction that the U.S. would lose any case adjudicated at The Hague.

In response, USBR officials dug in their heels, contending that conditions at Wellton-Mohawk were "normal" in terms of return flow on southwestern rivers. Maurice Langley, Chief of the Irrigation Division of the USBR, observed that the salinity of deliveries during the past winter (averaging about 1 700 ppm) were "usable". Furthermore, he insisted, no concrete definition of "usability" existed. He also noted that farmers in the Imperial Valley faced a similar scenario and as a result elected to install expensive tile drains on their farms. Finally, he stressed that the salt causing problems in the Mexicali Valley was "the accumulation of previous years and not the result of the use of salt this year".

A. B. West, Regional Director for the USBR at Boulder City, Nevada, also confirmed the "normality" of operations at Wellton-Mohawk. In addition, he reiterated that the project must continue pumping drainage water from its wells. He also expressed concern that any proposal that would give Mexico additional water would prejudice the Central Arizona Project (which still had not been approved by Congress). West revealed that the WMIDD was unwilling to install tile drains because it wanted to "create an underground reservoir of better water for future use". Once the saline water, up to 18 000 ppm was removed from the wells, pristine Colorado River water would be pumped into the wells for storage and use. Langley also objected to this option, noting that it would "take four or five years to get an appropriation and install them, *i.e.*, about half the period during which it was expected there would be a salinity problem".

The meeting reflected a general trend during the salinity crisis: the USDS and the IBWC tended to stress the responsibility of the U.S. for the problem, while the USBR tended to stress what Mexico needed to do in order to alleviate the salinity issue. Ambassador Mann elaborated on Mexican development of the Mexicali Valley, including the billion peso/five-year rehabilitation program. Charge de Affairs Robert Sayre pointed out that this was "equal to 10 percent of Mexico's annual budget". In response, West expressed how important it was for Mexico to

install the drainage system, for without it "Mexicali Valley was doomed". He further noted that "Mexico must put in drainage pumps, drain tile, and open drains, and maintain and manage them properly". West refused to speak for the WMIDD when Mann asked if it would install drains if the Mexican government installed them in Mexicali Valley.

Mann was also concerned that the two nations were working from different facts and premises. He suggested that a joint study be carried out, through the IBWC, in order to arrive at a single set of facts from which both nations could work towards resolving the issue. Mann thought that the principal concerns of the study should focus on adequate drainage and the quality of water Mexico could use. The ambassador was not naive, however. He pointed out that even if the technicians were not able to agree on everything, "it might remove some of the misunderstanding". Dominy suggested that WMIDD would be willing to participate "and would agree to a corrective plan that would cost them nothing".²⁰

SCIENCE, POLITICS, AND ENVIRONMENTAL DIPLOMACY

Science and international politics lay at the center of the salinity crisis and helped define the positions taken by each nation between 1961 and 1974. Scientific studies in Mexicali Valley served as fodder for legitimizing positions on both sides of the border. While cynics might contend that the contradictory conclusions reached by scientists on both sides of the border were merely the result of political calculation, one must look at the questions they asked to find the differentiating factor in the results they obtained. The numerous studies contained in USDS records illustrated the focus of U.S. policy makers and scientists on the quality of land in Mexicali Valley. Scientists for the USBR were heavily influenced by experiences with saline farmlands in the Wellton-Mohawk Valley. As a result, they focused on the poor drainage qualities evident in Mexicali Valley. Through this approach, many U.S. policy makers, particularly those from the USBR, insisted that Mexico was responsible for the saline quality of the soils in Mexicali Valley.

In contrast, Mexican scientists and policy makers focused on the quality of water being delivered to Mexicali Valley at Morelos Dam. In spite of the misperceptions

²⁰Memorandum of Conversation, "Colorado River Salinity Problem", March 9, 1962, NACP, RG 59, DF, 1960-1963, 611.12322/3-962.

of U.S. policy makers, the Mexican government had done a great deal of research on the drainage problems of soils in Mexicali Valley, beginning as early as 1954. In fact, on the eve of the salinity crisis, plans had been outlined to improve the drainage capacity of lands that were part of the Colorado River Irrigation District (CRID). The saline waters that were introduced in 1961 were an additional variable that further harmed fields already tottering on the verge of infertility. Accordingly, it is not surprising that Mexican diplomats, scientists, and politicians stressed the poor quality of the water delivered to the valley in establishing the cause of the crisis.

As early as November of 1961, various agencies on both sides of the border issued studies related to the crisis. On November 13-14, 1961, Dr. Leon Bernstein, from the U.S. Salinity Lab in Riverside, California, and IBWC engineer Joseph Friedkin, toured the Wellton-Mohawk and Mexicali Valleys. They noted a sharp increase in salinity in 1961. Beginning in November of that year, the average salinity of water delivered to Mexico rose to 2 500 ppm. Drainage from Wellton-Mohawk, meanwhile, averaged 6 200 ppm. They also noted that these levels would continue until March 1962, when increased releases from dams upstream would dilute the salinity of deliveries to between 1 200 and 1 600 ppm during peak irrigating season.

The IBWC report also provided several standards for measuring acceptable water quality. They noted for example, that in 1958 the World Health Organization (WHO) set 1 500 ppm as the level of "excessive" salinity for potable water. In the U.S., however, the WHO study continued, "chemical substances should not be present in a water supply in excess of 500 ppm of total dissolved solids ...where in the judgment of the reporting agency, other or more suitable supplies are or can be made available". Bernstein and Friedkin noted: "The current waters having 2 500 ppm total solids and 850 ppm chlorides from the taps in Mexicali taste of salts but thousands are using such waters in the city and in the rural areas with not yet any apparent indication of deleterious or ill effects".

After examining the fields, Bernstein noted that irrigation practices, as well as the saline waters, contributed to the poor harvests in Mexicali Valley. He also observed that wheat seedlings that had been irrigated with saline waters "were about two inches high and the stand then appeared good". Furthermore, crops such as wheat and alfalfa were able to withstand water with an average salinity of 2 500 ppm because of their resistance to salt toxicity. Nevertheless, he noted that the failure of crops during the current year could be compared with "the good

crop production on the same lands in 1960-1961 with the better waters then delivered". "This evidence", he averred, "cannot be denied". Bernstein suggested that salinity be limited to 1 800 ppm, and water be added to crops (6 inches) for leaching out toxic elements, and intensive soil testing be conducted (something the CRID had already undertaken).²¹

In February 1962, the Mexican Ministry of Agriculture and Livestock issued its own study of the Mexicali Valley salinity problem. It suggested that salinity levels had remained acceptable until November 1961, when they increased to 2 900 ppm. The report further insisted that drainage pumped from the wells in Wellton Mohawk Valley was not natural run-off, as specified by the 1944 Treaty, but instead an artificial substitution for natural drainage. In an effort to emphasize this critical point, the Ministry report noted, "This is not return flow, any more than if the U.S. government was to decide to divert water from the Salton Sea into the Colorado River to substitute it for natural Colorado River water to be delivered to Mexico". Finally, the report contended that since the U.S. government had authorized the dumping of drainage waters into the Colorado River without consulting Mexico, it must find a solution to the problem.²²

In February 1962 Bill Blackledge of the Anderson-Clayton experiment station in Mexicali reviewed current conditions in the valley. He noted that while the CRID was in the process of improving irrigation techniques on local farms, the potential for crop and soil damage with the use of hyper-saline water remained probable. He noted that during 1961, "the amount of salt deposited per acre was nearly double that which would have been applied with natural Colorado River water". He attributed the failure of cotton grown on marginal lands to saline irrigation water. While he believed it was too soon to know how much damage the saline water would inflict on the current wheat crop, Blackledge provided vignettes of farmers in the valley who were uneasy about using the water. For example, Federico Rioseco planted 125 acres of wheat, a portion of which was irrigated with good water and another section with "relatively high" saline waters. The section irrigated with high-quality water produced a healthy stand of wheat while the latter section had to be replanted. From these results Rioseco concluded that "the part irrigated with

²¹ Leon Bernstein and Joseph Friedkin, "Salinity of Colorado River Waters", November 21, 1961, NACP, RG 59, DF, 1960-63, 611.12322.

²² Mexican Ministry of Agriculture and Livestock, "The Salt Water Problem of the Mexicali and San Luis Valleys", in Letter from Julián Rodríguez Adame to Mann, February 12, 1962, NACP, RG 59, DF, 1960-63, 611.12322.

the uncontaminated Colorado River water looks good, while that irrigated with water containing the salts from Wellton-Mohawk looks bad". Blackledge later noted that his interaction with Rioseco was "representative of various experiences with other thinking farmers in this Valley".²³

In March 1962 a joint panel of IBWC and CILA scientists were given forty-five days to conduct studies in the Wellton-Mohawk Valley and in Mexicali Valley. Their mission was to obtain uniform numbers that the two nations could use during national talks in order to resolve the salinity crisis. During the early stages of the study, the U.S. panel of scientists arrived at some startling preliminary conclusions. While these preliminary findings did not necessarily find their way into the final report, they offered a glimpse into the severity of the problem. They noted that salinity levels in water delivered to Mexicali Valley farmers during the fall of 1961, "seriously aggravated the problem and created an emergency". The scientists also observed that the valley possessed an adequate drainage system. However "the salt content of water delivery by the U.S. since October 1961 [was] so high... that agricultural production in the Valley [would] probably have to be largely abandoned unless there is a reduction in salts". The panel estimated that at current levels, salinity during the winter months (February-October) would average 3 510 ppm and 1 550 ppm during the summer months. In terms of Wellton-Mohawk, the same scientists noted that the well water contained between 2 500 and 18 000 ppm of salt and the average salinity of discharges to the Gila River averaged 6 000 ppm. In terms of salt balance, the WMIDD received about one ton of salt per acre-foot and emitted between eight and nine tons of salt per acre-foot of water into the Gila and Colorado Rivers.²⁴ Despite the fact that many of the conclusions of U.S. scientists bolstered the Mexican position, the Mexican government roundly refused to let their scientists sign off on the studies, primarily because of the connection that American policy makers affixed between water and soil quality in the Mexicali Valley.²⁵

As the crisis in Mexicali Valley dragged on, the USDS continued to question the

²³ Bill Blackledge, Report, February 1962, contained in Letter from J.F. Friedkin, to Robert M. Sayre, March 6, 1962, NACP, RG 59, DF, 1960-63, 611.12322/3-662.

²⁴ Letter from Martin to McGhee, "Study of Colorado River Salinity Problem", NACP, RG 59, DF, 1960-63, 611.12322/4-2562.

²⁵ A draft of the study is included in "Joint Report of United States and Mexican Expert Panels on Colorado River Salinity Problems", May 8, 1962, NACP, RG 59, DF, 1960-1963, 611.12322/5-2862; Also see Letter from Martin to Rusk, "Letter to Foreign Minister Tello of Mexico on Salinity Problem", June 8, 1962, NACP, RG 59, DF, 1960-63, 611.12322/6-862.

USBR's efforts to resolve the problem. In May of 1962, not only did the Mexican government protest the scientific report issued by the U.S. government, but Western politicians and USBR officials objected as well. While Mexico had foreseen the need for rehabilitation measures in Mexicali Valley and had begun to implement those improvements, national officials viewed the coupling of the issues as an effort by the United States to forego the responsibility it bore for delivering saline waters to Mexicali.²⁶ Thereafter, DOI Secretary Udall and the USBR questioned whether the U.S. government should do anything to relieve the quality of water problem "unless [they had] a commitment from the Mexican government that it plans to undertake a complementary program in the Mexicali Valley".²⁷ Politicians from the Colorado River basin states in the United States later placed a condition on further investigations of the problem, demanding that no money be used to study construction of a by-pass drain or any proposal that would grant additional water to Mexico without charge.²⁸ Furthermore, Arizona officials continued to insist that no action be taken until the Wellton-Mohawk project could be assured that it would receive credit for all water pumped out of its wells.

The slow response of the USBR to Mexican requests for water deliveries in the fall of 1962 further dampened efforts to resolve the salinity crisis. In fact, the new IBWC Commissioner, Joseph Friedkin, could not obtain a satisfactory water delivery schedule for water destined for Mexico from the USBR. USBR officials feared that the USDS was "acceding to Mexican pressures and not giving due consideration to the interest of the United States and the problems of the Bureau of Reclamation". Maurice Langley went on to assure Robert Sayre that the Mexicans would receive good water (his definition including all waters with a salinity concentration of up to 2 000 ppm). Friedkin observed that the unwillingness of the USBR to cooperate had caused the CILA commissioner to doubt the commitment of the United States to resolve the problem. The USDS also worried that further DOI delay would only increase the chances that communist organizations would use the crisis as propaganda fodder in protests against the United States.²⁹

Other federal organizations brought their experience to bear in sorting out the severity of the salinity crisis. After reviewing the results of the Joint Study by the

²⁶ Letter from Goodwin to Rusk, May 28, 1962, NACP, RG 59, DF, 1960-63, 611.12322/5-2862.

²⁷ Letter from McGhee to Martin, "Mexican Program for Rehabilitation of Mexicali Valley", June 5, 1962, NACP, RG 59, DF, 1960-63, 611.12322/6-562.

²⁸ Memo from John Hugh Crimmins to Martin, "Colorado River Salinity Problem", July 19, 1962, NACP, RG 59, DF, 1960-63, 611.12322/7-1962.

United States and Mexico in 1962, the Department of Health, Education, and Welfare (DHEW) concluded that the saline waters dumped into the Colorado River could be considered "pollution", contrary to the official ruling of the IBWC's advisory panel. As a result, the organization concluded: "Such correction might require withdrawal of all or a part of the Wellton-Mohawk Division from irrigated production if found to be economically or politically advantageous to the United States... in solving the pollution of international waters". The memo also advised against a plan to increase pumping during the summer because such an action "would be an increase of about 50 percent in mineral solids content of water delivered to Mexico over that prior to the pumping program in the Wellton-Mohawk Division". Furthermore, increased pumping would make it practically impossible, in the estimation of the DHEW, to maintain an annual average of 1400 ppm. These high levels of salinity would be exacerbated even more with increased development throughout the Colorado River Basin. The memo ended by suggesting that the WMIDD install a sub-surface drainage system.³⁰

In February 1963, the USBR, unsatisfied with the findings of the IBWC's bi-national study, released a more detailed examination of the salinity issue. The USBR contended that the salinity problem was the result of poor farmlands, not recent applications of highly saline water. The report placed the burden on Mexico for resolving its poor drainage system while including measures to hasten drainage of the Wellton-Mohawk Valley with additional wells. "If Mexico carries out accepted irrigation and leaching procedures", the study stated, "the salt concentrations will not be detrimental to the crops that are presently being grown".³¹ The USBR relied on an engineering solution to the problem, hoping that such an approach would not increase water deliveries to Mexico or affect "the future of the irrigation districts of the United States..."³² This approach kept in tact the USBR's plan to create an aquifer beneath the Wellton-Mohawk Valley. The report stated that salinity levels would be decreased from somewhere

²⁹ Memo from Martin to Crimmins, "Winter Deliveries of Water to Mexico", RG 59, October 18, 1962, NACP, RG 59, DF, 1960-63, 611.19-1862.

³⁰ "Comments of Department of Health, Education, and Welfare on Report of United States Advisory Panel International Boundary and Water Commission," in Letter from Secretary of Health, Education, and Welfare to Rusk, October 30, 1962, NACP, RG 59, DF, 1960-63, 611.12322/10-2462.

³¹ DOI/USBR, *Special Studies: Delivery of Water to Mexico*, February 1963, Natural Resources Library, DOI, Washington D. C., vii.

³² *Ibid.*, p. 3.

in the range 2 000 ppm range to 1 700 ppm "as refreshing of the Wellton-Mohawk aquifer took place".³³

The release of the USBR report provoked a strong reaction from Ambassador Carrillo. He objected to the fact that the USBR would introduce deep well waters into the river under the guise of return flow, as well as not notify Mexico prior to doing so. As he had in the past, Carrillo reiterated that while the 1944 Treaty did not stipulate an exact quality of water that the United States must deliver to Mexico, it explicitly stated that such water would be fit for domestic and agricultural use. Furthermore, Carrillo took the study to task for exonerating the USBR and involved parties in the Wellton-Mohawk Valley with regards to the salinity crisis. Such an attitude of hubris, the ambassador noted, "departs from all rules of international law, which in no way and under no circumstances can conceive of a State's not being responsible for its own acts which may in any way affect another State of the international community". In terms of water quality, Carrillo took umbrage with the report's suggestion that Mexico would have to adapt its agricultural production to waters with salinity between 1 800 and 2 000 ppm. Carrillo pointed out that the U.S. would not accept water of a similar quality to that delivered with Wellton-Mohawk drainage. Observing that the solutions set forth by the report only entailed salvaging the Wellton-Mohawk Valley through additional drainage wells, Carrillo noted that the USBR "[had] no compunction in recommending works that would render permanent and constant the danger and loss which the deliveries of saline waters inflict upon Mexico".³⁴

On the other side of the diplomatic table, Carrillo's counterpart, Ambassador Mann, continued to press for U.S. projects, particularly the WMIDD, to achieve salt balance. Mann also stressed that the salinity level issue remained the most important immediate problem in bi-national relations. With the United States yet to take any action, Mann noted, "we should expect Mexico to move toward actions which can only be harmful to our national interests". Further inaction, in Mann's estimation, would probably lead the Mexican government to take its controls off of the press. At that point, the ambassador observed, "communists and opportunists will take every advantage of this opportunity to attack us on legal and moral grounds, raising issues on which they will be joined by many other Mexicans, even those who are anti-Communist and normally friendly to us".

³³ *Ibid.*, p. 77.

³⁴ Letter from Carrillo to Rusk, May 17, 1963, NACP, RG 59, POL 33-1, MEX-U.S., 1963.

Mann summed up his thoughts on the matter stressing that “the Wellton-Mohawk salinity problem was not created by an act of God”. Instead, he noted, “It was deliberately created by us on the theory that because the 1944 Colorado Water Treaty is silent on the issues of salinity”. As a result, Mann asserted that USBR officials fallaciously reasoned that they were “free to dump [salty drainage water] on the Mexicali Valley ...and gradually replace those underground waters with water of a better quality from the Imperial Dam so that the Wellton-Mohawk could have a useable underground reserve supply available for its crops in addition to its allotted share of water”.³⁵

In 1964 the salinity crisis dragged on into its third year. Mexicans were disheartened by the assassination of John F. Kennedy, whom they believed would have resolved the issue. Ambassador Carrillo continued to protest salinity levels that approached 2 000 ppm during the winter of 1964.³⁶ Salinity levels surged above the 1 500 ppm mark, considered to be the ceiling for acceptable waters by Mexican officials, reaching 1 650 ppm between March fifth and ninth of 1964. The credibility of the U.S. government was further called into question because it had assured Mexico that salinity levels would remain below 1 500 ppm.³⁷ Carrillo continued to inform USDS officials of the deteriorating condition of fields in Mexicali Valley, as well as the growing strength of radical groups, such as the Central Campesino Independiente (CCI).³⁸

Nevertheless, the USBR continued to stall. In March of 1964, a USBR official noted that he was well aware of the increased salinity and “expected it to go higher as Wellton-Mohawk pumps the higher saline wells on which pumping was reduced in the winter, and increases overall pumping to compensate for overall reductions during the winter”. The USDS had already expressed its disapproval of this plan. Robert Sayre noted that “Reclamation takes the position that it has no commitment to do anything”, including to fulfill President Kennedy’s 1963 commitment that the problem would not recur.³⁹ A month later, IBWC Commis-

³⁵ Telegram from Mann to Rusk, August 21, 1963, NACP, RG 59, POL 33-1, MEX-US, 1963.

³⁶ Memorandum of Conversation, “Colorado River Salinity Problem”, Carrillo and Sayre, January 6, 1964, NACP, RG 59, POL 33-1, MEX-US, Folder 1-1-64.

³⁷ Memo from Sayre to Mann, “Salinity Problem on Lower Colorado”, March 13, 1964, NACP, RG 59, POL 33-1, MEX-US, Folder 3-1-64.

³⁸ Memo of Conversation, “Joint Communiqué on Meeting of Presidents of United States and México”, February 21, 1964, NACP, RG 59, POL 33-1, MEX-US, Folder 1-1-64.

³⁹ Memo from Sayre to Mann, “Salinity Problem on Lower Colorado”, March 13, 1964, NACP, RG 59, POL 33-1, MEX-US, Folder 3-1-64.

sioner Friedkin similarly noted that delay tactics undermined the adoption of a permanent resolution. He also sensed a lack of concern on the part of the USBR for upholding the good faith of the United States in maintaining salinity levels below 1 500 ppm. Friedkin additionally feared that the lack of a solution would only exacerbate matters later in April when salinity levels were expected to average between 1 700 ppm and 2 000 ppm.⁴⁰

Although the number of scientific studies decreased after 1963, they became even more important in assessing the amount of damage caused by the saline water. In 1964, Bill Blackledge completed another study of Mexicali Valley lands and crop yields. Blackledge reported that Anderson-Clayton had temporarily stopped financing the farmlands of many valley farmers because they could no longer meet their financial obligations growing crops with saline water. While the affected fields only represented a small portion of valley lands, Blackledge believed that "a much larger percentage of the farm lands will be lost this coming season as salts continue to accumulate at an increasing rate". He contended that Mexican farmers had been making advances in drainage and agricultural techniques, and would have achieved close to the same production levels as farmers in the Imperial Valley if only they had received water of a similar quality to that of their neighbors to the north. Finally, Blackledge observed that the deterioration of lands would accelerate if water quality did not improve. "Even if the contamination were discontinued this very instant", he opined, "the reclamation of the damaged soils will be a major problem for years to come".⁴¹

MEXICALI VALLEY AS A LOCAL POLITICAL LANDSCAPE

Differences in the political structures of the two nations played a critical role in the effectiveness of local politics on ecological diplomacy in the binational delta. Farmers in the WMIDD and surrounding irrigation districts enjoyed the benefits of a legislative process that was responsive to the most effective organizers. In the western United States, where water and power were closely linked, local farmers found their interests well represented at the highest levels of government.

⁴⁰ Letter from Friedkin to Sayre, April 18, 1964, NACP, RG 59, POL 33-1, MEX-US, Folder 4-1-64.

⁴¹ Letter from Blackledge to Robert Allen, February 7, 1964, enclosed with telegram from Allen to USDS, "Evidence of Effects Suffered Due to Increase in Salinity Colorado River Waters Delivered to Mexico", February 13, 1964, NACP, RG 59, POL 33-1, MEX-US, Folder 1-1-64.

In April 1962, IBWC Commissioner Friedkin requested that the seven states of the Colorado River basin select two representatives for the "Committee of Fourteen", an organization that would advise the USDS on its position on the salinity crisis. While such a committee was helpful to the interests of the individual states, it approached the type of non-elected power described by political scientist Karl Wittfogel in his treatise, *Oriental Despotism*, and more recently by historian Donald Worster in his critique of U.S. water policy in the American West, *Rivers of Empire*.⁴² In effect, the committee served as a third bargaining entity throughout the crisis. Its initial concerns were to protect the water rights of the basin states, not surrender additional water to Mexico, and protect the WMIDD from dissolution. In fact, in May 1963, the Committee announced that any solution to the crisis "must be without detriment to the joint and separate interest of the concerned entities within the seven Colorado River Basin States". Such an attitude presaged a policy of retrenchment, particularly because requests for additional water in the arid Southwestern United States had not abated during the 1960s.⁴³

In contrast, the Mexican government did not provide an official place at the bargaining table for local groups in the Mexican delta. Nevertheless, grass-roots organizations manifest their discontent with inaction on the part of the U.S. and Mexican governments through letter-writing campaigns, an auto caravan from Mexicali to Mexico, D. F., and organized marches. During the early period of the crisis (1961-1965), there were several groups that mobilized political support in Mexicali Valley. The first, supported by the Mexicali Chamber of Commerce, was the Comité Coordinador de la Iniciativa Privada de Mexicali. The group was comprised of industrial, agricultural, and commercial organizations in the valley. They organized protests in front of the U.S. consulate in Mexicali, encouraged Mexicans not to shop in Calexico or El Centro, California, and lobbied government officials (of both nations) to remedy the problems occasioned by the excess salt.⁴⁴ Public protesting ebbed and flowed with the increase and decrease of salinity in water deliveries from the Colorado River. On December 14, 1961,

⁴² Karl Wittfogel, *Oriental Despotism* (New York, Penguin, 1981); Donald Worster, *Rivers of Empire*, (New York, Pantheon, 1985).

⁴³ "Report by Committee of 14 on Mexican Salinity Problem", May 9, 1963, NACP, RG 59, POL 33-1, US-MEX, 1963.

⁴⁴ James Boyd, Dispatch, "Salinity of Colorado River Waters-Mexicali Reaction", NACP, RG 59, DF, 1960-1963, 611.12322/12-761.

James Boyd, American consul in Mexicali, estimated that between eight and ten thousand protestors marched in the rain. The following day Ambassador Mann informed Secretary Rusk that an estimated 20 000 people had protested in front of the U.S. consulate in Mexicali the same day.⁴⁵ Mann feared that "Communist and Nationalist elements may now be seizing upon [the] problem for purposes... against us".⁴⁶

The manifestations of December 14th and 15th vividly display the impressive manner of political mobilization attained by local groups. Businesses were requested to close at noon and approximately six thousand soggy *Mexicalenses* marched in the rain past the U.S. consulate, bearing banners with slogans such as "World Peace will only be possible when the weak receive from the strong just and equitable treatment". Later on, during a speech before the governor of Northern Baja California, Aurelio Flores Valenzuela, local president of the Unión Agrícola Regional, asked the governor to petition federal officials to resolve the crisis. While these events could be counted as a success by local organizers, earlier arrangements for members of the Northern Baja California legislature to talk with the American consul were not as fruitful. Consul Boyd noted that only one member of the legislature, Alfredo Andrade, stopped by to talk with him. Furthermore, Andrade expressed the sentiment that "the problem would eventually be satisfactorily solved, but desired to stress the necessity for quick action if the winter wheat and alfalfa crops are to be saved". Like those in the USDS, Andrade feared that inaction would only heighten the chances of Communist exploitation of the issue.⁴⁷

Until 1958, *ejidatarios* and agricultural workers in Mexicali Valley associated themselves with the government sponsored Liga de Comunidades Agrarias y Sindicatos Campesinos, a local branch of the Confederación Nacional Campesina. However several of the members of the existing organization, including Alfonso Garzón, were not satisfied with the leadership and decisions of the organization. As a result they created the Liga Agraria Estatal de Baja California (LAE) in 1958. Their initial efforts included protesting before the governor over the low prices paid for cotton commodities. The LAE also encouraged inde-

⁴⁵ Journalist Lenora Werley estimated that there were as many as 35 000 protestors on December 14, 1961.

⁴⁶ Telegram from Mann to Secretary of State, December 15, 1961, NACP, RG 59, DF, 1960-1963, 611.12322/12-1561.

⁴⁷ Dispatch from Boyd to USDS, December 15, 1961, NACP, RG 59, DF, 1960-63, 611.12322/12-1561.

pendent political organization in Mexicali Valley during the early 1960s, achieving renown not only on the local level, but also on the national stage. Finally, immediately preceding the onset of the salinity crisis, the LAE helped farmers to trade their private property for *ejido* lands. President Adolfo López Mateos created the Ejido Sombrerete for these new *campesinos* in May, 1961.⁴⁸

Garzón, a fervent nationalist, hoped to defend the rights of the *campesinos* not only against the transgressions of their neighbors in Wellton-Mohawk Valley, but also against the wealthier *colonos* in Mexicali Valley. Garzón believed that the *colonos*, in league with officials from the CRID, were habitually undermining the promises of land and water that the Constitution of 1917 had promised to the landless and oppressed. For *ejidatarios* who felt powerless, protests and organized manifestations before Mexican and U.S. officials offered at least the semblance of recognition of their demands. Garzón noted that outside of the manifestations, “the farmers of the Mexicali Valley had no other way of expressing their feelings for urgency in a solution of the problem”.⁴⁹

Consul Boyd observed that on December 13, 1961, Garzón and the LAE held their own manifestation in front of his office with approximately four hundred protesters.⁵⁰ On December 18, 1961, Boyd reported that three-to four-hundred members of the LAE again protested in front of his office, intent on remaining “until assurance [of receiving a favorable response] from U.S. Ambassador [related to resolution of the] saline water problem”. Ambassador Mann suggested that Boyd avert problems in the local area by working with local leaders to assure them of “efforts being made by [the] U.S. to resolve [the] problem”. Boyd later reported that he had spoken with leaders of the movement. While the protesters remained friendly, they refused to disband.⁵¹ The protesters were still in front of the consulate on December 20, 1961.⁵²

Boyd remained somewhat dubious concerning the intentions of the protesters that continued their manifestations in front of the Consulate in late 1961. Around 2 500 people, many attracted by the new Comité de Defensa de Mexicali

⁴⁸Celso Aguirre Bernal, *Compendio Histórico-biográfico de Mexicali, 1539-1966*, sixth edition (Mexicali, publisher unnamed, 1989), pp. 382-385.

⁴⁹Telegram from Boyd to Rusk, January 29, 1962, NACP, RG 59, DF, 1960-1963, 611.12322/1-2962.

⁵⁰*Idem*.

⁵¹Telegram from Mann to Rusk, December 18, 1961, NACP, RG 59, DF, 1960-1963, 611.12322/12-1861; Telegram from Boyd to Rusk, NACP, RG 59, DF, 1960-63, 611.12322/12-1861.

⁵²Memorandum of Conversation, “Salinity of Colorado River Water”, Mann and Sayre, December 20, 1961, NACP, RG 59, DF, 1960-1963, 611.12322/12-2061.

y San Luis Río Colorado, Sonora, protested in front of the Consulate on December 22, while Alfonso Garzón and the LAE continued their encampment in front of the same building. Boyd believed that the December 22 march was a calculated effort to keep people from shopping across the border in Calexico and El Centro before Christmas. The Mexicali Chamber of Commerce had organized the boycott and many of its merchants used the boycott to promote their own businesses. Boyd was also informed that a more radical, communist-led, group had formed to protest the heavy-handed efforts of the Chamber of Commerce to profit from the voluntary ban on shopping in the United States. Boyd observed that on December 27, 1961, the two formal protest groups, one run by communists and the other by the Chamber of Commerce had disbanded and a Comité de Defensa del Pueblo de Baja California had been organized in its place. On December 31, 1961, approximately 10 000 protestors marched to the Governor's Palace to present their grievances.⁵³

The traffic in front of the consulate also amused Consul Boyd. At the end of his December 28th dispatch, for example, he noted, "As of 3:00 pm local time, Alfonso Garzón is still camped out in front of the Consulate with the women making tortillas and cooking various concoctions in large kettles. He told me he is just as well off here as on the farm; that without water and credit a farmer can do nothing".⁵⁴

The "communist" infiltration of the local leadership seems to have been very limited. Not only were the more conservative groups able to use leverage within the Comité General (such as Anderson-Clayton, a member of the local cotton producers association) to prevent radical acts, but the U.S. enjoyed the unintended assistance of the police force in Mexicali in combating the "red" menace. For example, on December 20, 1961, it was learned by Consul Boyd that communist leaflets had been distributed in Mexicali. He also reported, however, that the leaflets were "confiscated by police who [are] searching for [the] printing press". In reality, while communist exploitation of the issue may have been a threat, Mexican authorities were as vigilant as U.S. officials in suppressing radical propaganda that might have continued to turn public sentiment against the United States.⁵⁵

⁵³Telegram from Boyd to USDS, December 31, 1961, NACP, RG 59, DF, 1960-1963, 611.12322/12-3161.

⁵⁴Foreign Post Dispatch, Boyd to USDS, "Salinity of Colorado River Water-Mexicali Reaction", NACP, RG 59, DF, 1960-1963, 611.12322/12-2861.

⁵⁵Telegram from Boyd to USDS, December 20, 1961, NACP, RG 59, DF, 1960-1963, 611.12322/12-2061.

Garzón eventually abandoned the manifestations in front of the U.S. consulate. He did not, however, end his efforts to publicize the salinity issue. Garzón turned his attention to the national stage by leading a caravan of forty automobiles and two buses from Mexicali to Mexico, D. F., as a plea for help from the federal government.⁵⁶ By mid-February the caravan arrived in Mexico, D. F., with some 220 protestors. Garzón met with Secretary of Hydraulic Resources Del Mazo, Foreign Minister Manuel Tello, and CILA Commissioner Herrera Jordan. Despite Garzón's energy, the federal government continued to preach patience in reaching a tenable solution. However, del Mazo promised that the federal government would begin the rehabilitation project in Mexicali Valley, pending approval from the World Bank.⁵⁷ The same day, in an interview with a prominent Mexican magazine, *Hoy*, President López Mateos affirmed that the government was moving ahead with a billion-peso plan to rehabilitate the drainage system in Mexicali Valley. "In short", he noted, "we can state that results depend in a large part on what we can do ourselves to achieve a better utilization of the flow which [*sic*] corresponds to us".⁵⁸

Garzón, more than any other local leader, encouraged regional discord when the federal government appeared unwilling to press the United States for improvements in water quality. In February 1962, he complained, "our government is not doing everything possible... to help people of Mexicali".⁵⁹ Despite Garzón's enthusiasm, it was evident that his methods were not effective in attracting the attention of federal officials to his particular points of protest. Despite leading the caravan of cars to Mexico City, he unsuccessfully attempted to enter into talks with President López Mateos and U.S. Ambassador Mann. Notwithstanding his appeal to the *ejidatarios* that followed him, Garzón's brash demands that reparations be paid to farmers in Mexicali Valley fell on deaf ears.⁶⁰

On March 6, 1962, Garzón turned his attention to matters related to the limited water supply in Mexicali Valley. The crisis placed further wedges between

⁵⁶Dispatch from Boyd to USDS, February 6, 1962, NACP, RG 59, DF, 1960-1963, 611.12322/2-662.

⁵⁷Telegram from Mann to USDS, "Salinity of Colorado River Waters", February 16, 1962, NACP, RG 59, 1960-1963, 611.12322/2-1662.

⁵⁸Telegram from American Embassy, Mexico, D. F., to USDS, "President López Comments on Colorado River Salinity Problem", February 16, 1962, NACP, RG 59, DF, 1960-63, 611.12322/2-1662.

⁵⁹Telegram from Mann to USDS, "Salinity of Colorado River Waters", February 21, 1962, NACP, RG 59, DF, 1960-1963, 611.12322/2-2-2162.

⁶⁰Foreign Post Dispatch, Robert W. Adams to USDS, "Ejido Leader Garzon of Mexicali Approaches Embassy on Claim Against the U.S.", June 6, 1962, NACP, RG 59, DF, 611.12322/6-662.

ejidatarios and *colonos* in the CRID. Because the irrigation district had not accepted large amounts of saline water in 1961, shortages forced cutbacks in the spring of 1962. While irrigated acreage had been cut back to fourteen hectares per farmer, *colonos* were permitted to use their private wells to irrigate land above the fourteen-hectare limit. Garzón and representatives from fifty-seven *ejidos* set up a permanent protest in front of the CRID headquarters, demanding equality in the repartition of waters among valley farmers.

Unlike his failed attempts to meet with federal officials during the "salt caravan" to Mexico City, Garzón's actions quickly gained the attention of the Subsecretary of Agriculture, Jorge Patino Navarette, who came to Mexicali to hear the LAE's complaints. Garzón successfully lobbied for the revocation of the *colonos'* right to use their private wells for acreage above the fourteen-hectare limit (water would instead be used for the benefit of all the valley's farmers). Garzón cited article seventy-five of the Agrarian Code from the Mexican Constitution of 1917, which stipulated that *ejido* lands were those which should be provided with water before private lands. If such lands were not protected, Garzón contended that the *ejidatarios* legally held the right to take over the irrigation district.

The dispute over lack of water illustrated how the salinity crisis exacerbated pre-existing social tensions in Mexicali Valley. The shortage brought to a point of confrontation the long-suspected notion that *colonos* in Mexicali Valley had long been given preferential treatment in terms of irrigation practices. Garzón's efforts to enforce the legal legacy of the Mexican Revolution demonstrated the distance between the legal rights and historic treatment of *ejidatarios* in general throughout Mexico. However, the efforts by the federal government to enforce a semblance of equity in water distribution, at least in the short run, demonstrated more than a token commitment (particularly in a time of crisis when social unrest was less than desirable) to the ideals of the Mexican Revolution. As a result of three days of meetings, the rights of *colonos* to use their wells were restricted in order that uniform amounts of water would be made available to all farmers. However, the LAE did not receive much relief in their petition that marginal land, which was already being abandoned in order to make the irrigable acreage of Mexicali Valley more compact, receive water for irrigation.⁶¹ Later that year

⁶¹Memorandum, Liga Agraria Estatal de Baja California, March 6, 1962, Archivo Histórico del Estado, Mexicali, Baja California (hereafter cited as AHE), Fondo Territorio Norte, Sección Agricultura y Fomento, Serie Agricultura y Ganadería, Box 368; Moisés Maislin Leal, "Informa situación prevalenciente en el Distrito de Riego", March 8, 1962, AHE, Fondo Territorio Norte, Sección Agricultura y Fomento, Serie Agri-

Garzón mailed a list of 292 farmers that had allegedly not been complying with the agreements reached in March of 1962.⁶²

In 1963, Garzón's LAE took the lead in combating increases in the price of irrigation water. Garzón pled with Northern Baja California governor Esquivel Méndez to act in behalf of *ejidatarios* with federal officials in Mexico, D. F., Garzón warned that not only would the price of water be raised, but also all users would be required to pay for the water in advance (a requirement that did not bode well for *ejidatarios* who were strapped for cash). By February 18, 1963, the LAE contingent was again camped in front of the CRID office. The *ejidatarios* focused their frustrations on district manager Óscar González Lugo, who had allegedly refused to speak with them about their concerns. As a result, requests for lower water prices were also accompanied by calls for a reorganization of the Comité Directivo Agrícola of the CRID, including removal of Lugo from the position of district manager.⁶³

On March 9, 1963, Garzón reached his zenith of power. At that time, Undersecretary of Government Luis Echeverría (the future president who took significant interest in the plight of Mexicali Valley in the 1970s) and Alfredo Colín Varela, Undersecretary of Hydraulic Resources, met with Garzón and other *ejido* leaders to hear their complaints. In exchange for an agreement to stop protests in front of CRID headquarters, federal and state officials agreed to allow greater *ejidatario* representation on the Comité Directivo Agrícola. Mexicali Valley farmers also received a guarantee that water prices would not be raised until after a committee (that included *ejidatario* representatives) had studied the issue.⁶⁴ Furthermore, Juan Muñoz Martínez replaced González Lugo as CRID manager.⁶⁵

cultura y Ganadería, Box 368; Memorandum, no date, AHE, Fondo Territorio Norte, Sección Agricultura y Fomento, Serie Agricultura y Ganadería, Box 368; Dirección de Agricultura y Ganadería del Estado, "Informes de labores correspondiente a los meses de marzo y abril de 1962", AHE.

⁶²Letter from Alfonso Garzón to Óscar González Lugo, December 13, 1962, AHE, Fondo Territorio Norte, Sección Agricultura y Fomento, Serie Agricultura y Ganadería, Box 368.

⁶³Letter from Garzón to Eligio Esquivel Méndez, February 13, 1963, AHE, Fondo Territorio Norte, Sección Agricultura y Fomento, Serie Agricultura y Ganadería, Box 366; Letter from Comisionado Ejidal del Ejido Xochimilco, Municipio de Mexicali, Estado de Baja California, to Alfredo del Mazo, February 18, 1963, AHE, Fondo Territorio Norte, Sección Agricultura y Fomento, Serie Agricultura y Ganadería, Box 366; Garzón to Adolfo López Mateos, no date, AHE, Fondo Territorio Norte, Sección Agricultura y Fomento, Serie Agricultura y Ganadería, Box 366.

⁶⁴Minutes, March 9, 1963, AHE, Fondo Territorio Norte, Sección Agricultura y Fomento, Serie Agricultura y Ganadería, Box 366.

⁶⁵Letter from Garzón to Juan Muñoz Martínez, March 23, 1963, 671.12/571, AHE, Fondo Territorio Norte, Sección Agricultura y Fomento, Serie Agricultura y Ganadería, Box 366.

Garzón's peasant group received coverage in the *Los Angeles Times* towards the end of 1963. One article examined the political organization of *ejidatarios* in Mexicali Valley. There were three peasant unions, two of which were allied with the entrenched Partido Revolucionario Institucional (PRI) and the third, Garzón's Central Campesina Independiente (CCI), which was not. The CCI was linked with communism in the minds of U.S. officials because of its ties to the nationalist Movimiento de Liberación Nacional (MLN). The party also had strong connections to Lázaro Cárdenas and ex-Baja California governor (and noted anti-U.S. protestor) Braulio Maldonado. The *Times* reported that Garzón had used the salinity crisis as leverage to try and "bring the other two peasant and farmer unions under the wing of the CCI". Despite his efforts, the *Times* reported, Mexicali Chamber of Commerce employed a counter-attack by providing *ejidatarios* with provisions in order to win their allegiance away from Garzón. Playing on the anti-U.S. theme, however, had helped the CCI. As one supporter noted, "The CCI has a good plan and the other peasant and farmer groups will soon realize they'll have to join us or become slaves to the imperialists".⁶⁶

Two weeks later the *Los Angeles Times* featured an article about Garzón and Vicente L. Toledano, long-time Mexican labor organizer. Toledano headed the Partido Popular Socialista (PPS), an anti-U.S. and pro-Castro organization. Because the salinity crisis had not been resolved, Toledano planned to travel to Baja California and stir up animosity towards the United States. Employing a play on words, journalist Rubén Salazar noted, "The Colorado — which means reddish — River has brought a flow of left-wing extremists and Communists to Baja California in recent months". Garzón was riding high on the crest of a substantial base of public support during the salinity crisis, Salazar reported, for just four months previous he was "thrown in jail as an enemy of the people" and written off as "just another Communist agitator" by the press. By March 1963, however, Garzón had become the national spokesperson for the CCI. Apparently, his defense of low water prices together with the consternation caused by the salinity crisis won public sympathies, despite the leftist leanings of the CCI. Salazar also attributed the rise of the left in Baja not just to the salinity crisis and Garzón, but also to ex-governor Maldonado, who had cultivated the idea in his book, *Baja California. Political Commentaries*, that the government had abandoned the state

⁶⁶Rubén Salazar, "River Water Prices, Salt Content Protested by Mexico's Peasants", contained in letter from Sayre to Spence McIntyre, April 1, 1963, NACP, RG 59, POL 33-1, MEX-US, 1963.

shortly after it had been founded in 1951. Maldonado wrote, "The [Mexican] federal government gave us little help... It committed the error of thinking of us as a 'rich' state government and practically let us struggle for ourselves".⁶⁷

Other valley residents who were fiercely nationalist often found their ideas related to the crisis discounted because of their socialist leanings. In 1963, for example, the "communist subsidized" magazine *Política*, carried an extensive study of Colorado River water quality written by Emilio López Zamora, Director for Agriculture for the State of Baja California. Ambassador Mann warned, "[It] is unclear if article is solely communist propaganda effort or if [the] Government of Mexico has cooperated in its preparation, probably the former". While Zamora's article did carry an anti-U.S. tone, the science contained within it did not appear to be overly affected by his socialist predilections, particularly since some of the statistics emanated from U.S. agencies. Ultimately, Zamora outlined domestic plans for rehabilitation of the Mexicali Valley in his article. Zamora also objectively noted that the lack of water in Mexicali Valley was not only the result of the salinity crisis, but also because Mexicans "opened up almost twice as much farmland than could efficiently be irrigated with water from the United States". The most inflammatory of his remarks concerned the potential of the salinity crisis to bring all social classes in Mexicali together, making them "conscious that their collective interests and the sovereignty of the [Mexican] nation were in jeopardy". Such a development tended to happen on either side of the border whenever water quality significantly declined.⁶⁸

During 1964, Alfonso Garzón continued to ride a wave of popularity in Mexicali Valley. Mexican Ambassador Freeman noted, for example, that during a survey in Mexicali, those polled expressed "overwhelming support for far-leftist CCI leader Alfonso Garzón, among both rural and urban residents of the area." In addition to participating in protests throughout the year, the organization mounted a vigorous letter writing campaign that resorted to extreme measures to gain the attention of private and public officials throughout Mexico and the

⁶⁷Salazar, "River Row Makes Reds Flood Baja California, Unrest Among Peasants and anti-American Feeling are Fertile Ground for Propaganda", *Los Angeles Times*, March 17, 1963, in letter from Sayre to McIntyre, April 1, 1963, NACP, RG 59, POL 33-1, MEX-US, 1963.

⁶⁸Telegram from Mann to Rusk, March 14, 1963, NACP, RG 59, POL 33-1, MEX-US, 1963; Emilio López Zamora's, "La contaminación de las aguas del río Colorado: un conflicto internacional", *Política*, March 1, 1963, 3-13, is included with the telegram. A compilation of López's writings, including several articles on water issues and development in the delta can be found in *El agua, la tierra: los hombres de México* (Mexico, Fondo de Cultura Económica, 1977).

globe. The letter was sent to “make known to all the unmerciful aggression that Mexico is suffering at the hands of the U.S.”. Copies of the letter were intended for all members of the United Nations, Mexican governors, national deputies, chambers of commerce, labor organizations, peasant unions, industrial groups and banking groups. Often given to bombast and shock, the letters compared the salinity crisis to the United States building a nuclear plant and shipping its waste into Mexican waters. A stamp that read “Genocide. The USA contaminates the waters of the Colorado River, Annihilates 300,000 human beings in the Mexicali Valley” was printed on each letter.⁶⁹ Equally as dramatic, the CCI-affiliated *Federación Estatal Campesina de Sonora* petitioned President Johnson on the salinity issue, comparing the damage in Mexicali Valley to the atomic destruction of Hiroshima and Nagasaki. They appealed to Johnson to “avoid the misery and exodus of all of the people of a region always promising of great agricultural production and of the men and women forged in that work”.⁷⁰

GARZÓN'S DECLINE FROM POWER

Yet hope for imminent resolution of the salinity crisis prompted national officials to turn their support towards a rejuvenated *Comité General de la Defensa del Valle de Mexicali*. By March of 1964 it was rumored that CILA Commissioner David Jordán Herrera had worked through the Mexicali Valley Cotton Association in an effort to revive the *Comité General* and take control of the local political organization away from Garzón and the CCI.⁷¹ The *Comité* reorganized itself on March 22, 1964. This measure toned down the tenor of protest in the valley, providing the federal government with greater assurances that public protests would not adversely impact international negotiations. Despite the changing of the guard, federal officials remained leery of the impact of public manifestations on negotiations, except when it was in the strategic interest of the Mexican government to use public protest as a bargaining tool.⁷²

⁶⁹Telegram from Freeman to Rusk, May 21, 1964, NACP, RG 59, POL 33-1, MEX-US, Folder 5-1-64.

⁷⁰Letter from *Federación Estatal Campesina de Sonora* to President Johnson, November 7, 1964, AHE.

⁷¹Telegram from Boyd to USDS, “Salinity of the Colorado River Waters: Committee for Defense of Mexicali Valley Reactivated”, March 17, 1964, NACP, RG 59, POL 33-1, MEX-US, Folder 3-1-64.

⁷²The Mexican Chief of Immigration in Mexicali, for example, reported to the American Consulate that “the protest demonstrations... were interfering with the current political contest [in reference to the presidential election]”. See Telegram from Boyd to USDS, May 15, 1964, “Salinity of Colorado River Wa-

In May 1964 some of the more creative manifestations during the crisis took place in Mexicali. The Comité General used a large flatbed truck accompanied by about four hundred protestors and marched from the Chamber of Commerce to the U.S. Consulate. The trailer carried a coffin filled with salt, figuratively representing Northern Baja California. Consul Boyd noted that "representatives of each group took turns standing honor guard over the coffin". Each group carried signs with slogans. The CCI-LAE mounted a banner that stated, "Mr. Johnson your ranch is irrigated with virgin waters from Mexico. We demand virgin water from the Colorado". Another read "Salt Us First – Talk to Us Later". The Comité General also hung a sign across a hotel across the street from the Consulate that read "Enough Salinity Already (*Basta ya de Salinidad*)". Organizers intended to leave it there for Consul Boyd to see until the problem was resolved.⁷³

Ordered protests continued during the summer. By August, however, the federal government requested that the Comité General call off its demonstration on August 6, 1964, as they believed a solution to the problem was imminent. The Comité General immediately communicated the request to its members.⁷⁴ The sudden announcement came as a shock to the CCI. Garzón notified Aurelio Flores Valenzuela, General Coordinator of the Comité General that his group had organized protests in approximately thirty cities throughout Mexico. By pressing for immediate action, Garzón illustrated why national officials had tapped out the Comité General as its local coordinating body of choice.⁷⁵ By the

ters – Demonstrations Against", May 15, 1964, NACP, RG 59, POL 33-1, MEX-US, Folder 5-1-64. An example of Mexican officials using radical protest (something they generally detested) to their advantage can be seen in an exchange between Mexican Senator Vildosola and Ambassador Freeman. Vildosola warned Freeman of an upcoming "mammoth" demonstration on July 12, 1964, and suggested that the United States find a resolution to the problem before then. As Freeman explained the complications of finding a resolution because of domestic concerns with the Colorado River Basin states in the United States, Vildosola warned that he might not be able to guarantee that these demonstrations would be peaceful like those in the past. "He expressed his full understanding of the dangers of communists and other extremists in seeking to turn the demonstrations to their own ends", Freeman noted, "but he in no way accepted the inference of the desirability of postponing the scheduled nation-wide demonstrations on July 12". Telegram from Freeman to Rusk, June 19, 1964, NACP, RG 59, POL 33-1, MEX-US, Folder 6-6-64.

⁷³Telegram from Boyd to USDS, "Salinity of Colorado River Waters – Demonstrations Against", May 15, 1964, NACP, RG 59, POL 33-1, MEX-US, Folder 5-1-64.

⁷⁴Telegram from Freeman to Rusk, August 6, 1964, NACP, RG 59, POL 33-1, MEX-US, Folder 8-1-64; Also see Comité de Defensa del Valle de Mexicali Letter to Centrales Obreras y Campesinas, Organizaciones de la Iniciativa Privada, y la Opinión Pública Nacional", August 5, 1964, AHE, Fondo Territorio Norte, Sección Agricultura y Fomento, Serie Agricultura y Ganadería, Box 368.

⁷⁵Letter from Garzón to Aurelio Flores Valenzuela, August 9, 1964, AHE, Fondo Territorio Norte, Sección Agricultura y Fomento, Serie Agricultura y Ganadería, Box 368.

fall, continued whisperings of resolution weakened the ability of the Comité to mobilize popular support in Mexicali and largely did away with large-scale demonstrations.⁷⁶

Anticipation of a solution to the salinity problem increased throughout 1964 and early 1965, as protests in Mexicali were discouraged and forthcoming settlements periodically rumored to be imminent. For that reason, the announcement of Minute 218 in 1965 received a lukewarm reception in Mexicali Valley. The agreement required the United States to build a drainage channel from Wellton-Mohawk to Morelos Dam. Mexico could then decide whether or not it wanted to use the effluent to mix with better water from the river. In either case, Mexico would still be charged for water that was either used or wasted to the Gulf of California. The agreement would be effective for five years beginning on January 1, 1966. At the end of five years it would be reviewed by both nations to assess its efficacy. A PRI-sponsored manifestation of appreciation to President Ordaz only attracted 500 participants. The incoming U.S. consul in Mexicali, Arthur Feldman, attributed the reaction to "the long awaited and frequently promised solution which took over a year to become a fact". Additionally, many Mexicans felt that the solution was not just because Mexico would still be charged for the saline water it chose not to accept. Furthermore, continued efforts to rehabilitate farmlands in Mexicali Valley reinforced the idea that Minute 218 was only a temporary solution.⁷⁷

CONCLUSION

In 1964, an upset (and extremely articulate) Mexicali resident, Humberto Hernández, fired off a four-page letter to Senator William Fulbright, Chairman of the Foreign Relations Committee. Quoting a Fulbright speech, Hernández wrote, "We are confronted with a complex and fluid world situation — and we are not adapting ourselves to it. We are clinging to old myths in the face of new realities". Hernández then noted the plodding nature of resolution of the salinity crisis, observing that Mexicali's problems were "buried under the lengthy, slow and

⁷⁶Telegram from Feldman to USDS, November 19, 1964, "Salinity Demonstration Postponed", NACP, RG 59, POL 33-1, MEX-US, Folder 10-1-64.

⁷⁷Telegram from Feldman to USDS, "Round-up of Mexicali Reaction to the solution of the salinity problem", April 5, 1965, NACP, RG 59, POL 33-1, MEX-US, Folder 4-1-65.

deliberate proceedings of a rigid and prejudiced international policy, influenced by the selfishness and arrogance of a few".⁷⁸

Hernández's remarks spoke for thousands of Mexicali residents. His insight and the evidence from the salinity crisis suggest the need to reassess the nature of the dilemma and its resolution. The tangled approach of the USDS and the DOI suggests that there were at four political entities dealing with each other: The United States government, the American West (comprised of a linkage between Western legislators and the USBR), the Mexican government, and local organizers in Mexicali Valley. Personalities played a tremendous role in the dynamics of the crisis. Conflicts of interest within the DOI, as well as the constraints of checks and balances (for example, all executive treaties had to be approved by the Senate, where the West exercised great power on water issues) presented as much of a challenge to the USDS as did complaints from Mexico. It cannot be claimed that the West, the Sagebrush Rebellion notwithstanding, was a powerless "colony". Its leaders possessed the leverage to hold international treaties captive.

For the most part, USDS officials were sympathetic to Mexican claims, yet the existing water rights of Western farmers and the plans of the USBR limited their authority to act. Ambassador Mann privately pushed for salt balance on irrigation districts in the U.S. portion of the Colorado River Basin, although in official statements he was constrained to pull back. The U.S. consuls in Mexicali also had an interest in seeing the issue resolved judiciously. Inaction was the very condition that facilitated the rise of organizer Alfonso Garzón. Once a solution to the crisis was close at hand, however, official support for a revamped Comité General diminished Garzón's influence. By 1964, Garzón had been co-opted by the ruling party and eventually became a federal deputy.

Even the Secretary of the Interior, Stewart Udall, who was often upstaged on issues related to Mexico and the Colorado River by his subordinate, USBR Commissioner Floyd Dominy, quietly attempted to ameliorate conditions in Mexico within the limited constraints of Western water politics. It will be remembered that Udall also broke with the Hayden-Dominy juggernaut when he decided against building dams in the Grand Canyon. His commitment to environmental issues and sympathy for suffering humans, then, at least partially counteracted the actions of those officials whose primary interest was U.S. development of the Colorado River basin.

⁷⁸Letter from Humberto Hernández to J. William Fulbright, May 23, 1964, Archives, Museo Universitario, Universidad Autónoma de Baja California, Mexicali, Baja California, Rafael Martínez Retes Papers, Folder 10 (1964).

The first four years of the salinity crisis also illuminated distinctive attitudes towards ownership of natural resources. Farmers in Wellton-Mohawk Valley dug in their heels and used an accessible legislative apparatus, via influential congressman and senators, to protect their interests. On the other hand, the legacy of the Mexican Revolution and uncertain circumstances demanded that *ejidatarios* and *colonos* share water resources during the salinity episode. Even if such efforts at sharing resources failed or were subverted, the fact that such mechanisms existed for times of crisis reflected differing attitudes towards resolution of environmental crises.

As scientific data from both sides of the border attested, the salinity crisis was neither an act of genocide nor a figment of the "communist" imagination. In truth, the salinity crisis was a legitimate problem with various solutions. There are several incidents that corroborate this assertion. Most telling, perhaps, were the complaints from people in the U.S. delta who noticed a decline in water quality for domestic and agricultural uses. For example, Thomas Allt, a representative for the city of Yuma, Arizona, testified at the Colorado River Salinity Control Act (1974) hearings that prior to the fall of 1961 the city took its drinking water directly from the Colorado River. After the release of toxic drainage from Wellton-Mohawk, however, the city reached an agreement with the Yuma County Water Users Association to receive water from the Yuma Canal, which was connected to the Imperial Dam. Second, a study completed after the salinity crisis between the United States and Mexico had been diplomatically resolved, calculated that Colorado River water with salts totaling 1 400 ppm in the Imperial Valley could cause \$74 568 worth of damage. While these statistics were not calculated for Mexicali Valley, the contiguous nature of the two regions and similar geological properties makes a rough comparison possible.⁷⁹

Furthermore, agricultural economists estimated that the salinity of "pristine" waters in the Colorado River at Imperial Dam nearly tripled between 1926-1965 (383 ppm to 839 ppm).⁸⁰ IBWC data related to salinity differentials of Colorado River water between the Imperial Dam and the Mexican border also shed light on the extent of the problem. In 1960, water at the international boundary con-

⁷⁹Alan P. Kleinman and F. Bruce Brown, *Colorado River Salinity: Economic Impacts on Agricultural, Municipal, and Industrial Users*, U.S. Dept. of the Interior, Colorado River Water Quality Office, Engineering and Research Division (Government Printing Office, 1980), 8.

⁸⁰B. Delworth Gardner and Clyde E. Stewart, "Agriculture and Salinity Control in the Colorado River Basin", *Natural Resources Journal*, volume 15, January 1975, 65.

tained only an average of 33 ppm of salt more than water at the Imperial Dam. The following year, however, salinity differentials at the border increased 1636% percent over the previous year, to 540 ppm. Most riveting, however, are the statistics related to the salt differential at the border and Imperial Dam in raw tonnage between 1961 and 1965. In 1960, for example, the 33 ppm differential for 1.36 million acre-feet of water (the amount specified to be delivered at the *international boundary*—the rest was delivered from Yuma Valley drains to San Luis Río Colorado farmers—by the 1944 Treaty) created a salt tonnage differential of 61 036.8 tons. In 1961 the tonnage differential at the two points for the specified treaty delivery rose to 998 784 tons. In 1964 it reached the zenith for the entire crisis (1961-1974) at 1 241,081.6 tons. In 1965 the tonnage differential fell below the one million-ton figure.⁸¹

Ultimately, the first four years of the salinity crisis witnessed a profound transformation in the ecology of the lower delta. The uncertainty of increased volumes of salinity—on both the national and local level—not only increased tensions between the United States and Mexico, but also made it possible for local tensions to elicit national and international attention between 1961 and 1965. The desire on the part of both national governments to minimize uncertainty during the negotiation process contributed to the decline of local political flame-throwers like Alfonzo Garzón. As a result, by 1965 policy makers largely examined the political terrain of Mexicali Valley from afar—in Washington D.C., Mexico, D. F., Ciudad Juárez, and El Paso. The salinity crisis concluded in 1974 when the United States agreed to improve the quality of water sent to Mexico. Increased precipitation in the following years also improved the quality of water in the Colorado River.

Finally, Garzón's efforts to mobilize protestors in Mexicali and throughout the country on behalf of discontent Mexicali residents illustrate the early attempts of local organizers in post-World War II Mexico to voice their discontent with federal policy related to natural resource use and allocation. The uprisings

⁸¹John M. Bernal, *A Report on Salinity Operations on the Colorado River under Minute No. 242, January 1-December 31, 1997*, International Boundary and Water Commission, United States Section; For other helpful references on water quality see L. A. Richards, editor, *Diagnosis and Improvement of Saline and Alkali Soils*, USDA (Washington, GPO, 1954) for conversion formulas for computing salt tonnage from ppm salt, 157; I. Shainberg and J. D. Oster, *Quality of Irrigation Water* (Bet Dagan, Israel, International Irrigation Information Center, 1978), pp. 31-43; Ranbir Chhabra, *Soil Salinity and Water Quality* (Rotterdam, A.A. Balkema, 1996); Alexandra Poljakoff-Mayber, *Plants in Saline Environments*, *Ecological Studies*, volume 15 (New York, Springer-Verlag, 1975).

in Chiapas in the 1990s, for example, reflect a much more dramatic manifestation of local discontent with national land policies. However, both instances highlight the contrasting ways in which federal governments and local residents have viewed the contested lands and resources of distinctive Mexican landscapes. And, while Garzón's automobile caravan to Mexico City had little of the dramatic flair of Subcomandante Marcos' entry to Mexico City's Zócalo in March 2001, both episodes illustrate grass-roots efforts to mobilize public support outside of the electoral process. With little political capital beyond the power to mobilize the support of the masses into legions of protest, Mexican farmers and laborers have cultivated a unique political tool that dramatically reflects local responses to national policies. Ultimately, as Mexico and the United States move into the twenty-first century, it is hoped that both federal governments will see with the eyes of locals as they ponder the fragile future of natural resources in the border region.