



**THE BROWNELL TASK FORCE AND
THE MEXICAN SALINITY PROBLEM:**

A Narrative Chronology of Events

Submitted to:
Colorado River Basin Salinity Control Forum

By:
**Anne DeMarsay
Carmarthen Communications**

September 1991

Cover photograph: an aerial view of Imperial Dam. The view is looking upstream (north). Imperial Dam is the last diversion point where Colorado River water is taken by water users in the United States to be used both to the east (the right) in Arizona and to the west (the left) in California. Water passing over Imperial Dam continues on to Mexico where the water is used for agricultural, industrial, and municipal purposes in Mexico. This water which passes Imperial Dam, plus additional water coming into the river as return flows below Imperial Dam and water pumped across the border at San Luis, provide the quantity of water guaranteed to Mexico as set forth in the treaty between the two countries.

Imperial Dam is the point at which water quality samples are taken to ensure that the numeric criteria of water quality standards, adopted by the seven Colorado River Basin states for water used in the United States, are being maintained. Imperial Dam is also used as the upstream measuring point to determine water quality as provided for by the amended treaty with Mexico. When the total dissolved solid values at Imperial Dam are subtracted from values at the downstream measuring point at Morelos Dam, a differential is calculated. The differential, as explained in this report, is the basis for the water quality agreement between the United States and Mexico which led to an amendment to the treaty.

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**Colorado River Basin Salinity Control Forum
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Preface

In the early 1970s, the United States and Mexico engaged in extensive discussions concerning potential amendments to the treaty between the two countries relating to the delivery of water from the Colorado River to Mexico. Those discussions focused on water quality issues. The Colorado River Basin states observed those discussions with great concern and interest because the states desired to be certain that international agreements would not impact their ability to use the limited and already-apportioned Colorado River water supplies.

Negotiations for the United States were lead by Herbert G. Brownell, Jr., and a Task Force. Serving on a Working Group formed to assist that Task Force was a young, Office of Management and Budget (OMB) employee by the name of Anne DeMarsay. Anne was a budget examiner in the Water Resources Branch of the Natural Resources Division of OMB. Following her career at OMB, Ms. DeMarsay has become a consultant specializing in communications in the Washington, D.C., area.

Some two decades later, the Colorado River Basin states realized that it would be important to preserve for future reference some of the history of the negotiations between the two countries. Anne has excellent writing skills and a vivid memory of those negotiations. Hence, the Colorado River Basin Salinity Control Forum contracted with Ms. DeMarsay to write a narrative chronology of events. This publication is the product of that contract. The Forum believes that this report is an accurate representation of the events which occurred. However, the Forum cannot verify every detail attested to by Ms. DeMarsay in the report, nor does the Forum consider this report to be an official position or finding of the Colorado River Basin Salinity Control Forum.

Upon receiving a draft report, the Forum concluded that it would be important for Anne to record the sources that she used in preparing the report. Hence, she has provided a selected bibliography. In addition, it was felt that it would be informative to have a listing of the Task Force and Working Group members. That listing is provided under Appendix A. The Forum further realized that it would be important to preserve some reflections of the events from the states' perspective. A state organization had been created to allow for an interface between the State Department and the seven Colorado River Basin states. That organization was named the Committee of Fourteen. The Committee of Fourteen had been in existence prior to the negotiations which occurred in the early 1970s, but was reactivated and was most active during the period of the negotiations in the early 1970s.

Six members of the Committee of Fourteen were available to be interviewed in connection with this report. They had an opportunity to read this report, and Anne was asked to contact each of them individually and record some of their views for posterity. Her interviews with five of the six individuals are summarized in Appendix B. Unfortunately, Steve Reynolds of New Mexico passed away before Anne had a chance to interview Mr. Reynolds. Steve had read the report and had made some notations in his copy of the draft report. His notations are also made a part of Appendix B.

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Appendix A Task Force and Working Group Members

Appendix B Interviews with Committee of Fourteen Members

Floyd A. Bishop
Myron B. Holburt
Daniel F. Lawrence
Raphael J. Moses
Steve Reynolds
Wesley Steiner

The Brownell Task Force and the Mexican Salinity Problem: A Narrative Chronology of Events

Introduction

Seventeen years ago this summer, in June 1974, President Nixon signed into law P.L. 93-320, the Colorado River Basin Salinity Control Act. Title I of the Act authorized the Federal Government to take measures to eliminate the effects of brackish return flows (or drainage) from the Wellton-Mohawk irrigation project on water delivered to Mexico under a 1944 treaty allocating the waters of the Rio Grande, Tijuana, and Colorado Rivers between the U.S. and its southern neighbor. At the heart of the Title I program was a 100 million gallon-per-day (mgd) desalting plant to be built at a site near Yuma, Arizona. The desalting plant was to be the solution to a water quality dispute that had periodically troubled U.S.-Mexican relations since 1961.

The Yuma Desalting Plant was to remove 90 percent of the dissolved salts from the return flows, by a process called reverse osmosis. This desalted water was then to be blended with the remaining drainage to yield water of the quality guaranteed Mexico under a 1973 Minute to the original treaty, Minute No. 242. The estimated capital cost of the plant, along with other measures called for in Title I, was estimated at slightly under \$100 million at the time of authorization.

Completion of the plant is now thirteen years behind the original schedule. Its capital cost has risen to more than \$400 million, and projected yearly operation and maintenance costs range from \$10 million to \$33 million. The blended waters to be delivered to Mexico may cost as much as \$500 per acre-foot to produce.¹

Why did the Federal government choose such a costly—and risky—means to implement an international agreement? To answer that question, we must look at the history of that decision—the people involved, their perspectives and limitations, the courses of action they believed were available, and the constraints under which they worked. But first, what was the problem they were solving—or thought they were solving?

Emergence of the Salinity Issue

The treaty that guaranteed Mexico 1.5 million acre-feet of Colorado River water annually "from any and all sources" did not specify its salinity. The salinity of water used for irrigation water is often critical to agricultural productivity, as high concentrations of salt reduce crop yields and may preclude the growing of salt-sensitive crops such as tomatoes and lettuce. Because Mexico

used—and still uses—most of its Colorado River water to support irrigated agriculture in the Mexicali Valley, this silence seems odd. The history of the treaty suggests that the U.S. and Mexico drew different inferences about quality from the phrase "any and all sources."

Before the completion of Hoover Dam in 1935, destructive spring floods swept through the Colorado Basin almost every year, followed by dangerously low flows in the summer. When the river was in its natural state, Mexico could capture and use only about 750,000 acre-feet of water per year. Hoover Dam made possible the storage of floodwaters and year-round flow regulation, and Mexico stood to receive much more usable water—but the legislation authorizing the dam's construction barred foreign governments from receiving any benefit from it! The 1944 treaty contained an apparent compromise: the U.S. would deliver approximately twice as much water to Mexico as it would have been able to use had the Colorado River not been regulated (1.5 million acre-feet) but Mexico would have no say in the source of that water within the Basin, nor in its quality.²

Until 1961, no problems arose from the salinity of water deliveries. In that year, the Wellton-Mohawk Irrigation and Drainage District in Arizona, near the Mexican border, began to operate a pumped drainage system. To lower the high water table beneath the project, it began to pump highly saline water into its drains—water that was laden with salts that had accumulated in the soils beneath the project from decades of irrigation without drainage. These drainage waters, or "return flows" carried about 6,000 parts per million (ppm) of dissolved salts, and entered the river just above Morelos Dam, the main Mexican diversion point.

In the same year, the U.S. sharply reduced upstream releases—which would have diluted the brackish drainage waters from Wellton-Mohawk—in order to begin filling Lake Powell behind the newly completed Glen Canyon Dam. These two events caused the average annual salinity of water delivered to Mexico at Morelos Dam to jump dramatically, from about 800 ppm in 1960 to 1,340 ppm in 1961, to more than 1,500 ppm in 1962. Salinity levels in some months exceeded 2,500 ppm. In November 1961, the government of Mexico filed a formal diplomatic protest, charging the U.S. with violating international law. The International Boundary and Water Commission (IBWC), the joint U.S.-Mexican agency charged with administering the 1944 treaty, began negotiations on a practical solution.

For the next ten years, Mexican and U.S. scientists, diplomats, and Federal and state officials debated the intent of the 1944 treaty, technical issues, and equities under international law without reaching a permanent solution.³ The Committee of Fourteen—composed of two representatives from each of the seven Basin states— had been created in 1938 to consider basin-wide problems, including the prospective treaty. At the State Department's request, the Committee was revived in the early 1960s to advise the U.S. Section of the IBWC on the salinity issue.

In 1965, the U.S., under Minute No. 218 of the IBWC, agreed to several temporary measures to reduce salinity: extending the Wellton-Mohawk Drain to permit drainage to be bypassed around Morelos Dam (where it would flow to the Pacific Ocean without being diverted for use) during periods of unusually high salinity; replacing about 40,000 acre-feet per year of bypassed

drain water with additional water released from upstream storage; and constructing more wells at Wellton-Mohawk to permit selective pumping of drainage.

The Basin states were initially unwilling to make any concessions to Mexico on water quality. They pointed to the language and legislative history of the treaty as proof that Mexico was compelled to accept drainage water of any quality (except brine aquifers) as part of its allotment.⁴ In the eyes of many western U.S. water users, the provisions in the treaty were consistent with their own state water laws. Water law in the western United States recognizes the right to appropriate water for beneficial consumptive use—with some inevitable decrease in quality—and decrees that "first in time is first in right." International water law, however, generally follows the doctrine of riparian rights, under which downstream users have the right to receive water that has not been degraded by upstream users.

By the late 1960s, the states were convinced of the need to reach an accommodation with Mexico. U.S. interests proposed a new basis for settlement: "equivalent salt balance," based on a concept from agronomy and irrigation engineering.⁵ An irrigation system that is in "salt balance" returns the same amount of salt in its drainage waters as was applied to the land. Salt neither accumulates in nor is leached from its soil.

Proponents of the equivalent salt balance position recommended that the U.S. dilute Wellton-Mohawk drainage with a quantity of purer water sufficient to reduce the differential in salinity between Imperial and Morelos Dams to that which would exist if the project were in salt balance—about 280 ppm. In theory, as excessively salty waters were gradually drained from beneath Wellton-Mohawk, the amount of dilution water needed would decrease. Once the project reached salt balance, substitution for drain flows would no longer be necessary.⁶ The salinity of the water reaching Mexico would be that which the next downstream user would be entitled to under U.S. water laws.

Myron B. Holburt, a member of the Committee of Fourteen from California, explained the assumptions on which the equivalent salt balance concept rested as follows: "(1) water users in the United States have a right to irrigate lands below Imperial Dam, (2) Mexico has to receive drainage water under the Treaty, (3) creating a situation of ideal return flow conditions below Imperial Dam with respect to salinity would be the best Mexico could expect, (4) the total deliveries should be water of a quality that would be usable for irrigation of the type of crops grown by Mexico, considering its soil conditions."⁷

In the last days of the Diaz Ordaz administration, the U.S., with the support of the Colorado Basin states, offered to negotiate a new Minute based on salt balance equivalence. The Mexican government called the proposal constructive, but chose not to enter negotiations on a long-term agreement until a new president, Luis Echeverria Alvarez, took office in December 1970.

The Search for a "Permanent, Definitive and Just Solution"

During 1971, the U.S. and the new Mexican administration discussed a settlement based on the equivalent salt balance concept. By November, U.S negotiators believed that they were close

to reaching an agreement,⁸ but in early 1972 the Mexican government rejected U.S. proposals. In June 1972 President Echeverria arrived in Washington with a stronger demand: parity. Mexicali Valley farmers should receive water of the same quality as American water users served by Imperial Dam, then about 870 ppm.

President Nixon responded in a joint communique issued June 17, in which he promised to: 1) take action immediately to improve the quality of water going to Mexico; 2) appoint a special representative to find a "permanent, definitive and just" solution to the salinity problem and report to him by the end of the year; and 3) submit a U.S.-approved proposal to President Echeverria for consideration and approval. The IBWC was directed to draw up and sign a Minute containing this program.⁹

In preparation for the Mexican President's visit, the Office of Management and Budget (OMB) and the Departments of State and the Interior, briefed President Nixon on possible diplomatic courses of action and short- and long-term measures to reduce salinity levels of water delivered to Mexico. In the short run, bypassing some portion of return flows and replacing it with better quality water from another source seemed the only practical means. Long-term solutions fell into four categories: 1) continuing to bypass Wellton-Mohawk return flows and substituting less saline water from other sources (including "new water" from weather modification and other augmentation technologies then under study); 2) eliminating salt loading by totally or partially shutting down the project; 3) desalting all or part of the return flows; and 4) regulating salinity according to state-by-state water quality standards, restricting irrigation or requiring more efficient on-farm water management practices where necessary.

Before the Echeverria visit, the simplest and least expensive course of action appeared to be to continue to bypass—and substitute better quality water for—some portion of the return flows, while the issue of an acceptable salinity level was resolved diplomatically. After the Wellton-Mohawk project reached salt balance, the U.S could undertake more costly or controversial measures to permanently maintain the negotiated salinity level. This approach had several advantages: it would have given Mexico an immediate reduction in salinity, preserved the legal positions of both parties during negotiations over ultimate salinity levels, and deferred capital expenditures or politically unpopular decisions. The Colorado Basin states had been willing to support the equivalent salt balance concept; presumably they would have agreed to the use of substitution water from a source within the Basin for a limited period.¹⁰

Minute No. 241, the interim Minute required by the joint communique, was signed on July 14. It reflected the approach described above: the U.S agreed to bypass 118,000 acre-feet of Wellton-Mohawk drainage per year, replacing it with additional water released from Imperial Dam. This action would have reduced the salinity level at Morelos Dam from 1,240 ppm (under Minute No. 218, the interim 1965 agreement) to 1,140 ppm—the salt balance level, though the term was not mentioned. Mexico, however, asked the U.S. to bypass the remaining 100,000 acre-feet of drainage without substitution, which resulted in a salinity level of about 950 to 1000 ppm.

Here the diplomatic situation became murky. Why did Mexico agree to let the U.S. limit its efforts, even in the interim, to guaranteeing a level of salinity corresponding to that resulting

from salt balance? Why did its government then ask that remaining drainage flows be bypassed without compensation? Former U.S. Commissioner of the IBWC Joseph Friedkin recalls: "By the time the Presidents met in June, 1972, it was clear that there was no longer an opportunity to reach an agreement with Mexico on the salt balance principle. Mexico was unwilling to accept any Wellton-Mohawk drainage waters as treaty deliveries."¹¹ From this perspective, Mexico's wasting of the balance of the Wellton-Mohawk drainage must be seen as an effort to preserve its claim to water of Imperial Dam quality.

But Bureau of Reclamation employees in the Lower Colorado Region remember hearing another message via IBWC that summer; Mexican Commissioner David Herrera Jordan indicated that the approach used in Minute No. 241 would be acceptable to his government as the basis of a permanent solution.¹² Was Mexico, then, bypassing drain waters for internal political reasons, to prove its toughness to Mexicali Valley interests? Were Echeverria and his advisors really amenable to more moderate terms?

These questions were never to be answered conclusively. The events of the summer of 1972—the Echeverria visit, the joint communique, the prospect of a Presidential initiative—served to focus the attention of powerful individuals and interests on the salinity problem. In the process, both the international issues and the nature of an acceptable solution were redefined.

The joint communique introduced the terms "permanent" and "definitive." As the President's Special Representative, Herbert G. Brownell, Jr., and his Task Force deliberated, these terms came to be applied to the actual measures used to reduce salinity, rather than to a legal or diplomatic settlement. The narrow assignment placed on them—that of the ultimate technical fix—left, in the end, only one politically feasible solution.

Deliberations of the Brownell Task Force

Brownell, a lawyer who had served as Attorney General under President Eisenhower, was appointed on August 16, 1972, and sworn in on September 7. After a brief disagreement between OMB—which wanted him to be headquartered in the Executive Office of the President—and the State Department, Brownell and his staff were settled in offices in the Mexican Affairs section of State. The President also appointed an interagency Task Force to assist Brownell, composed of representatives of eight agencies: the Department of State (including the U.S. Section of the IBWC), the Department of the Interior, the Department of the Army (Civil Works), the Environmental Protection Agency (EPA), and four entities in the Executive Office of the President—the Domestic Council, OMB, the Council on Environmental Quality (CEQ), and the Office of Science and Technology (OST). (A list of Task Force members is included in Appendix A.)

The Task Force, in turn, created a staff-level Working Group, chaired by Samuel D. Eaton, Brownell's Executive Assistant. The Working Group included representatives from the Task Force agencies and departments, and two agencies of the Department of Agriculture: the

Agricultural Research Service (ARS) and Soil Conservation Service (SCS). (A list of Working Group members is also included in Appendix A.)

The Task Force and the Working Group began work immediately after Brownell was sworn in. Two sets of questions faced them. One concerned the international legal aspects of water quality differences, and included such questions as—

- Is Mexico legally obligated to accept Wellton-Mohawk drainage as part of its treaty allotment?
- Is the U.S. legally justified in limiting the improvement in water quality to salt balance equivalence?
- Do Mexican water users have a right to receive water of the same quality as American water users who are served by Imperial Dam?¹³

The other set dealt with the means of guaranteeing the quality of water delivered to Mexico, whatever the eventual salinity level—the "technical" solutions. The short- and long-term measures to be considered were much the same as those that had been presented to President Nixon earlier that year.

For three weeks in September of 1972, the Working Group heard presentations on the international legal issues and debated the merits of various positions. Then, as Brownell and Eaton noted in a 1975 article, these questions were set aside.¹⁴ Certainly the State Department's desire for a negotiated settlement that would avoid the possibility of litigation in an international court played a part in this decision, but the orders came from the head of the National Security Council—Henry Kissinger.

The National Security Council was the only concerned agency in the Executive Office of the President that was not represented on the Task Force or Working Group, despite Kissinger's well-known interest in U.S.-Mexican relations. As National Security Advisor, he must have been involved in briefing Nixon for the Echeverria visit and in preparation of the joint communique of June. But his position on the issues and his role were unknown to others in the Executive Office.

On September 26, the office of Assistant Secretary of the Interior James Smith received a message from the NSC: the salt balance approach of Minute No. 241 was to be an interim solution only. The final solution would require elimination of the effects of Wellton-Mohawk on salinity levels.¹⁵ Wesley Steiner of Arizona, then Chairman of the Committee of Fourteen, remembers hearing the same message from Brownell and Eaton in one of their early meetings with the Committee, during which the word of Kissinger's involvement came out.¹⁶ But most members of the Working Group and Task Force remained unaware of the change in policy.

Kissinger's directive—to eliminate the effects of Wellton-Mohawk on water deliveries to Mexico—reduced the allowable salinity differential at Morelos Dam to about 100 ppm. (Because all return flows from the project were being bypassed under Minute No. 241, this was the

salinity level the Mexicans were experiencing at the time.) It cut off legal arguments over parity and salt balance, and it greatly narrowed the range of options available to improve water quality.

Buying out and shutting down irrigation operations at Wellton-Mohawk, wholly or in part, was thought to be politically unacceptable to the Colorado Basin states, as well as very costly. It had been included on the Task Force's list of solutions for completeness. With the Kissinger decision, a permanent solution based on bypassing drainage and substituting higher-quality water from other sources became impractical or politically unattractive. The volume of water needed would be double that initially required to achieve salt balance equivalence, and it would be needed in perpetuity.

In his meetings with the Committee of Fourteen, Brownell had already assured the Colorado Basin states that the solution to the Mexican problem would cost them neither water nor money, and would not adversely affect further water resource development in the Basin. Augmentation of the limited and over-appropriated waters of the Colorado was many years away. The states would be unlikely to accept any solution requiring indefinite use of waters in the Basin for substitution. This left two categories of solutions: desalting of return flows and reducing salt loading through improved irrigation management.

Within the Department of the Interior, two groups contended for the Secretary's ear. The Bureau of Reclamation, which had built most of the Federal water resource development projects along the Colorado River, had close ties to water users. Its leadership had favored a solution based on salt balance. The Office of Saline Water (OSW) argued strongly for a mammoth desalting plant—the largest in the world. Its leadership saw the Mexican problem as an opportunity to demonstrate the technology whose development it had fostered over twenty years, and to rebuild support for its program.

At the time of Echeverria's visit, OSW had even lobbied the White House for a \$140 million, 200 mgd plant near Yuma, Arizona—and allowed word of it to reach *The Wall Street Journal*.¹⁷ Kissinger reportedly was intrigued by the possibilities of this new technology.¹⁸ Even Echeverria seemed to have caught some of the spirit. In his speech to Congress, he said: "It is impossible to understand why the United States does not use the same boldness and imagination that it applies to complex problems with its enemies to the solution of simple problems with its friends."¹⁹

When Kissinger's message reached Interior, the advocates of desalting pressed their case. While Reclamation's top managers were out of the country, Assistant Secretary Smith decided that Reclamation should be represented on the Working Group by the Planning staff (which had responsibility for new technologies) rather than by the Water Operations staff. (Water Operations was responsible for overseeing operation and maintenance of completed projects such as Wellton-Mohawk, and administering the water users' service contracts for water from these projects. Its managers had supported a salt balance approach.) And OSW would be represented by its own staff, not Reclamation's.

During the first week in October of 1972, Brownell and his staff visited Wellton-Mohawk, toured the border area, and were given an introduction to desalting technology. State and

Interior Task Force and Working Group members accompanied them on the trip, as did some Committee of Fourteen members. Upon his return, Working Group Chairman Sam Eaton announced that he and the Special Representative had been very impressed by the promise of desalting.

OMB representatives on the Working Group, unaware of Kissinger's order but alarmed at the growing support for a desalting plant, contended that the plant was an unnecessarily costly solution that conflicted with the President's water pollution control policy, that it was based on technology unproven on a large scale, and that it would have unknown environmental effects. The environmental concerns were shared by EPA, CEQ and the Corps of Engineers. OST was also troubled by the technical feasibility of such a large plant. Then Agriculture's representatives suggested that the Department's experimental on-farm irrigation management programs, which it ran in cooperation with Reclamation, might be used on Wellton-Mohawk farms to improve irrigation efficiency and thus reduce the volume of return flows. Less drainage would mean a smaller, less costly desalting plant.

As a result of these discussions in early October, OMB was asked to chair the Working Group's Subgroup on Irrigation Efficiency, to report on the feasibility of reducing salt loading and return flow volume through improved on-farm water management. With the assistance of scientists from ARS's National Salinity Laboratory in Riverside; Reclamation's Engineering and Research Center in Denver, EPA, and OST, the Subgroup put together a three-stage program. Its goal was to raise on-farm irrigation efficiency (the ratio of the volume of water consumptively used on a farm to that applied to the land) from about 54 percent to 80 percent in ten years. At 80 percent efficiency, the volume of return flows from the project would be reduced from 220,000 acre-feet to an estimated 95,000 acre-feet.

Combined with interim substitution for bypassed return flows, the irrigation efficiency program would have allowed the U.S. to defer investing in a desalting plant or other supplemental measures, until at least 1983. By that time, the Subgroup noted, desalting technology would be further refined, and weather modification, or other means of augmenting the Basin's water supplies, might be available. The size of a desalting plant or augmentation project would be less than half that necessary in 1972.

The Subgroup presented its report to Brownell and the Task Force in mid-November. Its ten-year goal of 80 percent efficiency was pronounced impossible by skeptical Interior Department members and representatives of the Wellton-Mohawk District.²⁰ Brownell was nonetheless impressed by its promise—and its low cost. When he issued his tentative recommendations at the end of November, he included Stage I of the program—improvement in overall project efficiency to 63 percent, using existing irrigation technology. The Subgroup's full program—reliance on improving irrigation efficiency until the mid-1980s, at which time another decision on technical means would be required—did not strike him as meeting the definition of a "permanent" solution. His central recommendation was that the U.S. commit immediately to building a desalting plant.

The Special Representative presented his recommendations to the Task Force and the Committee of Fourteen on November 28, 1972, and asked for agency views from Task Force members.

Although Brownell's proposed program included lining a portion of the Coachella Canal to salvage water to replace bypassed drainage from Wellton-Mohawk until the desalting plant began operating, the states were not satisfied. The Committee of Fourteen objected to his plan because it did not specify a permanent brine replacement source. The Executive Office agencies once again proposed the full irrigation efficiency program as an alternative, and it was once again rejected on the grounds of impermanence. Brownell's final report, which became the basis for Title I of the Colorado River Basin Salinity Control Act of 1974, was delivered to President Nixon on December 28, 1972.²¹

Negotiation of Minute No. 242

During early 1973, Brownell's recommendations were under review by the National Security Council and the Domestic Council. The State Department, meanwhile, convened a small interagency group, consisting of OMB, Interior, IBWC, and the Mexican Affairs staff to develop a U.S. negotiating position. Not surprisingly, it was to be based on eliminating the effects of Wellton-Mohawk return flows on Mexico's treaty deliveries, and would tie Mexican water quality to that at Imperial Dam. The U.S. would negotiate a salinity differential, not a level.

In mid-April, National Security Advisor Kissinger sent a memo to President Nixon, endorsing the Brownell report. He also rejected the Executive Office's irrigation efficiency alternative as not permanent.²² The President officially accepted those recommendations on May 5, and appointed Brownell as his chief negotiator. Secretary of State William P. Rogers flew to Mexico City to present the U.S. position to President Echeverria on May 13.

During the summer of 1973, Bureau of Reclamation and IBWC staff developed the formula for a salinity differential that would serve as the basis for the U.S. offer to Mexico: the U.S. would guarantee Mexico that its treaty deliveries would have an average annual salinity level no more than 115 ppm higher than the level at Imperial Dam, plus or minus 30 ppm. These figures were based on probable variations in Colorado River salinity that would have occurred in the absence of Wellton-Mohawk drainage. The Bureau completed preliminary studies to configure the engineering works included in the Brownell proposal, and prepared confirming technical reports.

On June 8, Brownell was accorded Ambassadorial rank. Negotiations took place through the summer. Brownell and the State Department kept Congressional leaders and the Committee of Fourteen informed of the progress of talks. Oddly, there was no official disclosure of the Brownell recommendations until the new Minute was signed.

Mexico accepted the basic U.S. offer, and Minute No. 242, guaranteeing Mexico that the average annual salinity of its treaty deliveries would be no more than 115 ppm higher than the salinity of water behind Imperial Dam—plus or minus 30 ppm—was signed on August 30, 1973.²³

Legislative History of P.L. 93-320

As soon as the Minute was officially signed, the Departments of Interior and State began to draft implementing legislation. Because of internal differences within the agencies and the involvement of an unusual number of individuals in the process, progress was slow, particularly in Interior. It was further impeded by arguments between Interior and OMB over such issues as how the desalting plant should be procured and who should have responsibility for its construction.

OMB feared that the plant would set a precedent for Federally funded, public-works-style solutions to water quality problems (as indeed its supporters in OSW hoped it would). It insisted that the Secretary of State (acting through IBWC) rather than the Secretary of the Interior, construct, operate, and maintain the plant. Assignment of this responsibility to the State Department was intended to make it clear that the desalting plant was a unique response to an international problem. Within the Executive Branch, OMB finally prevailed, although the Congress later disagreed. P.L. 93-320 vested authority for Title I in the Secretary of the Interior, who designated the Bureau of Reclamation as the construction agency.

Because of these delays, the Administration's bills were not sent to the Congress until February 7, 1974. Minute No. 242 called for passage of implementing legislation by July 1, 1974. Concerned members in both Houses had already introduced their own bills, drafted with the assistance of the Committee of Fourteen (and the Lower Colorado Region of the Bureau of Reclamation, which provided a drafting service): H.R. 12165 was introduced by Rep. Harold T. (Bizz) Johnson of California on January 21, and S. 2940, by Senators Paul Fannin of Arizona and Alan Bible of Nevada on February 1.

These Congressional bills were the basis of hearings and mark-up; the Administration bills were largely ignored. The House held three days of hearings on March 4, 5, and 8. The Senate hearings on April 26 lasted one day.

During the hearings, there was relatively little debate over Minute No. 242 or the basic elements of the solution. Considering that the Minute was more of an amendment to the 1944 treaty than an interpretation of its terms, the Senate might have insisted on ratifying it, but no such suggestion appears on the record. The states, their Congressional representatives, and agency witnesses soft-peddled their concerns and disagreements. The premise behind the Minute and the workability of the technical measures that were to implement the agreement were never really examined.

The states did raise several questions never answered by Administration witnesses, though—questions that may come back to haunt the Federal government when the desalting plant finally comes on line:

- Why is the Federal government committing over \$100 million to solve a water quality problem at the border, while ignoring projected increases in salinity above Imperial Dam? Why has it not taken a basin-wide approach?

- Why have no provisions been made for permanent replacement of water lost in the effluent (brine) stream from the desalting plant?
- Where will the Federal government obtain power to run the desalting plant?
- Will the desalting plant work?²⁴

To the first three questions, P.L. 93-320 (based on H.R. 12165), provided partial answers. Title II, authorizing a basin-wide salinity control program, was added, though the Executive Branch has never shown any enthusiasm for funding the projects in the program. The Congress declared in the Act that replacement of the brine stream from the desalting plant was a national obligation, but was silent on possible sources of replacement water. (The Federal government does not, in fact, own any water in the Colorado River Basin.) It further declared that use of power for the desalting plant and other Title I works must not diminish the supply available to preference customers, but again failed to specify power sources (although these were later identified by the Bureau of Reclamation).

Seventeen years later, the answer to the last question is still unknown.

Notes

1. Costs are given in current dollars. According to the U.S. Bureau of Reclamation, desalted product water from the Yuma plant will cost \$728 per acre-foot (October 1991 dollars); the cost quoted for the blended water is the author's estimate.
2. The negotiations leading to this compromise are summarized in Myron B. Holburt's article, "International Problems of the Colorado River," *Natural Resources Journal*, 15 (January 1975), pp. 11-13.
3. For a brief, authoritative history of the dispute, see former Ambassador Friedkin's essay, "The International Problem with Mexico over the Salinity of the Lower Colorado River," in *Water and the American West: Essays in Honor of Raphael J. Moses*, ed. David H. Getches.
4. See Myron B. Holburt, *op. cit.*, pp. 13-14 for a synopsis of the legislative history of treaty ratification.
5. Several former members of the Committee of Fourteen credit Steve Reynolds, New Mexico's long-time representative to the Committee, with introducing the concept of equivalent salt balance; but his handwritten note by the paragraph in the draft report on the origin of the concept reads: "Raymond Hill—long before '60!"
6. Steve Reynolds's notes on the draft report indicate that he believed gravity drains rather than pumps should have been installed at Wellton-Mohawk, and that the project would never reach salt balance as long as drainage was pumped. According to Bureau of Reclamation staff, when return flows are reduced to 108,000 acre-feet as called for in the Title I Definite Plan Report, Wellton-Mohawk will achieve approximate salt balance within four or five years.
7. Myron B. Holburt, "The Mexican Water Treaty and Its Relationship to Colorado Water Supplies." Paper presented to the California Water Resources Association, Coronado, California, August 11, 1972, p. 7.
8. *Ibid.*, p. 9.
9. Office of the Federal Register, "Visit of President Echeverria of Mexico," *Weekly Compilation of Presidential Documents*, 8 (June 19, 1972), p. 1058.
10. Steve Reynolds's notes say: "No!" He apparently believed the water substituted for bypassed Wellton-Mohawk drainage should have been Arizona's responsibility.
11. Friedkin, *op. cit.*, p. 48.

12. Interview with Michael J. Clinton, former Chief, Colorado River Water Quality Office, U.S. Bureau of Reclamation, in Washington, D.C., May 2, 1989.
13. Herbert Brownell and Samuel D. Eaton, "The Colorado River Salinity Problem with Mexico," *American Journal of International Law*, 69 (April 1975), p. 260.
14. *Ibid.*
15. Interview with Michael J. Clinton, *op. cit.*
16. Interview with Wesley Steiner, former Director, Arizona Department of Water Resources and former Chairman, Committee of Fourteen, July 12, 1991.
17. Burt Schorr, "Interior Agency Pushes Desalting to Smooth Troubled U.S.-Mexican Waters," *The Wall Street Journal*, June 22, 1972, p. 15.
18. Interview with Michael J. Clinton, *op. cit.*
19. "Mexico's President—An Outspoken Visitor," *U.S. News and World Report*, LXXII (June 26, 1972), p. 82.
20. The plan to achieve 80 percent on-farm irrigation efficiency called for the use of advanced irrigation systems—sprinkler, drip, and bubbler—that had not been widely field-tested in 1972. The Subgroup stressed that the 80 percent figure was a goal, subject to revision upon further systems testing. But the optimism of the scientists in the group proved justified: the project efficiency of Wellton-Mohawk peaked at 77 percent in 1985, and the volume of return flows dropped to 118,500 acre-feet (54 percent of the volume in late 1972).

Unfortunately, there is currently *no* active program to promote irrigation efficiency in the District; funding for the Bureau of Reclamation's Irrigation Management Services Program ceased in 1987, when the on-farm management programs were scheduled to be turned over to the Wellton-Mohawk District. According to Interior's draft report, *Title I Program, Colorado River Basin Salinity Control Act*, released in May 1991, irrigation efficiency has declined to about 60 percent and continues to decrease. Return flow volumes have risen to 140,000 acre-feet. As of this writing, Reclamation is assessing the causes of this deterioration—which bears on the size of the desalting plant—and possible solutions.

21. The report of Herbert Brownell to the President is reprinted in *Hearings on Salinity Control Measures on the Colorado River (S. 2940 and related bills)*, before the Subcommittee on Water and Power, Interior and Insular Affairs Committee, U.S. Senate, 93rd Cong., 2nd sess., 1974.
22. One of the lighter moments of the Watergate era occurred the day a distracted staff member in the White House Correspondence Office routed Kissinger's memo to the

President on the Brownell report, to OMB. The staff prepared a rebuttal that was delivered by the new OMB Director, Roy Ash. Kissinger reportedly was furious that his memo had fallen into the hands of "bean-counters and bureaucrats."

23. U.S. Department of State, "United States and Mexico Reach Agreement on Colorado River Salinity Problem," *Department of State Bulletin*, 69 (September 24, 1973), pp. 388-396.
24. These questions and others were echoed by members of the Committee of Fourteen and other water user groups. See especially Wesley Steiner's statement in the Senate hearings on S. 2940, cited above.

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Interview with Daniel F. Lawrence, former Director, Utah Division of Water Resources and former member of the Committee of Fourteen, May 24, 1991.

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Appendix A

**TASK FORCE AND WORKING
GROUP MEMBERS**

Task Force Members

<i>Name</i>	<i>Department or Agency</i>
Herbert G. Brownell, Jr. (Chairman)	President's Special Representative
Edward E. David	Executive Office of the President, Office of Science and Technology
Samuel D. Eaton	Department of State, ARA/ Mexican Affairs
Richard A. Fairbanks	White House, Domestic Council
Joseph F. Friedkin	Department of State, International Boundary and Water Commission, U.S. Section
William A. Morrill	Executive Office of the President, Office of Management and Budget
James Smith	Department of the Interior, Office of the Secretary
Russell E. Train	Executive Office of the President, Council on Environmental Quality

NOTE: The Environmental Protection Agency and the Department of the Army (Civil Works) were also represented on the Task Force; names of their representatives have not been located.

Working Group Members

<i>Name</i>	<i>Department or Agency</i>
Dr. William S. Butcher	Executive Office of the President, Office of Science and Technology
Anne DeMarsay (formerly Scheibe)	Executive Office of the President, Office of Management and Budget
Samuel D. Eaton, Chairman	Department of State, ARA/ Mexican Affairs
James C. Ellingboe	Department of the Interior, Bureau of Reclamation
Russell Freeman	Environmental Protection Agency
Jack Jorgenson	Department of the Interior, Office of the Assistant Secretary, Water and Power
T.R. Martin	Department of State, ARA/Mexican Affairs
J.W. (Pat) O'Meara	Department of the Interior, Office of Saline Water
N. William Plummer	Department of the Interior, Office of the Assistant Secretary for Policy Development and Budget
Pete Ramatowski	Department of the Army, Corps of Engineers-- Civil Works

Ronald Reeves

Department of Agriculture,
Agricultural Research
Service

Steven J. Sloan

Executive Office of the
President, Council on
Environmental Quality

Donald G. Waldon

Executive Office of the
President, Office of
Management and Budget

NOTE: The membership of the Working Group was less official than that of the Task Force, and tended to be somewhat fluid. USDA's Soil Conservation Service had a representative whose name has not been located. Dr. Jan van Schilfgaarde of the U.S. Salinity Laboratory in Riverside, California, and John Maletic from the Bureau of Reclamation's Engineering and Research Center in Denver, were members of the Subgroup on Irrigation Efficiency. Manuel Lopez of the Office of Saline Water's Denver office flew in to give technical advice.

Appendix B

**INTERVIEWS WITH COMMITTEE
OF FOURTEEN MEMBERS**

Interviews with Committee of Fourteen Members

After the Colorado River Basin Salinity Control Forum reviewed the draft of this report, the members asked the author to interview six former members of the Committee of Fourteen who had taken an active role in advising the Brownell and his Task Force in 1972-73:

- Floyd A. Bishop, who served as Wyoming State Engineer from 1963-74.
- Myron B. Holburt, who joined the Colorado River Board of California in 1965 and served as its Chief Engineer from 1968-84.
- Daniel F. Lawrence, former Director of the Division of Water Resources, State of Utah, a position he held from 1967 until his retirement in 1985.
- Raphael J. Moses, who became a member of the Colorado River Water Conservation Board of Colorado in 1952 and served as its Attorney from 1959-76.
- Steve Reynolds, State Engineer and Secretary of the New Mexico Interstate Stream Commission from 1955 until his death in 1990.
- Wesley Steiner, Director of the Arizona Department of Water Resources (and its predecessor agencies) from 1969 to 1985, and Chairman of the Committee of Fourteen during the Brownell era.

The interviews were to elicit their reactions to the draft report and their recollections of the events that led up to the negotiation of Minute No. 242 and the passage of the Colorado River Basin Salinity Control Act.

Sadly, Steve Reynolds died before we could arrange an interview, although he had seen the draft report and made handwritten notes. I have reproduced these all-too-brief notes in this Appendix, with references to points in the report indicated.

Phone interviews with the other five former Committee members, ranging in length from 35 minutes to 1-1/4 hours, were conducted in May-July 1991. The interviews were semi-structured, as the Forum had suggested a number of open-ended questions, but our discussions ranged over a variety of topics. On the following pages, I have recorded my notes of these interviews in narrative form, using each person's words as much as possible. Each one has reviewed his narrative for accuracy; any remaining errors are the fault of the author.

Floyd A. Bishop
Wyoming

One thing the report does not perhaps reflect is that there were significant differences among the Basin States. Many of us felt that the Wellton-Mohawk project should be cut back [bought out] because the drainage was ridiculously high in salt. It was a good solution, but it never did fly. We had very extensive deliberations though we did come to agreement in the end.

During the Task Force deliberations, we felt that the matter was somewhat out of our hands. I thought the Committee of Fourteen had some influence early on, but very little after the State Department became involved. I did not tour Yuma with Brownell—I don't remember that Committee of Fourteen members were invited to participate—and I had no private conversations with him or any member of the Task Force during that period.

The final solution did not affect Wyoming adversely, though it was inordinately expensive. We were more concerned about being able to develop our water, and that numerical water quality standards for upstream states should not be part of the agreement. We opposed the long-term use of upstream storage as a solution—that would have had serious implications for Upper Basin development and particularly for Wyoming, which had the most unused water.

Among the other measures proposed, I thought the canal lining was a sensible step. I felt that improvements in irrigation efficiency were inevitable, but would be of more limited benefit in solving the salinity problem that their supporters believed.

The desalting plant was the easiest way out, though it was a substantial burden on the Federal government—how substantial we didn't then realize. We had faith in the desalting technology, and believed that improvements would reduce costs. Our hopes, obviously, didn't materialize.

Myron B. Holburt
California

My involvement with the Mexican salinity problem goes back to the mid-1960s. I joined the Colorado River Board in August 1965, and attended Committee of Fourteen meetings after that date. Shortly after I became Chief Engineer in March 1968, the Governor appointed me a member of the Committee.

As far as the Committee's initial position, everyone had decided to support Wellton-Mohawk. Rationally, I think Arizona would have been better off without the project, but there was a lack of urban influence at the time. No one spoke up for the Central Arizona Project. If Arizona had supported the purchase of land from farmers in the Wellton-Mohawk District by the U.S., there would have been a more dependable water supply for CAP. Everyone on the Committee was, of course, opposed to any continuing use of upstream storage water unless it was replaced.

The Committee of Fourteen met several times with Ambassador Brownell, Sam Eaton, and the Task Force. Some of the Task Force and Working Group members talked to me privately—I remember talking to Sam Eaton, Pat O'Meara, Jim Smith, and Jan van Schilfgaarde—but our conversations were usually at meetings. I did tour the Yuma area with Brownell; I think most of the Committee of Fourteen were there. As I recall, the Bureau of Reclamation led the tour, and its representatives talked mostly about technological solutions to the salinity problem.

The real force behind the choice of a desalting plant as a solution to the salinity problem with Mexico seemed to be the State Department. Once Echeverria made salinity a major issue, the State Department found it attractive. Here was a problem they could solve by spending money—unlike other major problems like drugs, trade, and immigration. Brownell was a very good politician who realized the influence of the Committee of Fourteen, and promised that the solution wouldn't cost the states money or water. He did not believe that there was any practical alternative.

At one time the U.S. talked about improving the agricultural systems in the Mexicali Valley [to reduce the effects of salinity] but the Mexicans would not agree to this as a potential solution. There were supposed to be groundwater agreements, too, but they never materialized either.

Because of the State Department's strong interest, Brownell went ahead with the negotiation of the Minute [No. 242] even though there were some unsettled issues with the states—replacement of the brine stream, and providing power for the desalting plant and the groundwater pumping along the border. The figure of 115 ppm \pm 30 ppm was drawn from historical data—a weighted average of the salinity differential over some period of years. It was sound; I remember that we checked it independently. The Minute itself never mentioned the desalting plant. I always thought that Mexico insisted on this so that they would still have the guarantee even if the desalting plant was never built.

The issue of replacing the brine stream from the desalting plant has never been settled. The authorizing legislation contains a statement of Federal responsibility, but there's never been a plan to carry it out.

Committee members believed that the Minute was really a new treaty or an amendment to the existing treaty. It went beyond the scope of a minute [an interpretation of treaty language]. It never came to the floor of the Senate for ratification because the states were united in their support for its basic provisions.

[NOTE: Myron Holburt also provided a number of valuable corrections and clarifications of points in the draft report, which have been incorporated in the final version.]

Daniel F. Lawrence

Utah

The chief purpose of the Committee of Fourteen was to consult on matters regarding the 1944 Water Treaty with Mexico. I became involved in the Brownell Task Force and the negotiations culminating in Minute No. 242 when [then-Chairman from Arizona] Wes Steiner convened the Committee at the request of IBWC Commissioner Friedkin.

The 1944 Water Treaty was developed with input from the Basin States, all of whom wanted to maintain the sanctity of the 1922 Colorado River Compact. When we first heard about the Task Force, which was under the direction of the State Department, we were alarmed that an agency with a different perspective [than IBWC] might be tempted to give water away to satisfy Mexican concerns. Stealing our upstream storage for dilution was certainly a prominent option. While we had reluctantly allowed use of stored water as a temporary measure [under Minutes No. 218 and 241], we were absolutely opposed to it as a long-term solution.

During the period when the Task Force was working, we met with them several times as a group; I had no private contact with them. I remember that the Task Force did tour the area. The Committee also held several meetings with Commissioner Friedkin during which he briefed us on the progress of the Task Force and later the negotiations, and consulted with us on various issues. These meetings, like other meetings that were not limited to the states alone, were usually attended by representatives of the Bureau of Reclamation and the Office of Saline Water.

The solution recommended by President Nixon reflects the states' tough lobbying job against the use of upstream storage. Building a desalting plant appeared to be the only other choice. The nonstructural alternative [partial buy-out and improving irrigation efficiency at Wellton-Mohawk] would have affected farmers in Arizona, and their representatives opposed it. There was also some question about its effectiveness, both in our eyes and those of the Mexicans. After all, Mexican acceptance of the terms of Minute No. 242 was based on their appraisal of how it would benefit them.

Desalting was more popular then, too. There was some euphoria about the new technology, and the cost estimates for the plant were far, far below reality. No one was looking closely at the numbers or the potential problems. You can't ask why people agreed to spend \$400 million on a desalting plant—they didn't.

As to Minute No. 242, it is based on salt balance. The figure of 115 ppm was just hammered out, and the ± 30 ppm to allow leeway. We didn't believe the Mexican farmers should be given an advantage over U.S. farmers in the salinity of the water they received.

In the end, we were very satisfied. For people who were supposed to be fighting over Colorado River water, we developed a solid, seven-state comity and a mutual determination to keep our political problems out of the debate. We recognized our common interests and stuck to our guns, even though California faced difficult intrastate problems. (Myron Holburt did a superb job.) We prevailed by diligence, and sold the solution to our governors and representatives.

Raphael J. Moses
Colorado

I recall the period of the Brownell Task Force as a discouraging, distressing part of my career. The reactivation of the Committee of Fourteen seemed like a convenient way to pay lip service to the Basin States' interests without their really having much of a say in things.

The Committee did meet at least twice with Ambassador Brownell and his Task Force. I do recall a meeting with the State Department's lawyers, who persuaded us that we really couldn't give Mexico just any kind of water. They pointed out that we might be able to make a case in International Court, but the U.S. would get a black eye for trying. And as a lawyer, the more I got into it, the more inequitable it seemed [to insist on strict application of the appropriation doctrine]. But in meeting with the Task Force, I always had a feeling that we were in the cat's paws. Our constant complaint was that every time we told the Brownell and [Samuel] Eaton our bottom line, they would come back the next day and *start* negotiating from that position.

The only time I met any of the members privately was when Governor Love invited my wife and me to dinner with the Brownells shortly after he was appointed. The matter of the Colorado River came up, but the conversation was pretty general, since he had not really had time to become familiar with the issues. And I did not accompany Brownell on his tour of the Yuma area.

We did meet more frequently with IBWC Commissioner Joe Friedkin. Joe was really the liaison—Brownell didn't speak much Spanish, and Joe is fluent. He is also a man of complete integrity, whom the Mexicans trusted and respected. I think Brownell relied heavily on him.

In the end, we wound up doing the same thing we always do—throwing money at the problem. Everyone on the Committee of Fourteen except Arizona thought that Wellton-Mohawk should be bought out and shut down—it was so obviously the source of the problem, and most of the crops they were growing were subsidized anyway. The Bureau of Reclamation had no business expecting Mexico to take that drain water—it was *bad!* But because of Arizona's opposition (and Carl Hayden's being Chairman of Senate Appropriations), it wouldn't fly politically.

We all favored a settlement based on salt balance. We felt it was fair, and could have been achieved without building a desalting plant. Mexico rejected it, as they did the U.S. offer to bypass the remainder of the Wellton-Mohawk drainage without charging them for it. I think the Mexicans felt that they had us on the defensive, and wanted to get as much out of the situation as they could.

After they rejected these offers and settled on the differential in Minute No. 242, we had no choice. All of the Committee members were opposed to the long-term use of upstream storage to dilute or replace Wellton-Mohawk return flows, and took the firm position that it was a national obligation. We would have been interested in importation but it was politically infeasible; [Senator Henry] Jackson had forbidden even the study of it at that time. Releases from storage would have hurt only the Upper Basin [which was not the cause of the problem].

We had high hopes for desalting in those days, and were intrigued by the experimental plant at Roswell, New Mexico. Maybe we got carried away by gadgets. I'm glad to see, in retrospect, that the improvements in irrigation efficiency have been so substantial. The Bureau pooh-poohed it, and I wasn't sure it would work as well as it has.

All in all, my involvement with the Task Force was a very frustrating experience. I felt we'd been used. Two constructive things did come out of it, though. First, the seven Basin States, for the first time in history, cooperated on something. Because we recognized our common goals and the benefits of cooperation, we were able to get the Title II program authorized. Second, the idea [promoted by EPA] of setting numerical limits on water quality at state boundaries was rejected. It's a fact that you can't use water without degrading it. Upstream quality needed to be addressed as well, if we were to be able to continue to develop our allotments—or even operate the projects already built—and still give downstream users usable water. That's why we supported Title II, even though we rejected the proposed water quality standards.

Steve Reynolds
New Mexico

On the pumping of 6,000 ppm waters from beneath Wellton-Mohawk: "Gravity drains should have been used!"

On Mexico's being compelled to accept drainage water of any quality under the 1944 treaty: "Not brine aquifers."

On the origin of the concept of equivalent salt balance: "Raymond Hill—long before '60!"

On the liability for the water substituted for Wellton-Mohawk drain flows to achieve equivalent salt balance quality: "Would have to be at Arizona's cost!"

On Mexico's rejection of salt balance proposals in early 1972: "Too late for gravity drains!"

On a total or partial buy-out of Wellton-Mohawk: "Hayden said 'No'."

On the prospect of Wellton-Mohawk's reaching salt balance: "Never, with pumped drainage!"

On the Basin states' willingness to continue providing substitution water under Minute No. 218: "No!"

Wesley Steiner
Arizona

The Committee of Fourteen was established before the 1944 Treaty, then disbanded. Soon after 1961, when the salinity problem with Mexico began, the State Department wrote to the governors of the Basin states to ask that it be reactivated to advise the IBWC. I was appointed one of Arizona's representatives in 1969, when I became State Water Engineer and Executive Director of the Arizona Water Commission, but I came from the California Department of Water Resources and had previously represented that state on the Committee. I guess I was elected Chairman because it was drainage from an Arizona project that precipitated the problem.

Initially, in the 1960s, the Committee of Fourteen stonewalled the Federal government on concessions to Mexico. The Treaty was clear. We finally recommended offering "equivalent salt balance," a concept I think was suggested by Steve Reynolds.

It was Nixon and Kissinger who came in and upset our position. We believed that anything the U.S. offered Mexico beyond equivalent salt balance had to be a Federal responsibility. The Committee stayed united, though. We had just come through the CAP Act and Arizona v. California period, and the last thing we wanted was another scrap over who would bear water costs.

Brownell had enormous respect for the Committee of Fourteen, and we had an excellent relationship with him. My contacts with him were mostly in formal meetings. I once met privately with him and Sam Eaton for dinner, late in the process. He wanted to check his recommendations with me before presenting them to the Committee. I don't recall touring the Yuma area with him, though—I really don't think the Committee was along on that one.

We did know that Kissinger was involved in the process of finding a solution to the salinity problem. That fact came out when Brownell reported to the Committee that equivalent salt balance was being scrapped—I think it was early in his tenure.

I'm very uneasy about the desalter. It had to be there, given Nixon's promises, but I was very uneasy at the time—and still am—about its being a permanent solution. The brine loss replacement issue has still not been resolved. I also had grave concerns about what Ag. [USDA] was pushing—agricultural efficiencies that perhaps could not be reached and sustained. The idea of using upstream storage water for dilution—no, no, a thousand times, no. That would have put us right back where we were before the Colorado River Basin Project Act—and Wyoming never supported *that!*

Buying out Wellton-Mohawk was never viable. I don't recall other states suggesting it, because of the precedent it would set. The Upper Basin states in particular did not want the precedent, and Arizona could not afford an intrastate fight—the CAP appropriations still lay ahead. It was probably unfortunate that the Wellton-Mohawk project was ever built, but the Yuma people had their friends in Congress, especially Senator Hayden. Of course, Arizona is much more urban

now, and there would be a great deal more debate today. But 25 years ago, the Federal government and the Salt River Project made all the significant water policy decisions in Arizona.

In the end, there was widespread feeling that Nixon was overly generous, and that the U.S. got sold down the river. I was willing to support the negotiation process once Nixon had made the commitment to Echeverria, but I wasn't really happy about it. It was too generous, and I felt it would come back to haunt us. I still think we should have held out for equivalent salt balance.

The Committee learned a valuable lesson about how much strength we had if we stood together. We were the ones who added protective pumping to Title I, and the Title II program. We had nothing to give away.