



# Colorado River Basin SALINITY CONTROL FORUM

## GOVERNORS

Janice K. Brewer, AZ  
Jerry Brown, CA  
John Hickenlooper, CO  
Brian Sandoval, NV  
Susana Martinez, NM  
Gary R. Herbert, UT  
Matthew H. Mead, WY

## FORUM MEMBERS

### Arizona

Thomas Buschatzke  
Larry R. Dozier  
Linda Taunt

### California

Bill Hasencamp  
Thomas Howard  
Tanya Trujillo

### Colorado

James Eklund  
Steven H. Gunderson  
David W. Robbins

### Nevada

Leo M. Drozdoff  
John J. Entsminger  
Jayne Harkins

### New Mexico

Estevan López  
Scott A. Verhines

### Utah

Eric Millis  
Gawain Snow  
John Whitehead

### Wyoming

Dan S. Budd  
Patrick T. Tyrrell  
David Waterstreet

## EXECUTIVE DIRECTOR

Don A. Barnett

106 West 500 South, Ste. 101  
Bountiful, UT 84010  
(801) 292-4663  
dbarnett@barnettwater.com  
www.coloradoriversalinity.org

## MEMORANDUM 2014-47

**TO: Forum Members**

**FROM: Don and Jack Barnett**

**SUBJECT: 40 Years Ago – the Genesis of the Colorado River Basin Salinity Control Program**

**DATE: June 12, 2014 [Draft]**

---

It has been forty years since the passage of the Colorado River Basin Salinity Control Act (Act) on June 24, 1974. Over the years an extremely amazing partnership between federal and state agencies, and local companies and producers has developed in implementing the Colorado River Basin Salinity Control Program (Program). Measures have been put in place which now reduce the salt-load of the Colorado River by 1.33 million tons annually. The water quality of the river is approximately 90-100 mg/L better than it would have been but for the Program and annual economic damages have been reduced by several hundred million dollars. As we look to the future and continue to deal with the challenges of implementing the Program, we thought it helpful to provide a look-back as to what was happening 40 years ago and the genesis of the Program. Knowing where we came from might help guide our future endeavors. This effort is not to provide in any stretch a full history of the Program, but just a look at key laws, decisions and documents from 40 years ago.

**1948 - Federal Water Pollution Control Act:** the Federal Water Pollution Control Act, as amended over the subsequent years, led EPA to convene conferences on interstate waters. These conferences were held at the request of the involved states. A request was received from six of the seven Colorado River Basin States, and the first session of this conference met in Phoenix on January 13, 1960. This lengthy conference mostly addressed uranium issues in the River. In total there were seven “sessions” over twelve years and with time, the discussion moved from uranium to the “mineral quality problem ... commonly known as salinity.” In 1963 the conferees asked EPA to study the mineral quality problem.

**1971 – EPA published *The Mineral Quality Problem in the Colorado River Basin, Summary Report*:** This 65 page (plus several hundred pages of appendices), eight-year study by EPA described the mineral quality issues in the Colorado River, their causes, projected increases and costs as well as control possibilities and an action plan. It found that 47% of the salinity concentration at Hoover Dam was from natural sources with the remaining 37% from irrigation, 12% from reservoir evaporation, 3% from evaporation and 1% from out-of-basin exports (1960 conditions). These salt concentration values, which are often cited, are not to be confused with salt load of which more than 60% comes from natural diffuse sources. Table 1 on pages 15 and 16 of the report shows that 6,691 million tons of the Colorado River’s total salt load of 10,727 million tons comes from either “Natural Diffuse Sources” or “Natural Point Sources” which may have led to the language in the salinity control act which states that: “Federal ownership of the lands of the Colorado River Basin from which most of the dissolved salts originate”. A copy of this report is found on the Forum’s website at:

<http://coloradoriversalinity.org/docs/The%20Mineral%20Quality%20Problem%20in%20the%20Colorado%20River%20Basin%20EPA-1971.pdf>

**1972 – Colorado River Water Quality Improvement Program:** In February, 1972, Reclamation published this document. It lays out a 10-year comprehensive plan to improve the water quality of the Colorado River. Within this document one will find the DNA for the salinity program. It has the following chapters:

- I. Introduction
- II. Previous Studies and Findings
- III. Program Objectives
- IV. Program Structure
- V. Effect of Program
- VI. Description of Water Quality Improvement Program
- VII. Allied Programs

A copy of this report is found on the Forum’s website at:

<http://coloradoriversalinity.org/docs/Colorado%20River%20Water%20Quality%20Improvement%20Program%20-%201972.pdf>

**1972 - Conference in the Matter of Pollution of the Interstate Waters of the Colorado River and Its Tributaries in the States of California, Colorado, Utah, Arizona, Nevada, New Mexico and Wyoming concluded:** The final session (Session 7) of the conference, which was initiated 12 years earlier, began in Las Vegas on February 15, 1972. It was here that EPA stated its expectations for a Basin States salinity control program. A final meeting, a reconvening of Session 7, was held in Denver, Colorado, on April 26-27, 1972.

Incidentally, a bad snow storm made it so that only the conferees from Wyoming, Colorado and California were present. However, the EPA representative chairing the conference looked around the room and said: “That means four of the seven States are not here. At least it’s pretty close to a quorum if you count the Federal Government” and he went ahead with the business of the meeting (they later conferred with the other state conferees). Statements and positions were taken at the meeting. At the conclusion of the meeting, the

group adopted “Conclusions and Recommendations.” The meeting concluded on the second day, and it is stated by the EPA Chair, Murray Stein, “Again I would like to thank all the States very much for their efforts here, because I do think with this unanimous agreement we have achieved the first step in what promises to be one of the major breakthroughs in achieving high quality water in the United States, and that is the control and reduction of the salinity in the Colorado River system.” Not all in attendance at this meeting were in lockstep with the march EPA had set forth, as the following is recorded near the end of the minutes of this final meeting: “My name is Kenneth Balcomb. I speak for the Colorado River Water Conservation District. I am sitting back there in the back of the room, you understand, and, frankly, I don’t know what you are talking about. If you are going to do something about the salinity of the Colorado River, if you are going to make some decision here, I think you ought to at least let people know what the hell you are talking about. I am serious.”

The proceedings of this final conference are found on the Forum’s website at:  
<http://www.coloradoriversalinity.org/docs/Seventh%20Session%20Proceedings%20-%20Reconvened%20April%201972.pdf>

**1972 – The Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500):** In October of 1972 a bill titled “The Federal Water Pollution Control Act Amendments of 1972” passed Congress. Section 303 of the act required the adoption of water quality standards applicable to interstate waters. Pursuant to that requirement, EPA began to work with the states concerning the adoption of salinity standards. It appears that EPA felt there would be standards on every tributary stream or the river itself as the flow crossed state lines. The states saw it otherwise. More on this later.

**1973 – Minute 242:** While discussions were ongoing about water quality standards above Imperial Dam, the State Department was involved in discussions with Mexico about the quality of the water in the Colorado River as it crossed into Mexico. A high level commission had been appointed by the Secretary of State to address these issues. It was called the Brownell Commission. The State Department asked each of the Colorado River Basin governors to appoint two members to a committee to advise the Brownell Commission. This committee was called the Committee of Fourteen. On August 30, 1973, representatives of the United States and Mexico signed Minute 242. However, the United States could not honor the commitments made in Minute 242 without an act of Congress and congressional appropriation. A copy of Minute 242 is attached hereto as Attachment A and can also be found on the Forum’s website at:  
<http://coloradoriversalinity.org/docs/Minute%20242.pdf>

As an aside, years later the Forum desired to know more of the workings of the Brownell Commission and so it hired Anne DeMarsay to write a report that the Forum has now published. It is titled, “The Brownell Task Force and the Mexican Salinity Problem: A Narrative Chronology of Events” and can be found on the Forum’s website at:  
<http://coloradoriversalinity.org/docs/The%20Brownell%20Task%20Force%20and%20the%20Mexican%20Salinity%20Problem,%20A%20Narrative%20Chronology%20of%20Events.pdf>

**1973 – First Forum Meeting:** The April 1972 action by EPA concerning the mandate for standards on the Colorado River above Imperial Dam and the State Department’s agreement with Mexico in August 1973 moved the seven Basin States leaders to conclude that they had best find ways to work together, but how? It was apparent that if collectively they wanted to have some influence, they must act quickly as Congress would soon be considering the actions of the State Department. Through all this, the states had informally caucused, but had no vehicle to use to act collectively. As they had informally met, they had relied on Lynn Thatcher of Utah to take some leadership. Thatcher was urged by some to convene a meeting of just the states and he arranged a meeting in Denver, Colorado, for November 8-9, 1973. One of the outcomes of that meeting was that the states created the Forum. In fact, this is considered to be the first meeting of the Forum. Thatcher was elected chairman and Ival Goslin with the Upper Colorado Commission was designated to act as secretary.

For the first seven years the Forum did not have an office or staff. The Work Group was created and served as staff. Myron Holburt, a Forum member from California, served as Work Group chairman and the important early drafts of mandated documents were created in his office. When in November of 1980 Jack Barnett became the first Executive Director of the Forum, Ival Goslin presented him with a box which he said contained the unorganized files of the Forum.

It was six years later, as Barnett was creating a Forum library, that it was concluded that there were no minutes from the first Forum meeting. So, in 1986 Barnett assembled pertinent documents available to him and interviewed the state representatives he could locate who were at that first meeting of the Forum on November 8<sup>th</sup> and 9<sup>th</sup>. There was created a Forum agreed-to document that now serves as the minutes of the first meeting, and which is attached hereto as Attachment B.

**1974 – Colorado River Basin Salinity Control Act (P.L. 93-320):** On June 24, 1974 (40 years ago this month), the Colorado River Basin Salinity Control Act became law. Title I of the act deals with the United States’ salinity commitments to Mexico (below Imperial Dam) whereas Title II of the Act deals with improving the water quality of the Colorado River to US users (above Imperial Dam). A copy of the original Act is attached as Attachment C and has the following sections:

- Sec. 201: Directs the Secretary of the Interior to implement the salinity control policy adopted for the Colorado River in the “Conclusions and Recommendations” published in the *Conference in the Matter of Pollution of the Interstate Waters of the Colorado River and Its Tributaries in the States of California, Colorado, Utah, Arizona, Nevada, New Mexico and Wyoming*, held in Denver, Colorado on April 26-27, 1972 and approved by the administrator of EPA on June 9, 1972 (see above). It provides that the Secretary expedite the investigation, planning and implementation of the Program as described in chapter VI of Reclamation’s 1972 report *Colorado River Water Quality Improvement Program* (see above). It also directs that the Secretaries of the Interior and Agriculture and the Administrator of EPA cooperate in carrying out the objectives of the Act.

- Sec. 202: Authorizes the construction of the Paradox Valley, Grand Valley, Crystal Geysers and Las Vegas Wash units.
- Sec. 203: Authorizes planning reports.
- Sec. 204: Creates the Colorado River Basin Salinity Control Advisory Council.
- Sec. 205: Provides for the Program's funding, including cost share.
- Sec. 206: Directs the Secretary to every two years submit a Program progress report.
- Sec. 207: Indicates that excepted as provided this Act doesn't modify other Acts and Compacts.
- Sec. 208: Allows for the Secretary to make project modifications and sets the Program's ceiling.
- Sec. 209: Provides a few definitions.

The Act has been amended at least five times. A codified copy of the Act, as amended can be found on the Forum's webpage at: <http://coloradoriversalinity.org/docs/USCODE-2011-title43-chap32A.pdf>

**1974 - "40 CFR Part 120, Water Quality Standards"** On December 18, 1974, EPA issued a regulation requiring the states of the Colorado River Basin to adopt water quality standards for salinity, consisting of numeric criteria and a plan of implementation. The standards needed to be submitted to EPA for approval on or before October 18, 1975. A copy of EPA regulation as printed in the federal register is found on the Forum's website at: <http://coloradoriversalinity.org/docs/EPA%20Regulation-40%20CFR,%20Part%20120,%20Water%20Quality%20Standards.pdf>

**1975 - *Proposed Water Quality Standards for Salinity: Numeric Criteria and Plan of Implementation for Salinity Control, Colorado River System (1975 Review)***: In June, 1975, the Forum published and approved a document titled above. It was in direct response to the December 18, 1974, EPA mandate. It was the Forum's first formal declaration as to the seven states' intentions concerning water quality standards and a salinity control program. One would expect that the Work Group under Myron Holburt's leadership worked long and hard in the few months between December 1974 and June 1975 to prepare a draft. However, legend has it that at the Forum meeting certain Forum members participated in an examination of every statement or assertion before the document was approved. This tradition continued into the 80s as Jack Barnett, early in his service, witnessed detailed edits by the Forum of documents that followed before they were approved.

The proposed Review was accepted by the Forum and sent out for public comment. Upon receiving comment, a supplement was adopted by the Forum on August 26, 1975. This combined document is found on the Forum's website at: <http://coloradoriversalinity.org/docs/1975%20Review.pdf>

This document, often referred to as the 1975 Review, was not in fact a review at all. It is the first declaration, the founding document. The tradition was started where the Forum

approves a report and that approved report is then taken by each of the seven states and submitted by the states to the three regions of EPA for their approval, along with many additional documents each state prepares for its statewide triennial review. Hence, technically the first review of the standards by the Forum was three years later as it approved the 1978 Review. This year's 2014 Review is the thirteenth review.

**1977 – Lawsuit:** EPA's accepting of the states' *Water Quality Standards for Salinity Including Numeric Criteria and Plan of Implementation for Salinity Control, Colorado River System* (1975 Review) was not welcomed by all. The Forum had an early task that it had not expected. The states, working together as the Forum, had changed EPA's mindset to move from state line standards to the standards associated with the three downstream measuring points used today. The Environmental Defense Fund took exception to this move by EPA and challenged this action in the courts. Dave Robbins provided to us the below history:

The case was brought by George "Rock" Pring, an attorney with the Environmental Defense Fund. He filed a suit against Doug Costle, Administrator of the EPA as well as the seven Basin States over the States' adopted water quality standards (and criteria) for salinity in the Colorado River, that had been approved by the EPA. The adoption of the salinity standard resulted from the Forum's efforts. He filed the case in the U.S. District Court for the District of Columbia in 1977. He alleged that Reclamation and Interior had violated Section 201 of the Colorado River Basin Salinity Control Act; that EPA, Interior and Reclamation had violated Section 102(2)(e) of NEPA; that EPA had violated Sections 303(a)-(e) of the Clean Water Act and he sought an order that would require EPA to promulgate regulations setting forth new or different water quality standards, implementation plans and waste load allocations for salinity in the Colorado Basin. His basic thrust was to require that there be numeric criteria adopted at all state lines, together with waste load allocations for salinity. I worked with Assistant Attorney Generals from the other six Basin States in defending the State's salinity standards. After briefing and argument the District Court entered judgment against EDF and in favor of EPA and the Basin States on all of his claims. The decision was entered in October of 1979.

Rock then appealed that decision to the U.S. Court of Appeals for the District of Columbia. He restated his contentions and sought reversal of the District Court's ruling in its entirety. The appeal was argued in October 1980 and in April of 1981 the Court of Appeals sustained the District Court in all regards allowing the salinity control standards and criteria to remain in effect and supporting the position of the seven states, the Bureau of Reclamation and EPA in that regard. At the appellate court level my partner, Dennis Montgomery, then Colorado Assistant Attorney General, handled the case, together with Assistant Attorneys General from each of the other Basin States. If anyone is interested, the appellate court decision can be found at 657 F.2d 275 (1981).

Hence, there was a lot going on 40 years ago which led to the genesis of the salinity control program and provided the foundation upon which we build the Program as we move into the future.

attachments

cc: Work Group, Federal Salinity Coordinators