

**Statement of**  
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**U.S. Environmental Protection Agency, Region 9**  
**Before the**  
**Subcommittee on Water and Power**  
**of the**  
**Committee on Resources**  
**U.S. House of Representatives**  
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**La Quinta, CA**

Good morning, Chairman Calvert and Members of the Subcommittee. My name is Wayne Nastri. I was appointed Regional Administrator for the United States Environmental Protection Agency Region 9, our Pacific Southwest office, in October 2001. The Office is responsible for federal environmental issues in Arizona, California, Hawaii, Nevada, the Pacific Islands, and for 147 federally recognized Indian Tribes. Thank you for giving me the opportunity to provide testimony relating to the lower Colorado River and Salton Sea and to our role in the restoration effort at the Salton Sea. As you requested, I will also be providing some remarks today regarding potential air quality impacts associated with the myriad activities impacting the Salton Sea.

The lower Colorado River provides a finite annual amount of water that is divided among agricultural, urban and environmental needs in an arid area that traverses 7 states, 35 Indian Tribes and two countries. Any change in that distribution may have far-reaching ramifications that impact all users of that water. Working together with other federal, state and local agencies, EPA contributes our best efforts to identify workable, cost-effective solutions to that challenge. Our commitment is to work with agencies such as the Bureau of Reclamation and the Salton Sea Authority until those solutions are identified and implemented.

EPA's role in the Salton Sea and lower Colorado River region is active and multifaceted. At this time I would like to highlight our three main areas of involvement.

### **1. Salton Sea Restoration**

In the early 1990's, large scale episodes of fish and bird kills underscored the need to address deteriorating environmental conditions at the Salton Sea. The late Congressman Sony Bono spearheaded the effort to draw national attention to this unique aquatic resource. In 1997, Congress provided EPA \$5 million to identify baseline conditions at the Sea. Based on those studies and in recognition of the complexity of the issues, in 1998 Congress appropriated an additional \$8.5 million to EPA for scientific and engineering

studies and pilot projects. The studies and projects were coordinated by the Salton Sea Authority. Engineering pilot projects to reduce salinity are underway; the potential commercial use of a highly productive fishery has been explored; a bioremediation study for the reduction of nutrient loadings to the Sea is about to begin. Three workshops brought experts in water and sediment chemistry, eutrophication and air quality together to produce white papers. This work has provided a sound basis for further investigations and for the development of alternatives being considered to improve conditions at the Salton Sea. Throughout the process, EPA has worked to ensure the use of appropriate scientific methods and cost effective approaches.

## **2. Environmental Review of Projects Related to California's Use of Colorado River Water**

Concurrent with addressing the issues relating to the Salton Sea, California must reduce its use of Colorado River water to achieve the amount apportioned to it mandated by the Law of the River. The Department of Interior, state and local agencies in California are proposing several strategies and water transfers that will allow California to meet its goal of reducing its dependence on Colorado River water to 4.4 million acre feet in years of normal supply. Some of these actions require Federal environmental review. The National Environmental Policy Act (NEPA) requires the preparation of an Environmental Impact Statement (EIS) and an opportunity for public review and comment. EPA's role is to review the EIS's (i.e., the State of California Colorado River Quantification Settlement Agreement, the Department of Interior's Implementation Agreement for the California Quantification Settlement Agreement, the Imperial Irrigation District/San Diego County Water Authority Water Conservation and Transfer Project) related to those actions.

Proposed water conservation activities, water management strategies and the transfer of Imperial Valley water to San Diego will reduce the amount of water reaching the Imperial Valley. The result will be less water reaching the Salton Sea. Lower Sea levels will expose lake bed sediments that may become airborne. We cannot predict with confidence what the potential emissions will be from the newly exposed lake bed at the Sea. From our experience at Mono Lake and the Owens Lake basin, which I will talk about in a moment, we know that windblown dust from an exposed dry lakebed can cause high levels of PM-10. PM-10 is the Federal health standard for particulate matter smaller than 10 microns in size. Inhalable particulates in this size range over certain ambient concentrations may have serious health effects for people, especially children, the elderly, and those with respiratory illnesses. Our concern regarding airborne impacts from the Salton Sea is based on our experiences at Mono and Owens Lakes; however, we have no information to predict the degree of air impacts from the Salton Sea.

### **a. MONO LAKE**

Mono Lake is located in Mono County in eastern-central California. Since 1941, portions of the water from four of the major tributary streams have been exported before reaching the lake. From 1974 through 1989, an annual average of 83,000 acre-feet of water was exported from the Mono Basin.

Over the past 50 years, the water level of Mono Lake has dropped by approximately 45 feet, causing the exposure of approximately 20 square miles of lakebed and an emissive area of 9 square miles. As the lake receded, 24-hour PM-10 readings increased at one monitoring site out of many in the area, to 981 g/m<sup>3</sup> in 1993. The 24-hour standard is 150 g/m<sup>3</sup>. Today, the State of California is refilling Mono Lake to its historical level, and although the lake has not yet reached that level, the PM-10 levels are declining.

### **b. OWENS DRY LAKE BED**

Owens Lake is located in Inyo County in eastern-central California. In 1913, the Los Angeles Department of Water and Power (LADWP) completed an aqueduct system and began diverting the waters of the Owens River to the City of Los Angeles. By 1930, these diversions had drained Owens Lake almost completely dry.

The Owens dry lake bed is approximately 70 square miles. The emissive area is approximately 35 square miles. Strong winds over the dry, alkaline bed of Owens Lake have produced the highest measured concentrations of PM-10 ever recorded in the US: levels as high as 20,750 g/m<sup>3</sup> were measured at the lake. The reading represents the highest 24-hour average at one monitoring site out of many around the lake. Annual PM-10 emissions from Owens Lake may exceed 400,000 tons, and dust transported from the Lake can result in violations of the 24-hour PM-10 NAAQS in the town of Ridgecrest, 150 miles to the south. The dust from the lake bed contains naturally occurring carcinogenic compounds, including arsenic, nickel, and cadmium. EPA has not conducted a study to determine if there is a cancer risk. The State Implementation Plan includes cost effective control measures, such as shallow flooding, managed vegetation, and gravel cover, to minimize dispersal of PM-10 and bring the area into attainment.

### **c. SALTON SEA**

The conditions at Mono Lake and the Owens Dry Lake are not the same as those at the Salton Sea in their climate and soil characteristics. However, the potential of exposing 100 square miles of once previous lake bed without any mitigation raises concerns. Factors that affect potential PM-10 air quality problems include how the lake crusts over after the water recedes, how rain, drying and other forces, such as human activities, might disturb the crust, and how winds affect emission patterns on the dry lake bed. In addition, the soil from the lake bed may contain toxic materials. These could be naturally occurring, as in the case of Owens Lake, as well as potential contaminants from agricultural runoff. The congruence of these factors may cause higher emissions in some areas compared to other locations in the vicinity.

There is some indication that the existing north shore of the Salton Sea might be presently emitting PM-10 into the air. To understand these potential impacts, the soil type and characteristics of the potential new shoreline should be assessed. Models to assess the level at which violations in PM-10 NAAQS may occur should also be employed. And finally, potential control measures should be evaluated.

We should use the lessons learned at these experiences at Owens and Mono Lake to insure that changes to the level of the Salton Sea do not cause any exceedences of the PM-10 standard and do not have negative impacts on public health.

### **3. Water Quality**

The waters of the area, Salton Sea, Alamo, New Rivers, are all impaired, that is, they do not meet the water quality standards for their designated uses. Under the Clean Water Act, the State of California and EPA must identify the pollutant of concern and how much of it may enter the water and still achieve the overall water quality standards. The State and EPA must identify the Total Maximum Daily Load (TMDL) for a pollutant of concern and California must implement the program based on the TMDL. The California Regional Water Quality Control Board, Colorado River Basin, has approved the sediment load allocations for the Alamo River, and the pathogen and sediment loads for the New River. Implementation of the TMDLs by California will be forthcoming.

EPA with other agencies, support the local tribal interest for maintaining water quality in the area. The consortium of tribes in Coachella Valley (Morongo, Aqua Caliente, Torres Martinez, Twenty Nine Palms

and Augustine Bands of Cahuilla Indians) are concerned about the effect of Coachella Valley Water District's proposed use of Colorado River water to recharge the aquifer from which the tribes take their drinking water. The tribes are concerned about the potential aquifer contamination by perchlorate, which has been detected in the Colorado River water.

#### **4. Other EPA Activities in the Area**

In addition to the three activities I've just highlighted, other EPA programs in this area include the joint State of California and EPA effort to control the perchlorate movement draining into Lake Mead and the Lower Colorado. Another long-term commitment is our border water infrastructure program.

EPA's border water infrastructure program provides technical assistance and grant funds for high priority water and wastewater infrastructure projects to communities and Indian Tribes within the 100 km north and south of the US/Mexico Border. As you know, one of the local tributaries to the Salton Sea is the New River. The New River is polluted from multiple sources in the US and Mexico.

One of the sources is the mixture of raw and treated sewage from Mexicali, Mexico. EPA and other federal and state agencies are working with Mexico to address the sewage situation and improve water quality in the New River. EPA has provided grant funds to improve the collection and existing treatment systems in Mexicali; however, there is still much work to be done. It should be noted that as we assist Mexico in improving the level of treatment of its sewage, Mexico may choose to keep its effluent for non-potable uses. The result may be less water in the New River and ultimately the Salton Sea; however, the water that does reach the Sea will be of better quality.

In closing I would like to reconfirm our commitment to work with the federal, state, local and tribal agencies that are undertaking the challenge posed by the competing needs for the lower Colorado River water. Coordination with the tribes is a necessity due to the presence of tribal trust assets which could be affected. We have made great strides in identifying the issues that need to be addressed and how they are interrelated. My staff met recently with the representatives from the Bureau of Reclamation and the Imperial Irrigation District to work on ways to address these challenging issues. Thank you very much for extending an invitation to me to provide testimony here today. I will be happy to answer any questions that the Subcommittee members may have. Thank you.

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