Engineering and Operations Committee
Item #6a

Subject: Colorado River Source Water Protection Update

Purpose: To review the current status on key water quality protection efforts associated with the Colorado River.

Engineering and Operations Committee

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Summary

This presentation will provide an update on key source water protection activities associated with the Colorado River. These efforts include (1) Chromium-6 remediation near Topock, AZ; (2) Perchlorate remediation in Henderson, NV; and (3) Uranium Mill Tailings Cleanup near Moab, UT

Colorado River Source Water Protection Update

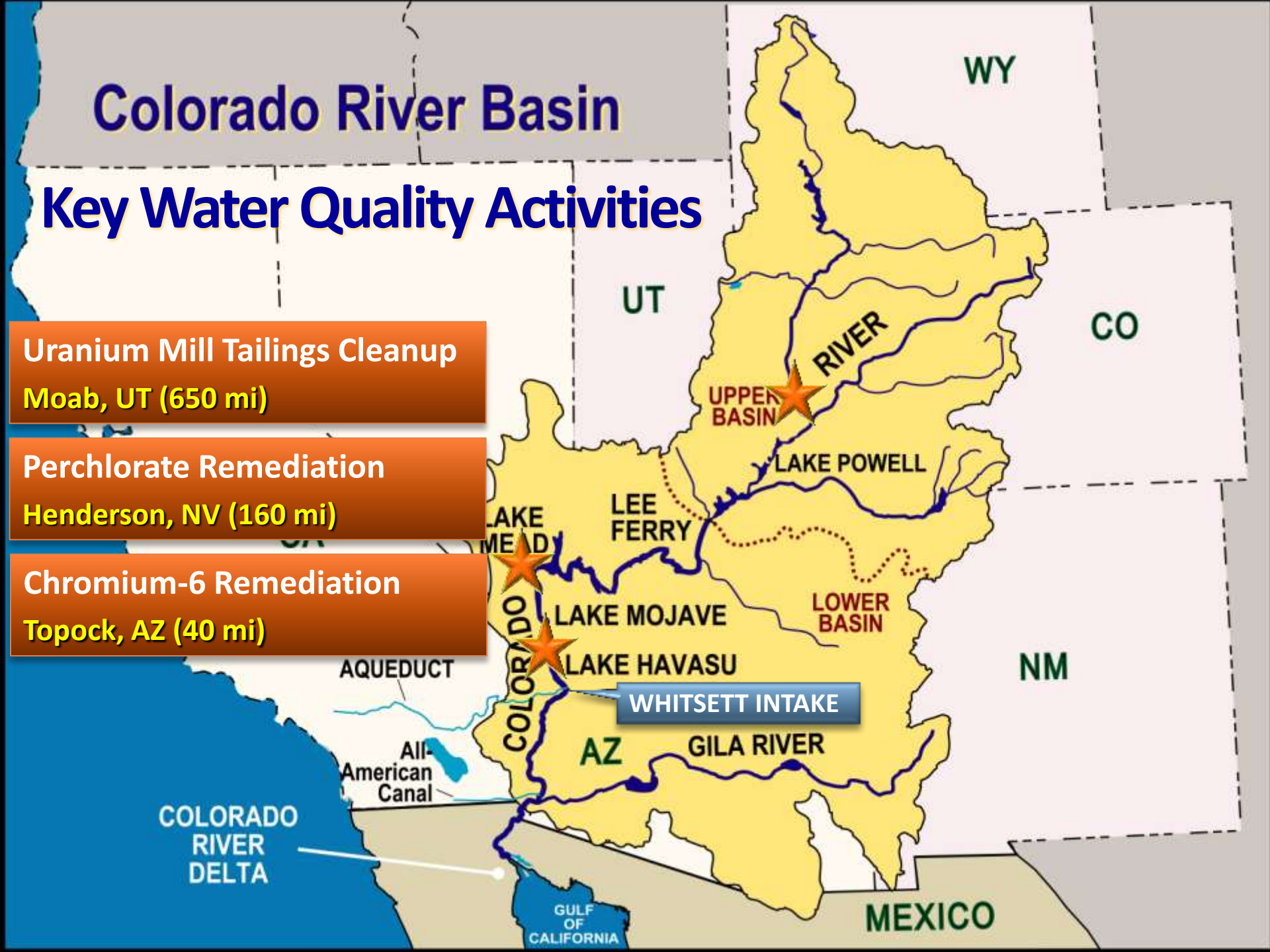
Engineering and Operations Committee
Item 6a
March 9, 2015

Key Water Quality Activities

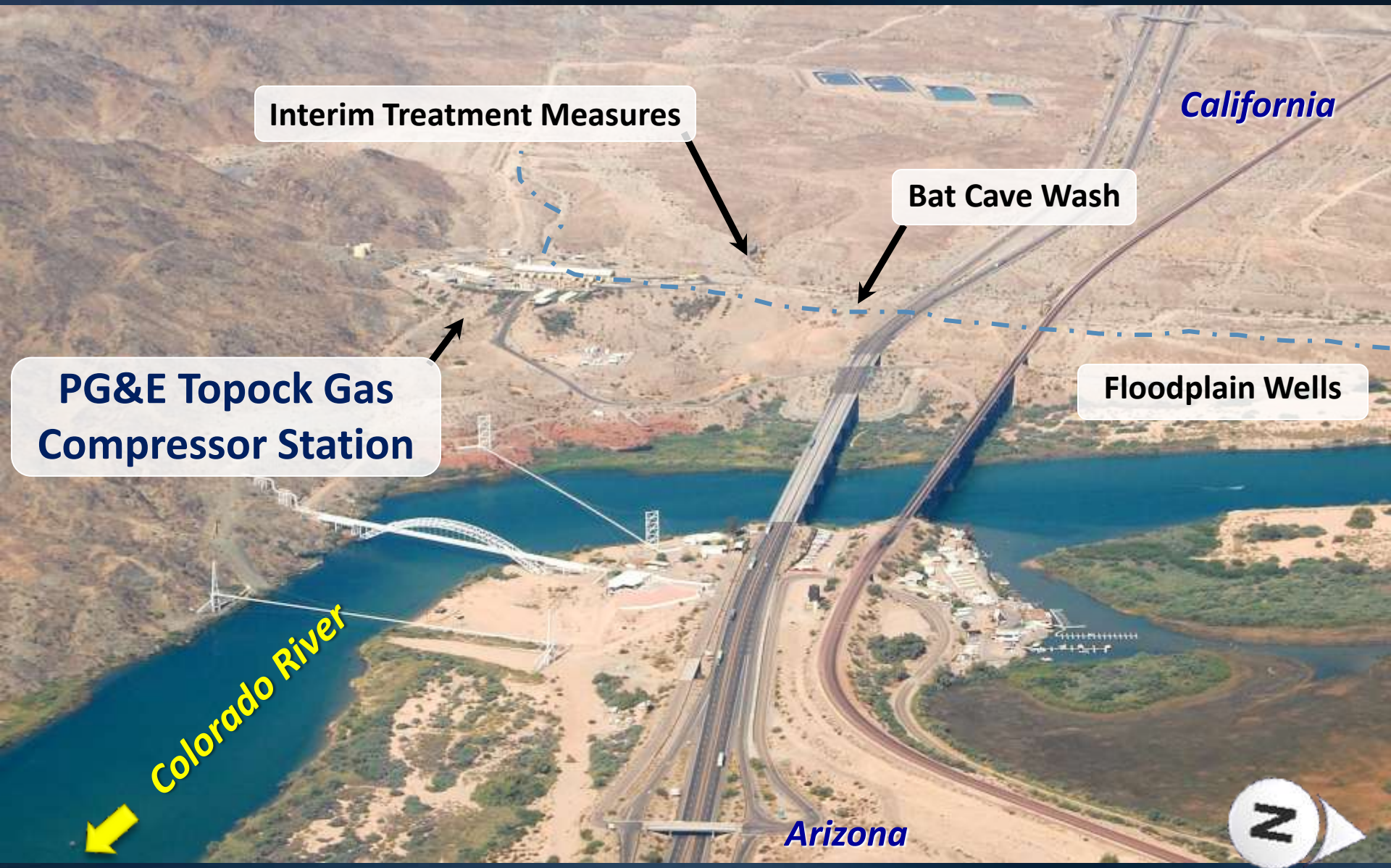
Uranium Mill Tailings Cleanup
Moab, UT (650 mi)

Perchlorate Remediation
Henderson, NV (160 mi)

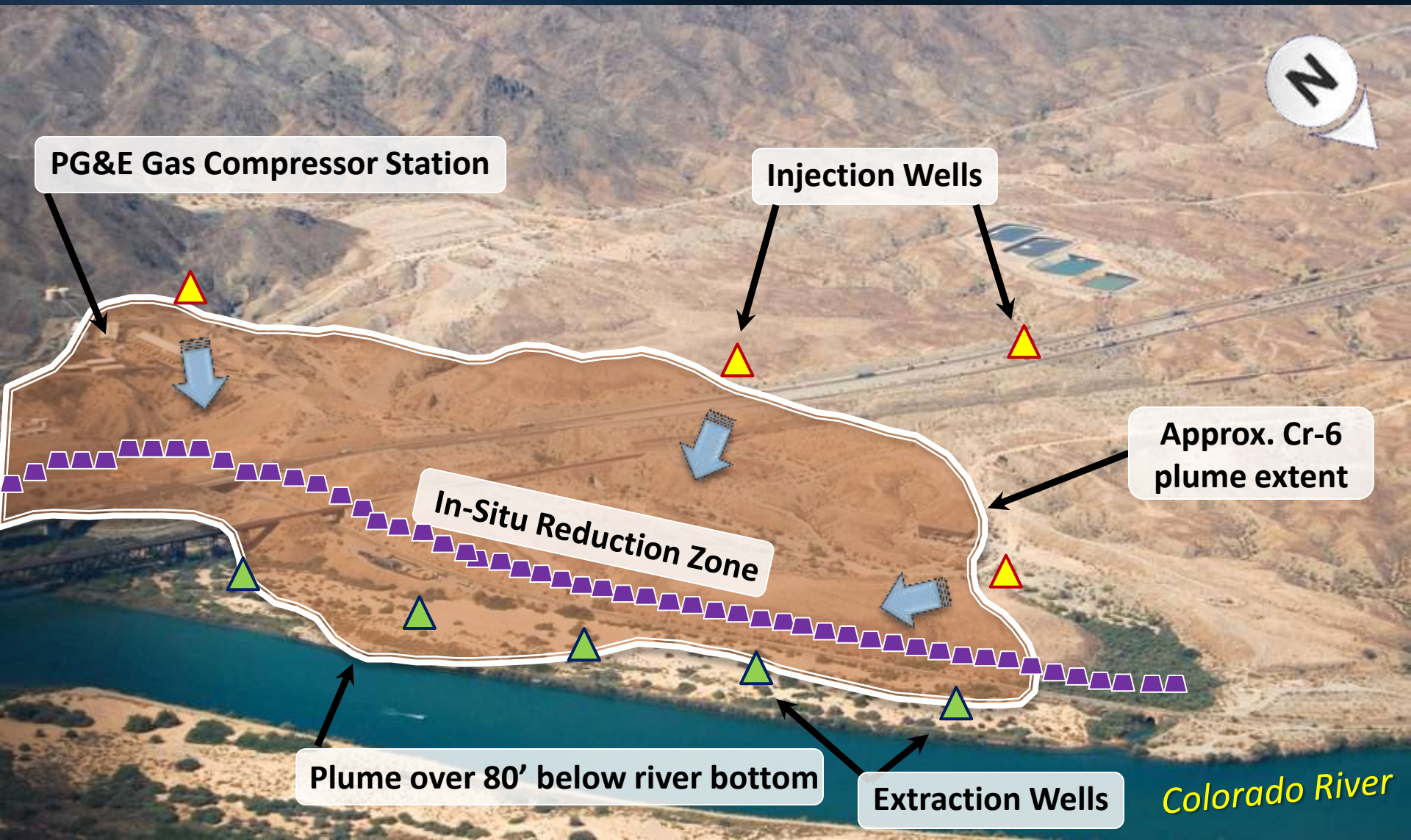
Chromium-6 Remediation
Topock, AZ (40 mi)



Topock Chromium-6 Remediation



Groundwater Remediation
In-Situ Treatment



Remediation Status

- Final Remedy and EIR – January 2011
- Design (90%) – February 2015
  - Design completion – Aug. 2015
- Design Challenges
  - Tribal concerns
  - CEQA addendum
- Schedule
  - Construction begins – Dec. 2015
  - Online - 2018

Freshwater Exploratory Well

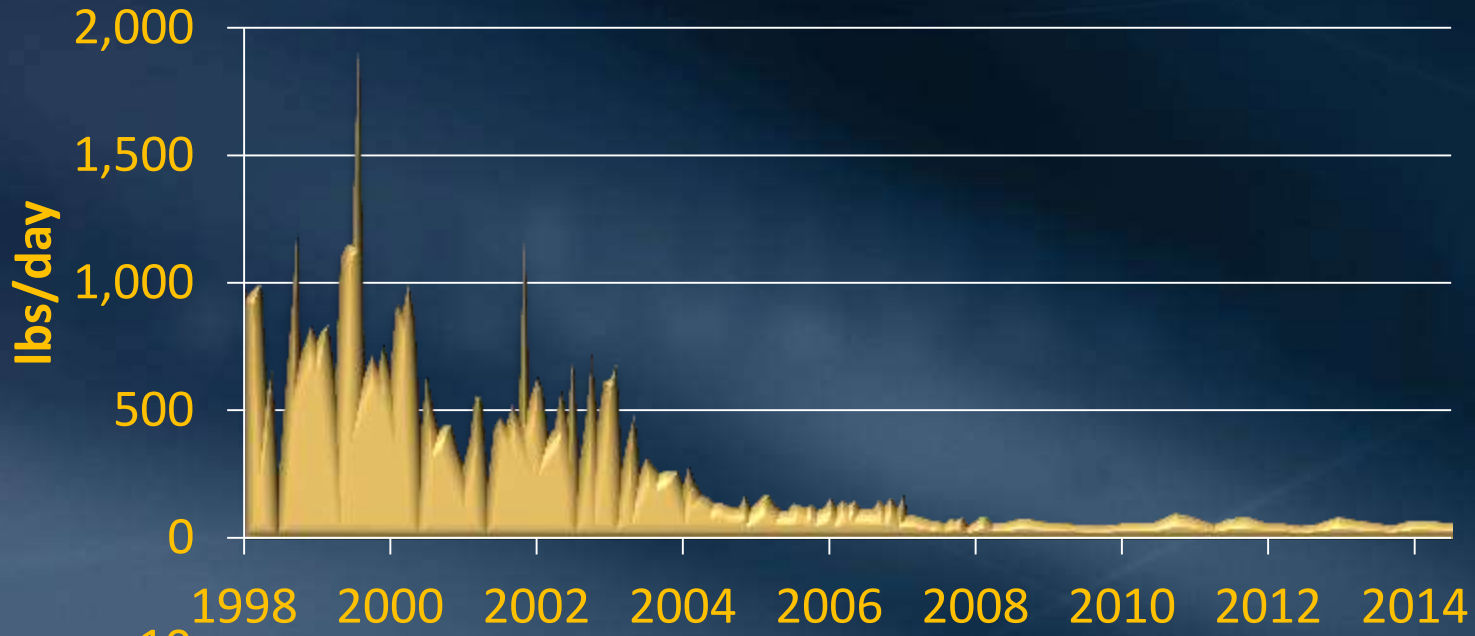
Metropolitan Actions

Topock Chromium-6 Remediation

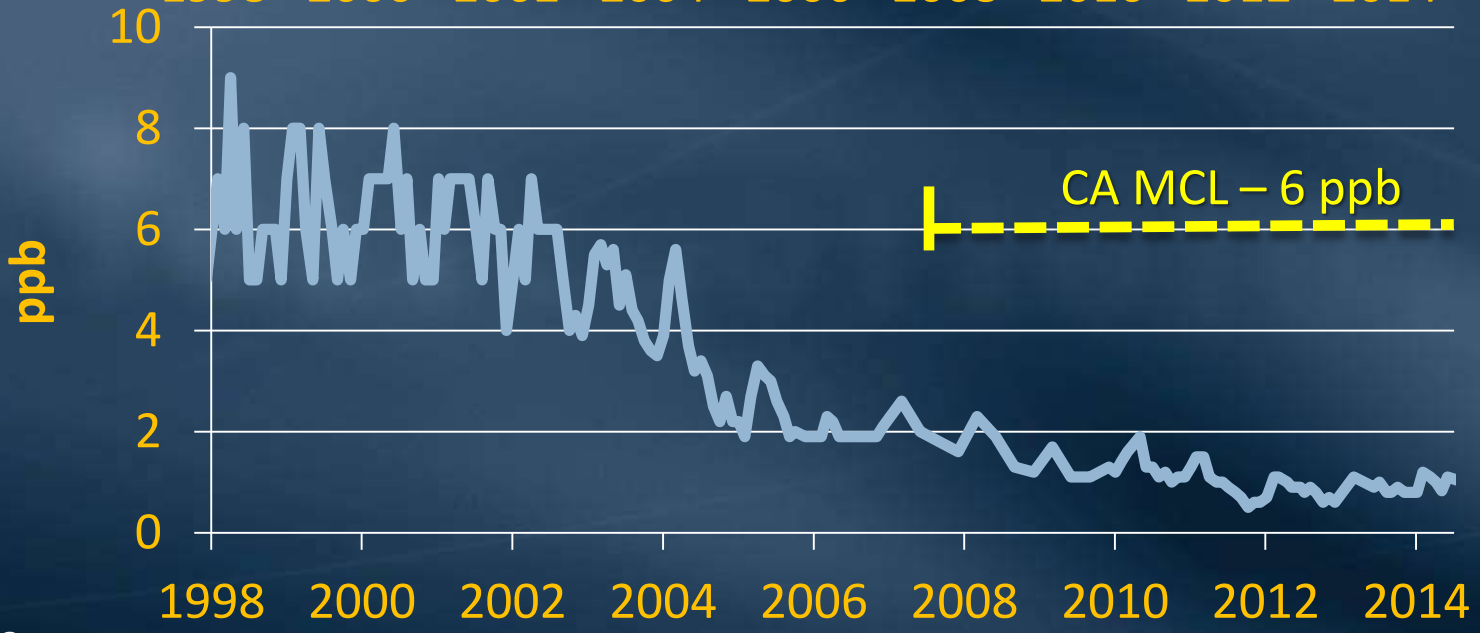
- Continue to monitor chromium-6 levels in the Colorado River
- Review and comment on design
- Continue to engage in working group meetings

Henderson Perchlorate Remediation

Continued Decline in Perchlorate Levels



Loading into Las Vegas Wash



Levels at CRA intake at Lake Havasu

Perchlorate Remediation Update

- Tronox
  - Fluidized Bed Reactors remove 1,500-2,000 lbs/day
  - Bankruptcy settlement created $81M environmental trust
  - Anadarko lawsuit settlement ~$1.1 billion to trust
  - Long-term remedial plan to further accelerate site cleanup
- AMPAC
  - Fluidized Bed Reactors remove up to 1,400 lbs/day

Metropolitan Actions

Perchlorate Remediation

- Continue to monitor perchlorate levels
- Monitor remediation performance
- Participate in long-term remedial plan development
- Continue to engage in stakeholder meetings
- Monitor distribution of settlement proceeds

Moab Uranium Mill Tailings Cleanup

Uranium Mill Tailings Removal Update

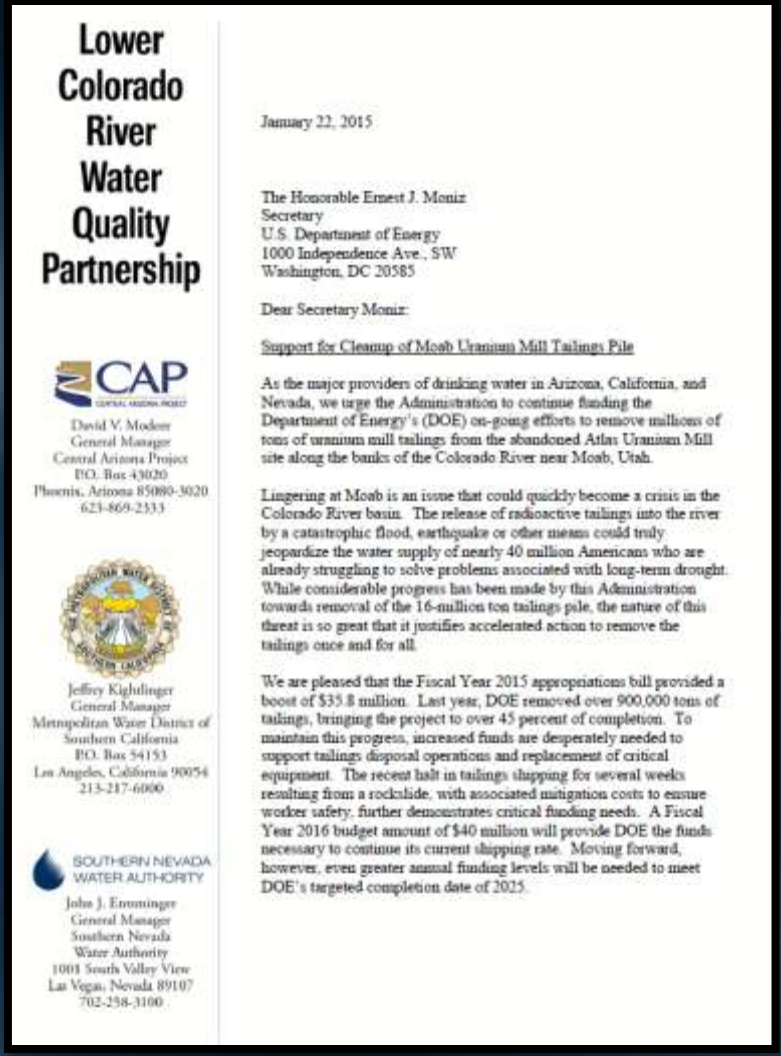
Photos courtesy of DOE

- Stimulus funds expedited initial cleanup
- 7.32 million tons removed (46%) to date
- Operations resumed following rockslide
- $35.8M in FY 2015 budget
- Targeted completion ~2025

Metropolitan Actions

Uranium Mill Tailings Cleanup

- Continue to advocate for yearly funding
- Continue to monitor remediation activities



Lower Colorado River Water Quality Partnership

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January 22, 2015

The Honorable Ernest J. Moniz
Secretary
U.S. Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

Dear Secretary Moniz:

Support for Cleanup of Moab Uranium Mill Tailings Pile

As the major providers of drinking water in Arizona, California, and Nevada, we urge the Administration to continue funding the Department of Energy's (DOE) on-going efforts to remove millions of tons of uranium mill tailings from the abandoned Atlas Uranium Mill site along the banks of the Colorado River near Moab, Utah.

Lingering at Moab is an issue that could quickly become a crisis in the Colorado River basin. The release of radioactive tailings into the river by a catastrophic flood, earthquake or other means could truly jeopardize the water supply of nearly 40 million Americans who are already struggling to solve problems associated with long-term drought. While considerable progress has been made by this Administration towards removal of the 16-million ton tailings pile, the nature of this threat is so great that it justifies accelerated action to remove the tailings once and for all.

We are pleased that the Fiscal Year 2015 appropriations bill provided a boost of $35.8 million. Last year, DOE removed over 900,000 tons of tailings, bringing the project to over 45 percent of completion. To maintain this progress, increased funds are desperately needed to support tailings disposal operations and replacement of critical equipment. The recent halt in tailings shipping for several weeks resulting from a rockslide, with associated mitigation costs to ensure worker safety, further demonstrates critical funding needs. A Fiscal Year 2016 budget amount of $40 million will provide DOE the funds necessary to continue its current shipping rate. Moving forward, however, even greater annual funding levels will be needed to meet DOE's targeted completion date of 2025.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA