

INTERNATIONAL BOUNDARY AND WATER COMMISSION, UNITED STATES AND MEXICO



Presentation for the Colorado River Citizens' Forum

February 20, 2007

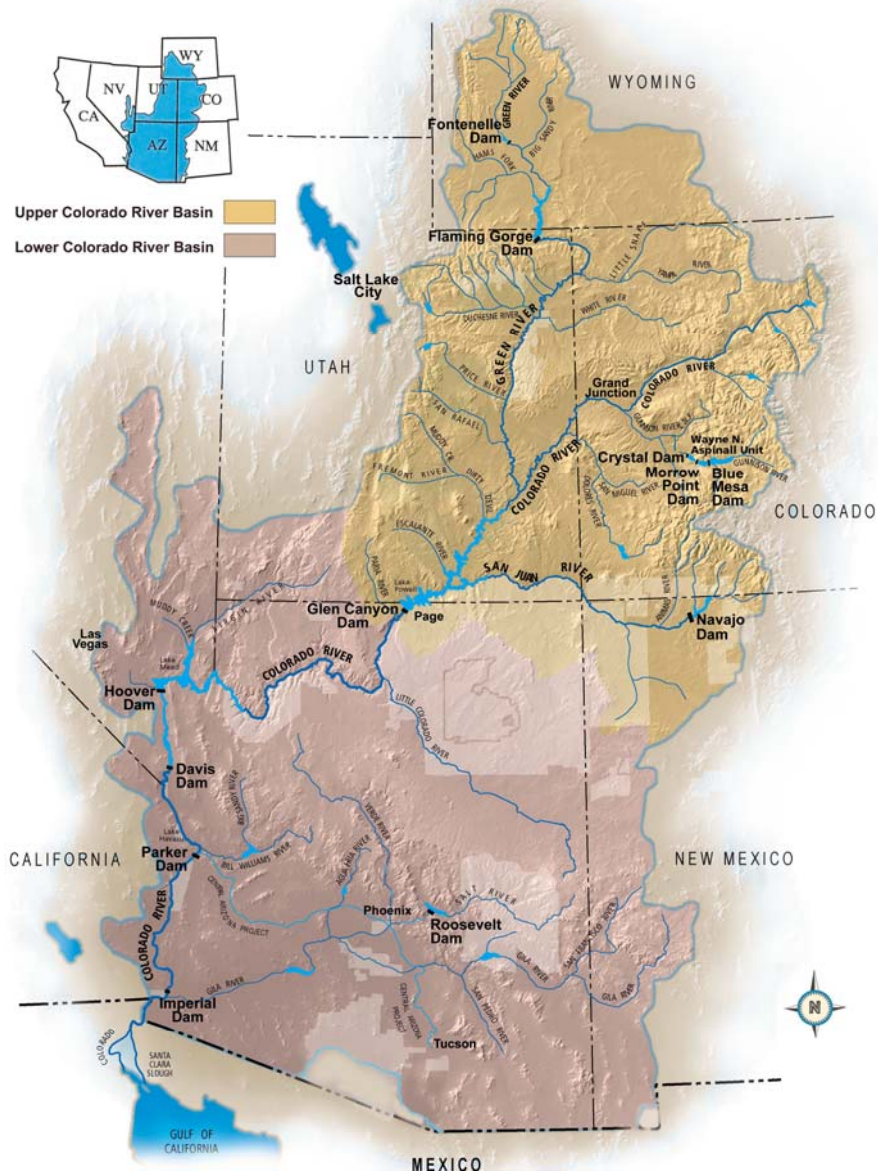
Imperial, California

1944 WATER TREATY

Colorado River

- U.S. to deliver to Mexico a volume of 1.5 maf (1,850,234,000 cubic meters)/ year
- When there are surplus waters, U.S. to deliver to Mexico a total volume of up to 1.7 maf (2,096,931,000 cubic meters)/ year

Colorado River Basin



Distribution of Waters of the Colorado River





MORELOS DAM

1944 WATER TREATY

Colorado River

- In the event of extraordinary drought, deliveries to Mexico reduced in the same proportion as consumptive uses in the U.S. are reduced
- 2000-2006 was the driest 7-year period in historical record
- Bureau of Reclamation is developing guidelines for managing Lower Basin shortage in the U.S.
- IBWC consultations underway with Mexico

LAKE MEAD



1999

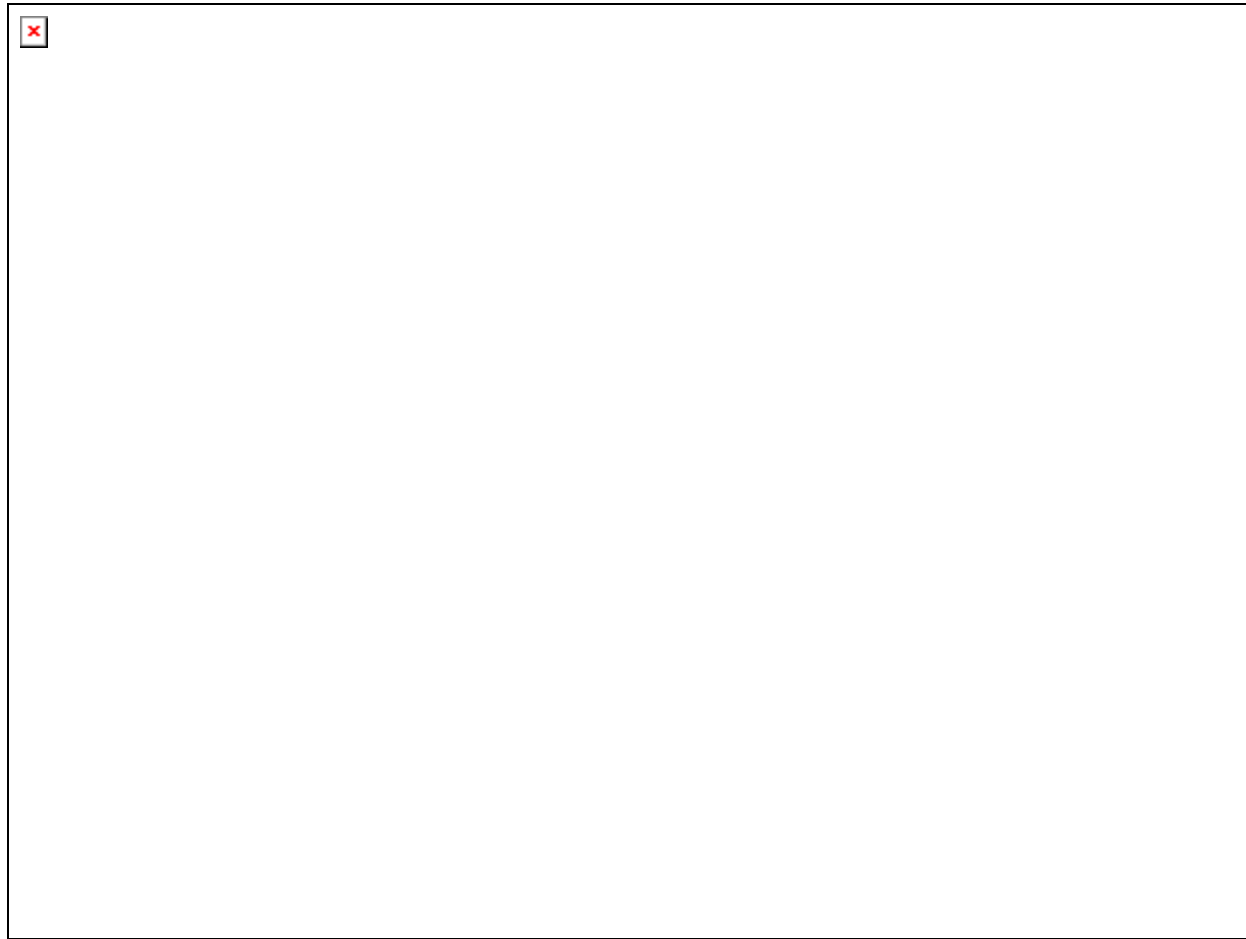


2006

1970 BOUNDARY TREATY

- IBWC to maintain the Rio Grande and Colorado River as the international boundary
- Boundary is middle of the channel occupied by normal flow or middle of the channel which in normal flows has the greatest average width over its length
- IBWC to delineate the international boundary on maps
- IBWC may stabilize or rectify the channel

1970 BOUNDARY TREATY



Colorado River below Morelos Dam

1970 BOUNDARY TREATY

- Current boundary mapping
 - Aerial imagery collected
 - Maps to be drafted in 2007
 - Delineation of boundary must be in accordance with treaty and agreed to by both Sections

CARRYING CAPACITY AND BOUNDARY PRESERVATION

- Studies for long-term channel capacity improvements
- Maintain the river channel as the international boundary
- Project could include new river alignments, dredging, levee work
- Project suspended so that flood frequency analysis could be undertaken

CARRYING CAPACITY AND BOUNDARY PRESERVATION

■ Flood Frequency Study

- undertaken collaboratively between USIBWC and Bureau, which contracted Brown & Caldwell
- Study to review the flood control objectives for the limitrophe reach
- To determine combined flood flows from the Gila River and Colorado River mainstem
- To determine existing conveyance capacity (levee to levee) between Imperial Dam and SIB
- To develop recommendations for flood protection and boundary delineation in the limitrophe
- Study to be completed in June 2007

SEDIMENT

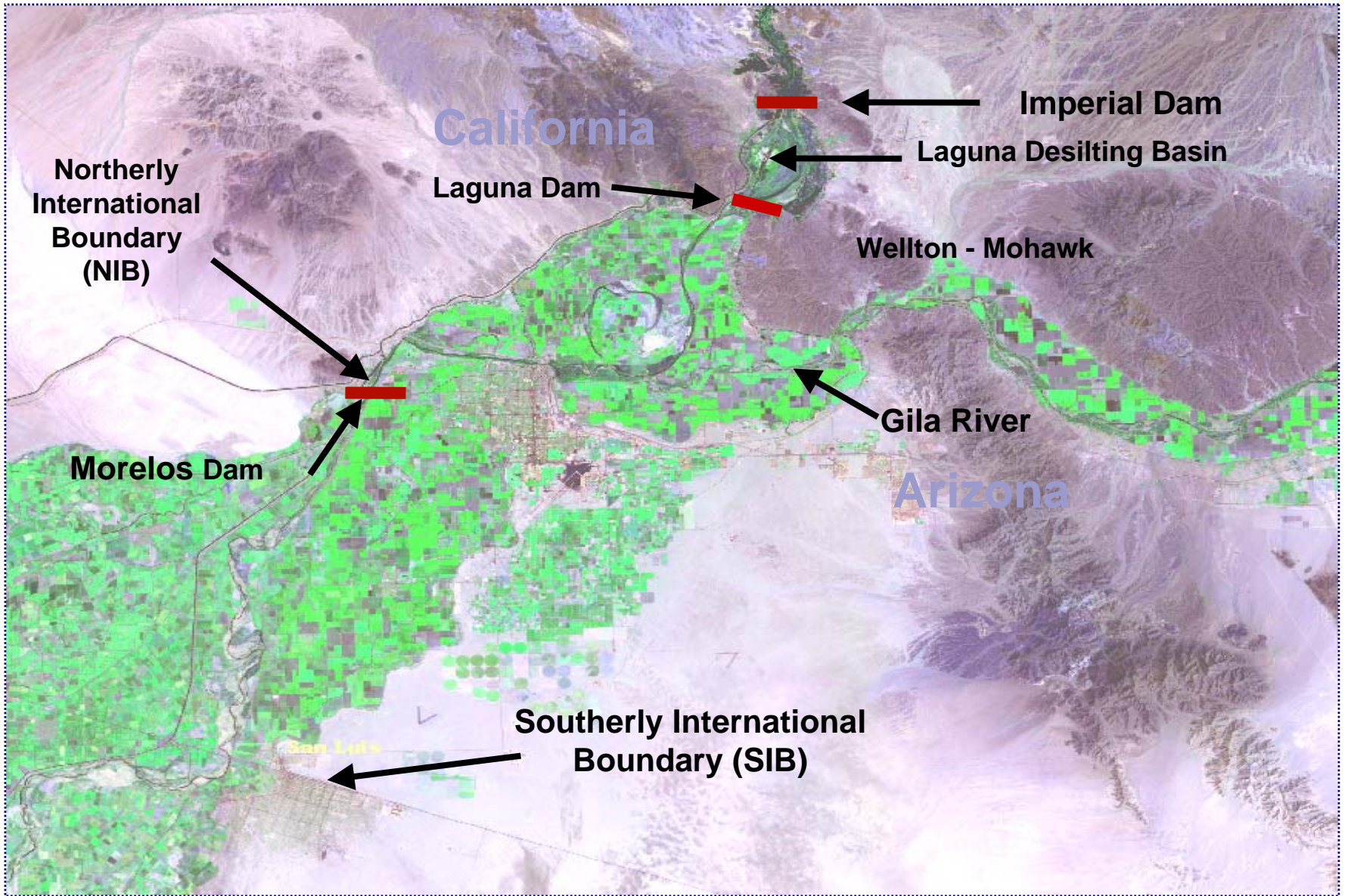
- To address sediment problems from the 1993 flood, ensure delivery of water to Mexico at NIB.
- Dredging Operations – coordinated with Bureau
- Morelos Dam – sediment removal is a safety of dams issue
 - USIBWC working to acquire permits
 - Consultation undertaken with USFWS
 - Habitat restoration plan being developed
 - Construction likely to begin in FY 08

COLORADO RIVER PROJECTS



Sediment in Colorado River

Periodic dredging is required



California

Imperial Dam

Laguna Desilting Basin

Northerly
International
Boundary
(NIB)

Laguna Dam

Wellton - Mohawk

Gila River

Morelos Dam

Arizona

Southerly International
Boundary (SIB)

San Luis

COLORADO RIVER SALINITY CONTROL

- Minute 242 (1973) regulates the salinity of water delivered to Mexico
- Water delivered to Mexico must be similar in quality to water delivered to U.S. users at Imperial Dam
- Wellton Mohawk Canal bypasses saline flows to the Santa Clara Slough in Mexico
- Desalination plant in the U.S. can be made operational when needed

COLORADO RIVER SALINITY CONTROL



Wellton Mohawk Bypass Drain

COLORADO RIVER SALINITY CONTROL

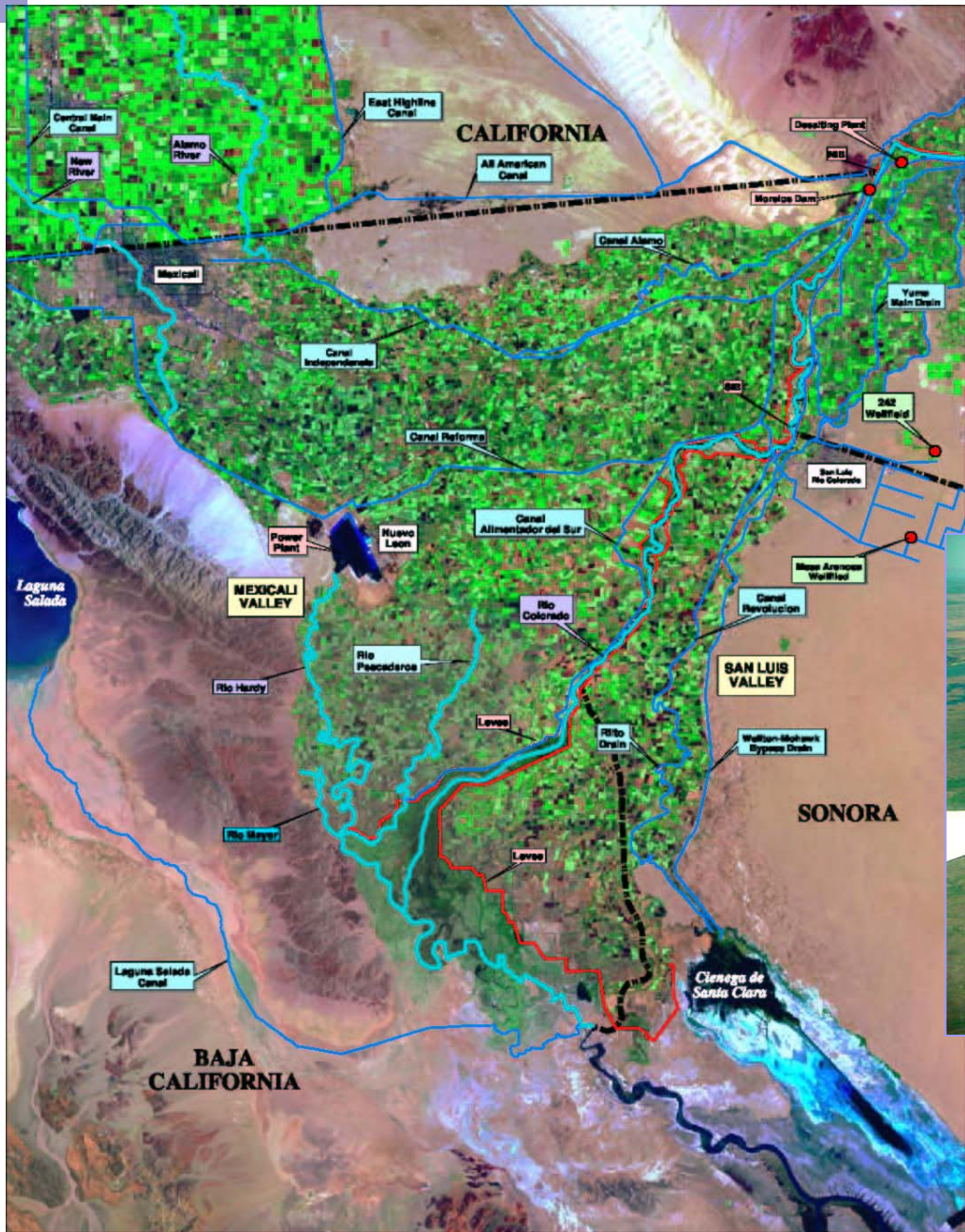
- Additional measures were undertaken to reduce salinity or even out salinity spikes at the Southerly International Boundary
 - Construction of a diversion canal into the Wellton-Mohawk Drain
 - Installation of a variable speed pump and automatic controllers for remote operation of the system
 - Purchase of equipment for continuous monitoring of salinity
- Test operation of Yuma Desalting Plant in spring 2007

SIB SALINITY PROJECT



COLORADO RIVER DELTA

- Minute 306 on the Colorado River Delta
 - IBWC to establish a framework for binational cooperation in the development of studies and recommendations in recognition of the interest of both governments in the preservation of the riparian and estuarine ecology of the delta region



17 3 2005

COLORADO RIVER DELTA

- Binalational Advisory Committee established:
 - Participation of non-governmental organizations
 - Mexican federal and state agencies
 - U.S. federal agencies
- Restoration and conservation projects
 - Advisory Committee has proposed various restoration and conservation projects
 - Projects relate to improving flow regimes to benefit ecosystems, habitat improvement, native plants, and hydraulic modeling

NEW RIVER

- Mexicali II Project substantially complete
- Ongoing water quality monitoring
- USIBWC willing to collaborate with -
Calexico/CNRC on trash rack
 - Located in U.S.
 - To collect solid waste
 - Engineered to consider human safety

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U.S. Section Headquarters

(915) 832-4100

www.ibwc.state.gov