

# RECLAMATION

*Managing Water in the West*

## Regulatory Storage Below Parker Dam and Drop 2 Storage Reservoir Project Overview and Status

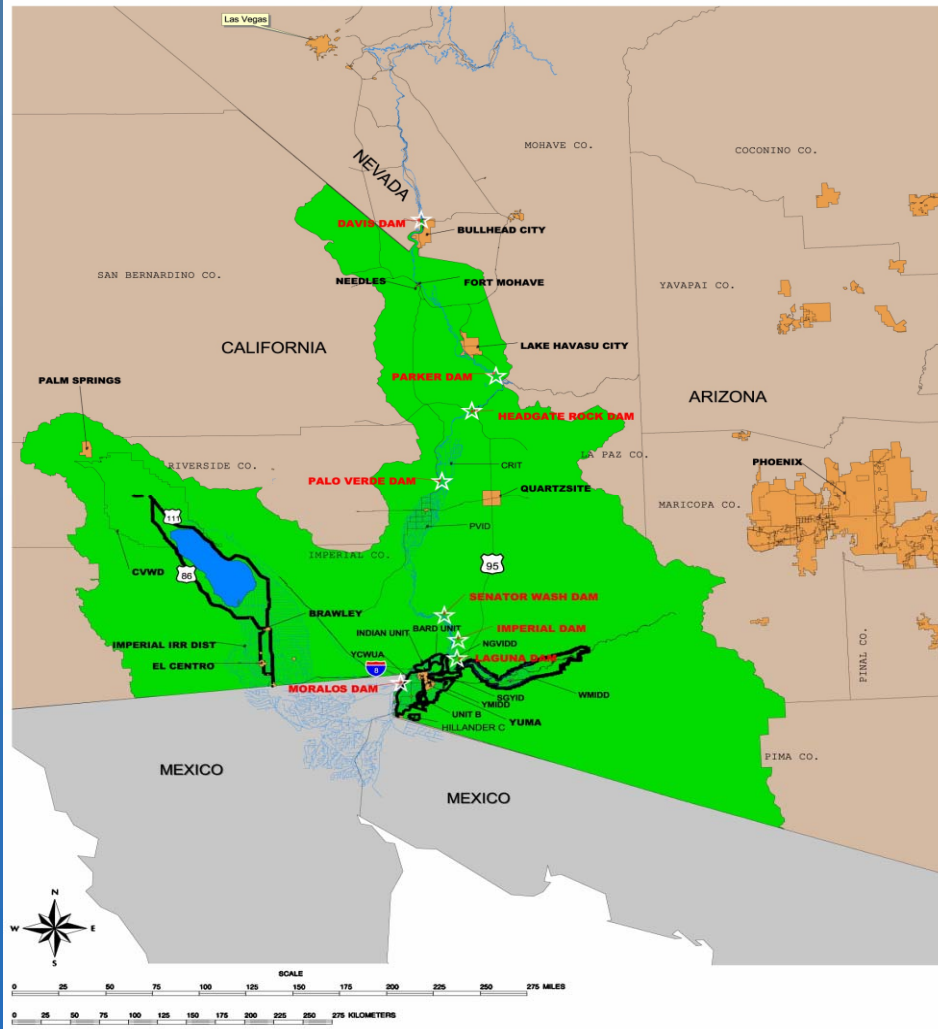
August 2007



U.S. Department of the Interior  
Bureau of Reclamation

# Yuma Area Office

YUMA AREA OFFICE BOUNDARIES



## Key Responsibilities

Deliver Colorado River Water to Irrigation Districts

Manage Yuma Area Ground Water Table

Comply with Treaty with Mexico

Colorado River Environmental Mitigation

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**Senator Wash**



**Imperial Dam**

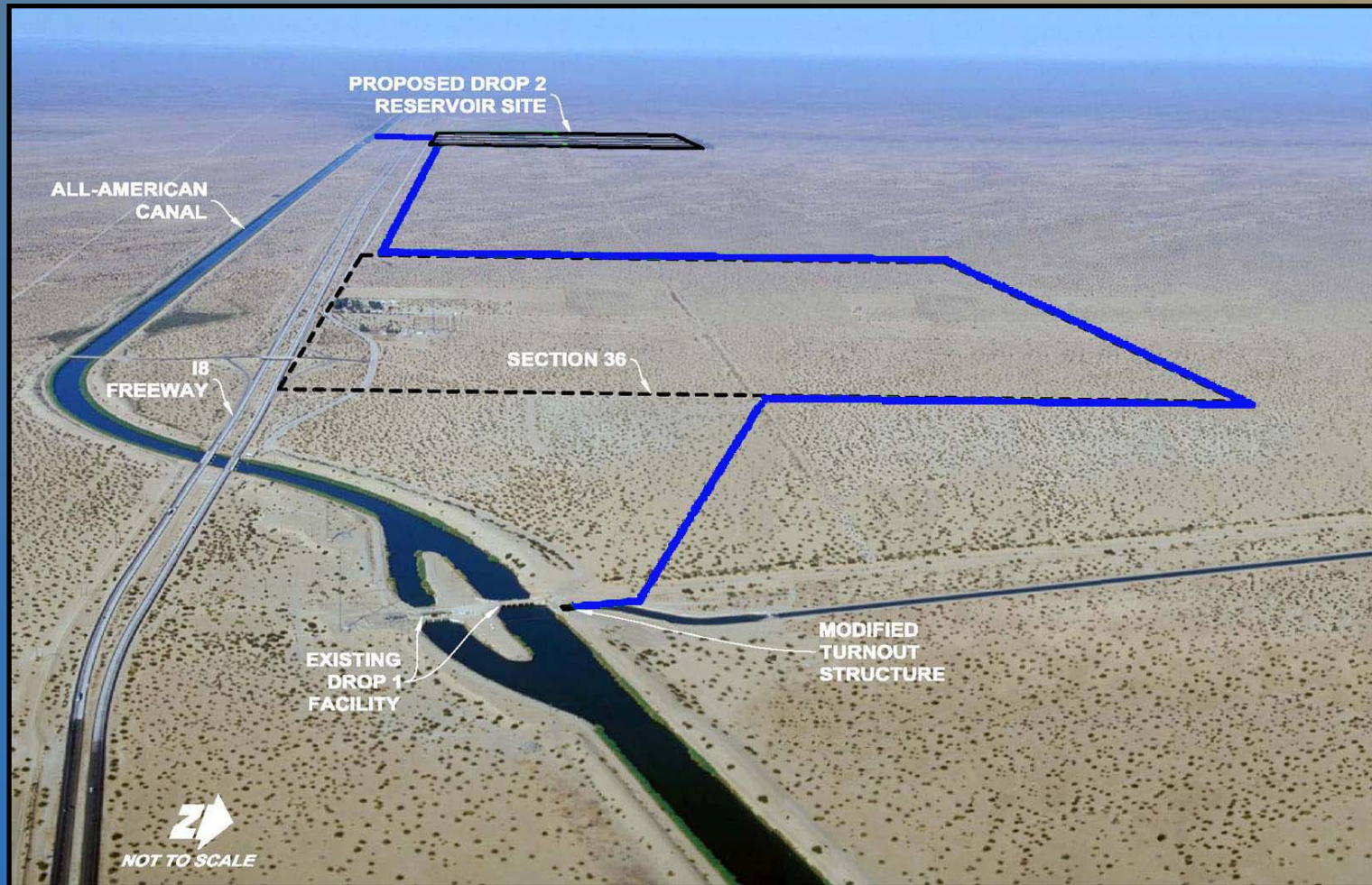


**Laguna Dam**

**Proposed  
Drop 2  
Reservoir**



# Project Plan View Map



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# Project Overview and Purpose

- Plan, design, and construct an 8,000 acre-foot storage reservoir and 1,800 cfs conveyance system.
- Provide available storage space for conserving a portion of “non-storable” flows currently not captured in the lower Colorado River system.
- These non-storable flows are a result of limited Colorado River system storage capacity below Parker Dam.

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# Congressional Mandate

December 20, 2006, Public Law No. 109-432 (120 Stat. 2922, 3047) Section 396  
“Regulated Storage Water Facility”:

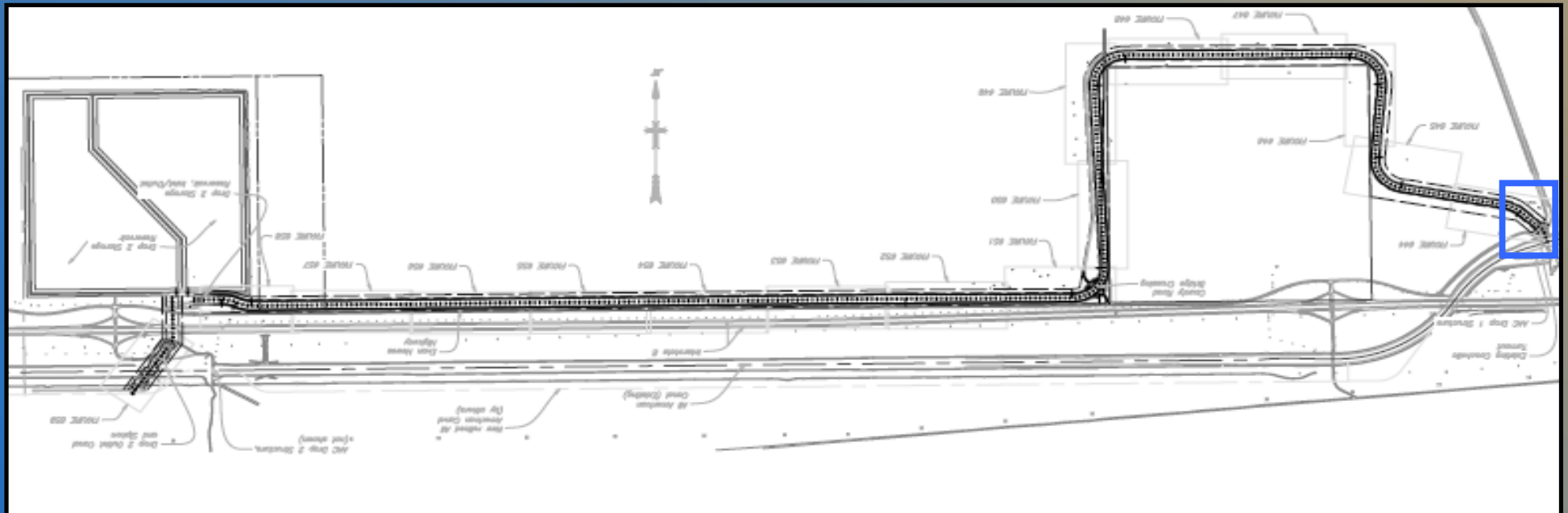
- (a) Construction, Operation, and Maintenance of Facility. – Notwithstanding any other provision of law, upon the date of enactment of this Act, the Secretary shall, without delay, pursuant to the Act of January 1, 1927 (44 Stat. 1010, chapter 47) (commonly known as the “River and Harbor Act of 1927”), as amended, design and provide for the construction, operation, and maintenance of a regulated water storage facility (including all incidental works that are reasonably necessary to operate the storage facility) to provide additional storage capacity to reduce nonstorable flows on the Colorado River below Parker Dam.
- (b) Location of Facility – The storage facility (including all incidental works) described in subsection (a) shall be located at or near the All American Canal.

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# Principal Project Features

# Turnout Structure “Bifurcation”

- Modify Existing Coachella Canal Turnout at Drop 1
- Drop 2 Inlet Canal: 1,800 cfs; Coachella Canal: 1,550 cfs
- Five Existing Radial Gates
- Common Center Gate (Provides Redundancy)
- Allows Filling 8,000 acre-foot Reservoir in 72 Hours



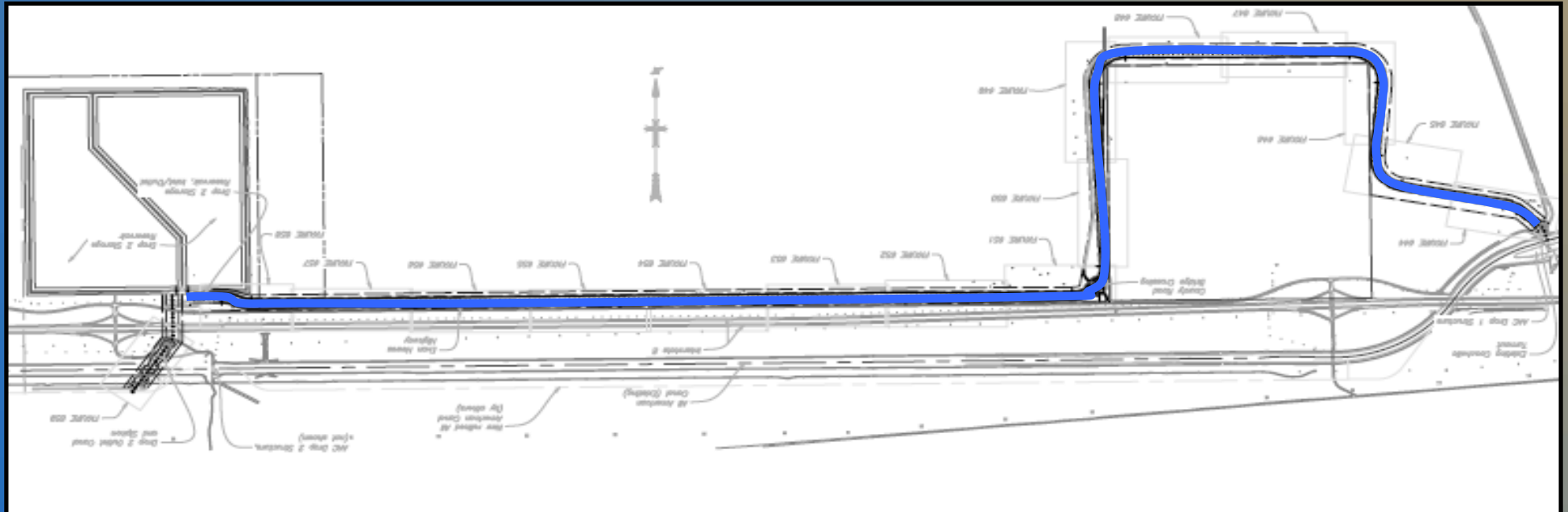
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# Principal Project Features

## Inlet Canal

- 6.65 Miles
- 1,800 cfs; Flows Metered
- 2H:1V Side Slopes; 3 ½ inches Concrete Lining
- Around Section 36; Limit Canal Right of Way – Minimize Environmental Impact
- 6 foot Security Fencing and 3 foot Flat Tailed Horned Lizard Fencing

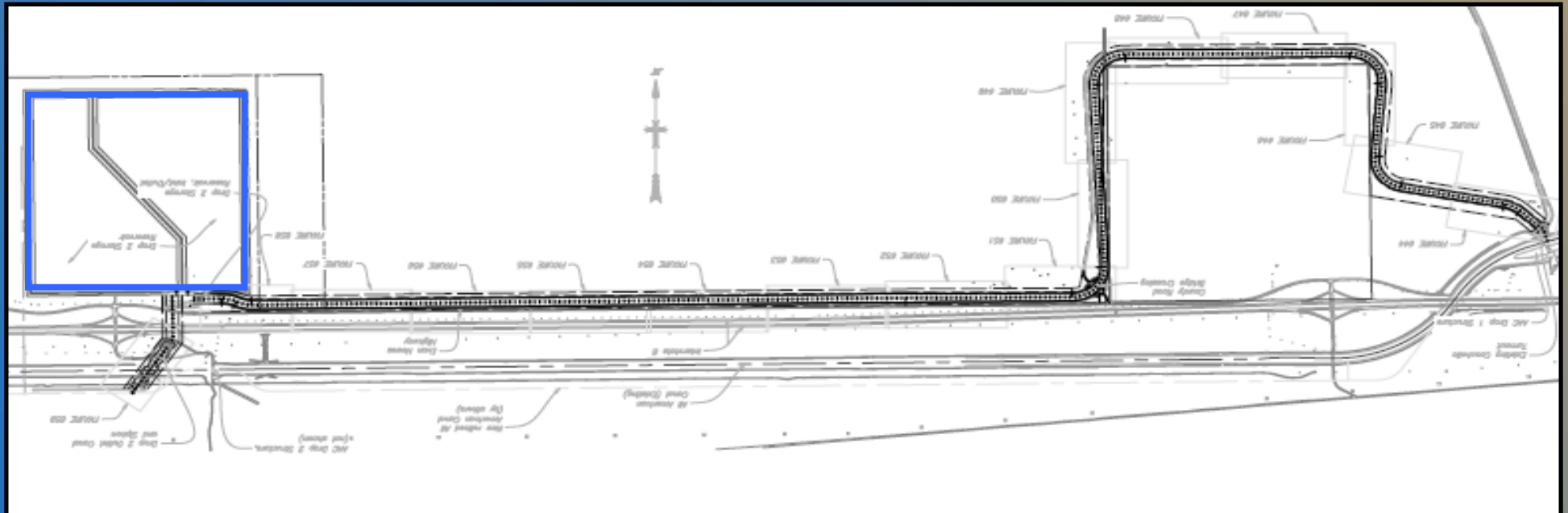


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# Principal Project Features

# Reservoir

- Earthen Embankment; 485 acre Footprint
- 3H:1V (Inside) 4H:1V (Outside) Side Slopes; 9 inches Soil Cement with 60 mil HDPE Liner
- Capacity: 8,000 acre-foot, 2 each 4,000 acre-foot Cells
- Water Depth: 20 to 21 feet; Freeboard: 4 feet
- 6 foot Security Fencing and 3 foot Flat Tailed Horned Lizard Fencing



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# Principal Project Features

## Reservoir

- Brock Ranch Site
- Adjacent to the Drop 2 Hydroelectric Power Structure on the All American Canal
- Approximately 30 Miles East of El Centro, CA, and 25 Miles West of Yuma, AZ

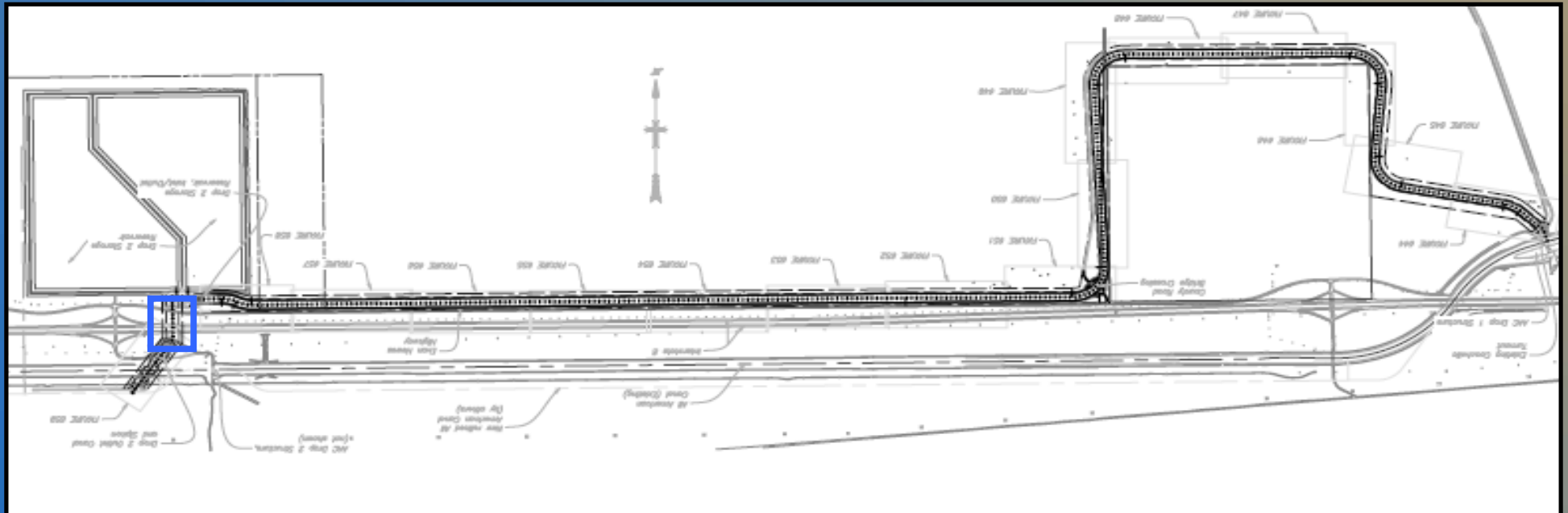


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# Principal Project Features

# Outlet Crossings

- Evan Hewes Highway
- Interstate 8 Highway
- Twin 108 inch Pipelines (Steel with Welded Joints)
- Gravity System
- 1,800 cfs; Flows Metered



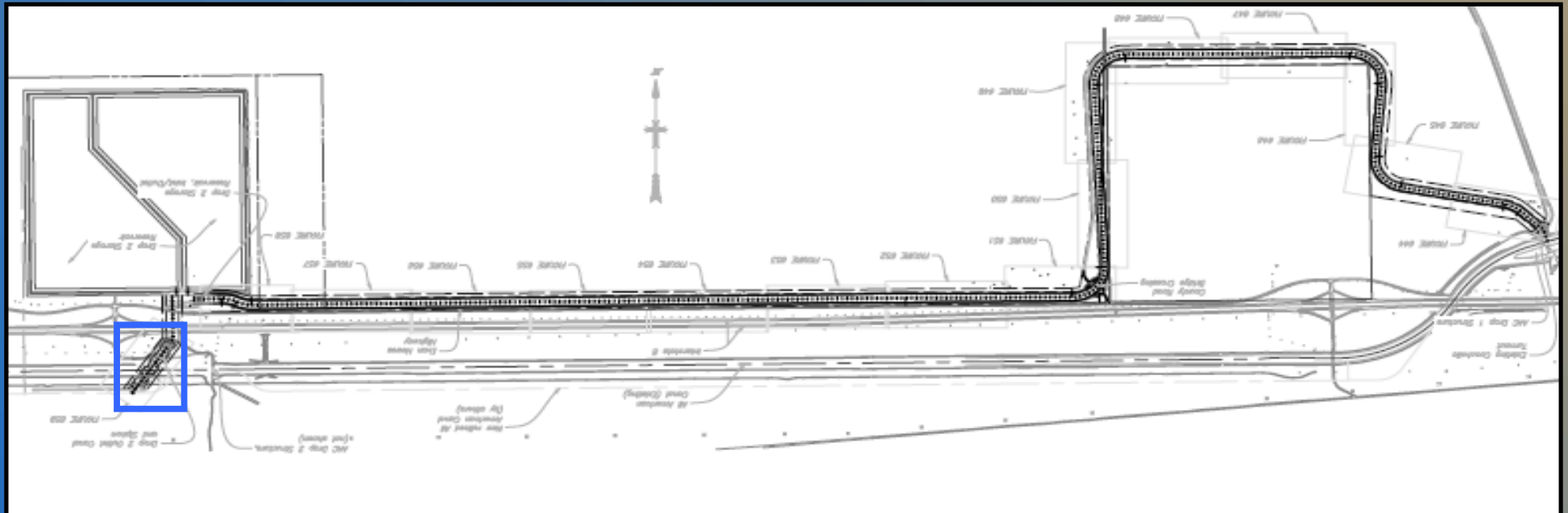
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# Principal Project Features

## Outlet Canal

- 0.25 Miles
- 2H:1V Side Slopes
- 3 ½ inches Concrete Lining
- Allows Draining 8,000 acre-foot Reservoir in 72 Hours

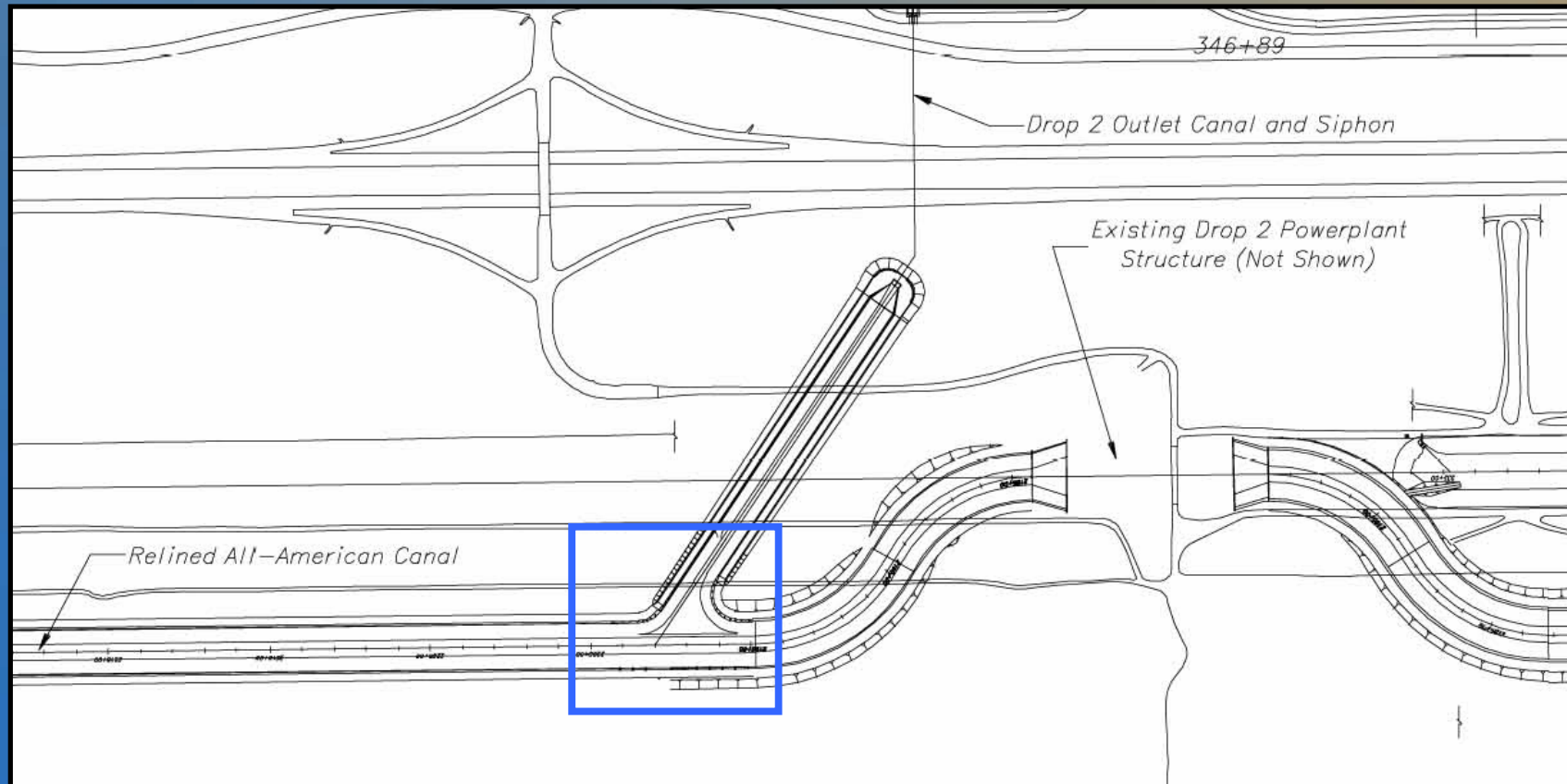


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# Principal Project Features

## Turn-in Structure “Confluence”

- Into Newly Lined All American Canal Downstream of Drop 2



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# Stakeholder and Partner Coordination

Including:

- Bureau of Land Management
- California Department of Transportation
- Coachella Valley Water District
- Flat Tailed Horned Lizard Management Oversight Group
- Imperial County
- Imperial Irrigation District (IID)
- Indian Tribes, Including Quechan and Cocopah
- Private Land Owners
- Southern Nevada Water Authority (SNWA)
- TransCanada North Baja System – IID Lateral
- US Customs and Border Protection
- Utility Providers Including IID, Imperial County
- Yuma Heritage Foundation

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# Voluntary Environmental Commitments

- **Uninterrupted Water Supply**
- **Flat Tailed Horned Lizard Management Strategy**
- **Limitrophe/Hunter's Hole**
- **Aesthetics**
  - Lighting
  - Views
- **Air Quality**
  - Combustive and Fugitive Dust (PM<sub>10</sub>) Abatement
  - Ozone (O<sub>3</sub>)
- **Noise Abatement**
- **Erosion Control**
- **Migratory Bird Act Considerations**
- **Cultural Resources**
- **Hazardous Materials**

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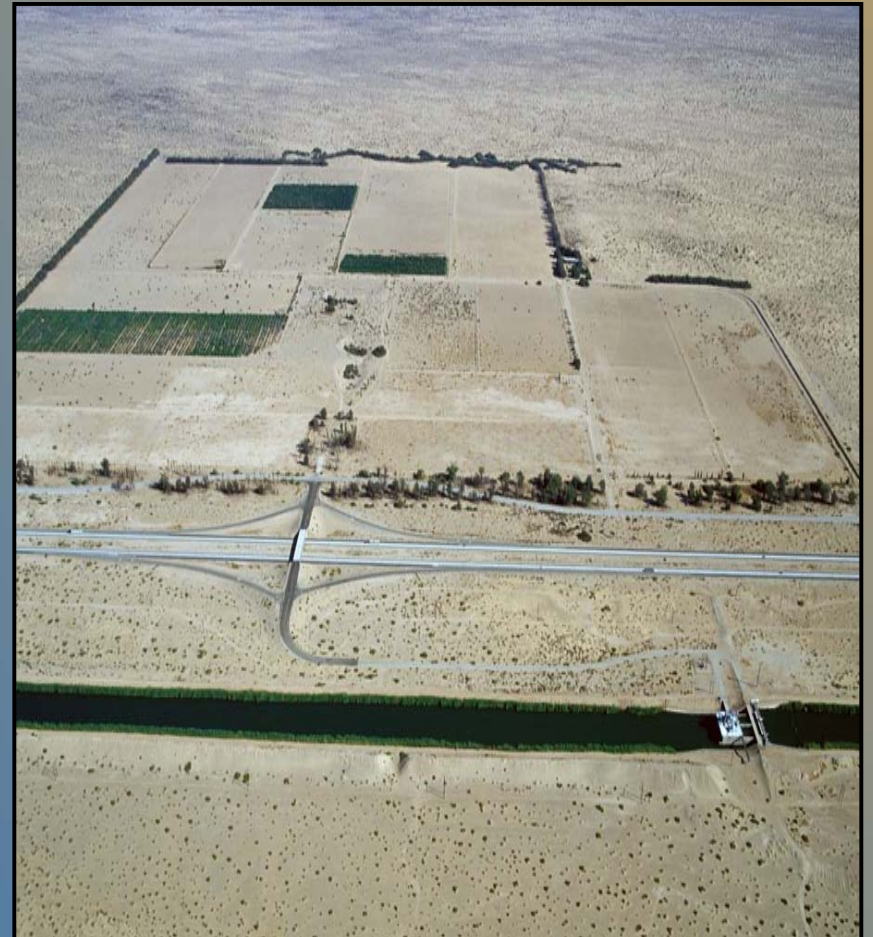
# Project Milestones (High Level)

- **Value Planning Study**
  - May 2004
- **Appraisal/Storage Alternatives**
  - February 2005
- **Draft Environmental Assessment**
  - November 2006
- **DEC (Design, Estimating, and Construction) Review**
  - December 2006
- **Feasibility Design Report**
  - March 2007
- **Final Environmental Assessment**
  - June 2007
- **Final Design Period**
  - March 2007 through March 2008
- **Project Management (Acquisition & Construction Management) Plan**
  - September 2007
- **Various Agreements**
  - July 2007 - March 2008
- **Environmental, Cultural and Lands Compliance and Permitting Period**
  - March 2007 - March 2008
- **Stakeholder Final Integration and Coordination Period**
  - March 2007 - July 2008
- **Acquisition Period**
  - January 2008 - July 2008
- **Construction Period**
  - July 2008 - October 2010

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# Questions



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