

All-American Canal Lining Project

Environmental Mitigation

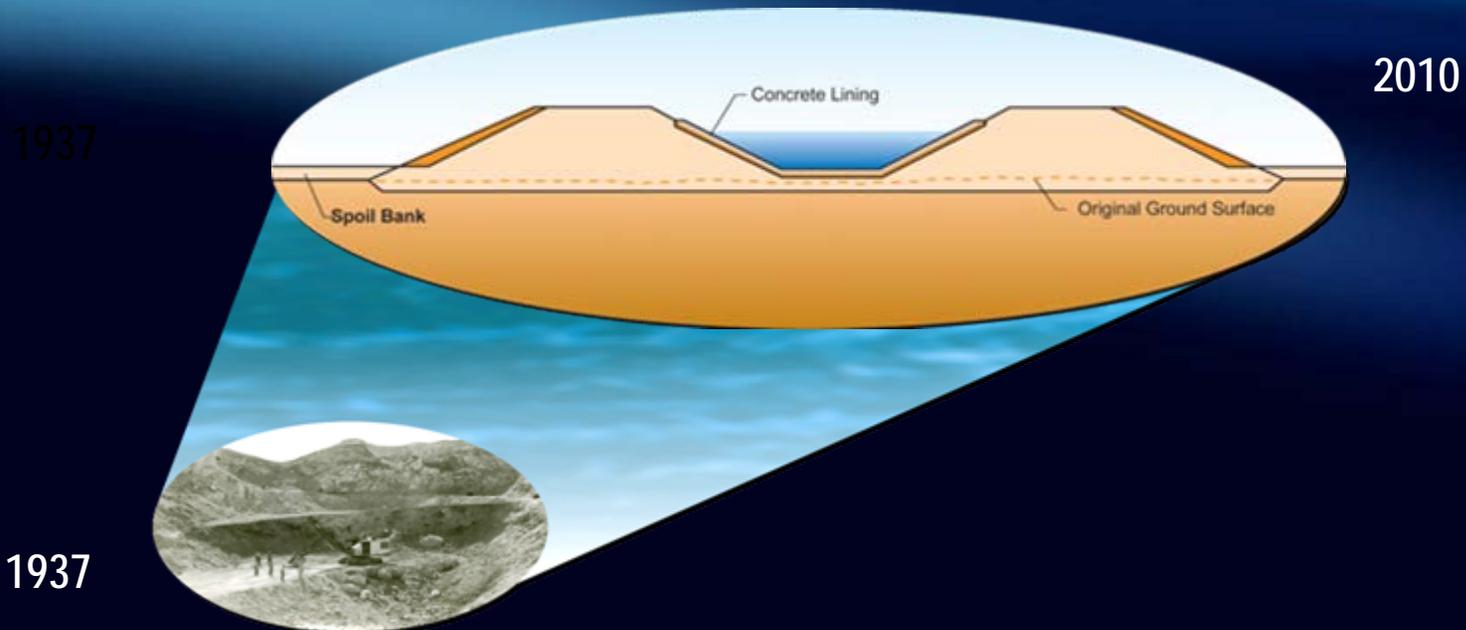
Presented By:

Vikki Dee Bradshaw

AACLP Designated Biologist

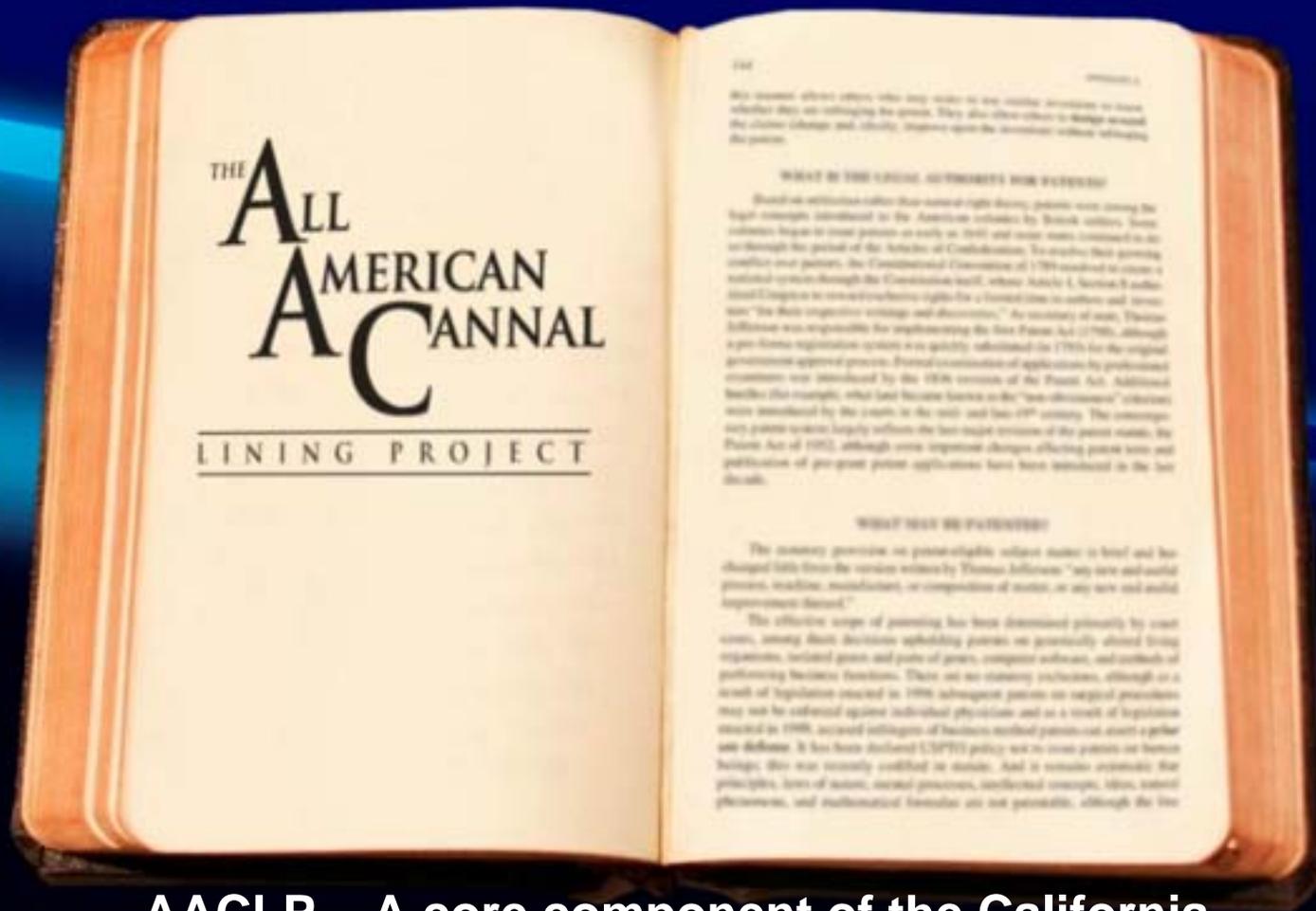
Imperial Irrigation District

May 11, 2009



Environmental Compliance History of the All-American Canal Lining Project

- **Congressional authorization of the Project in 1988**
- **Approved EIR/EIS and ROD signed March 1994**
- **US FWS BO/CO issued February 8, 1996**
- **ACOE 404 Exemption Letter dated June 2, 2006**
- **EIR/EIR Addendum and Amendment to ECP completed July 2006**
- **CDFG 2081 Incidental Take Permit issued August 14, 2006**
- **Construction started June 2006 then stopped by court ordered injunction based on environmental compliance litigation**
- **Court injunction lifted in early 2007. NTP issued to both contractors by early June 2007. Cost of Injunction: at least \$30 million.**

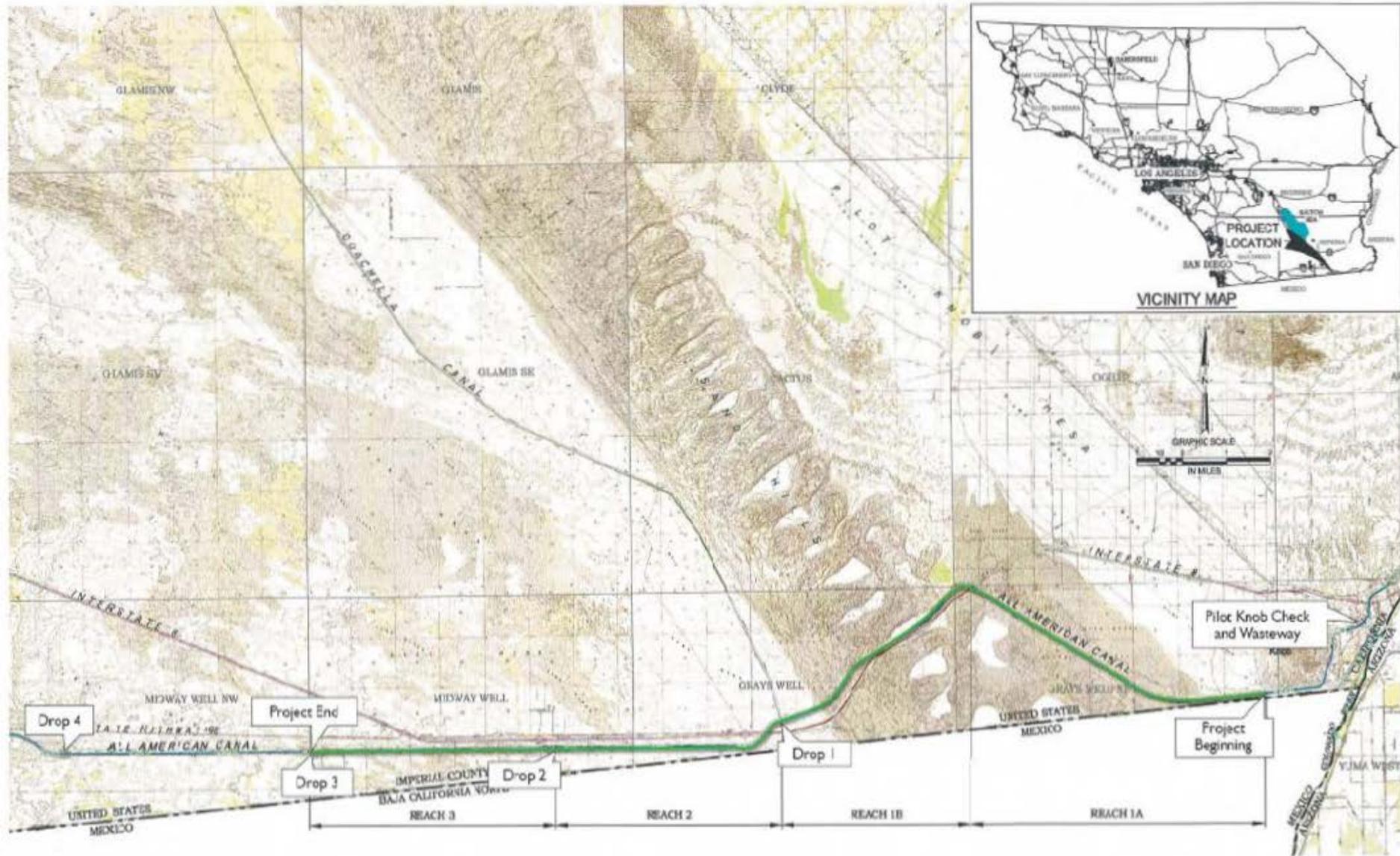


**AACLP – A core component of the California
4.4 million acre-feet Quantification Settlement
Agreement**

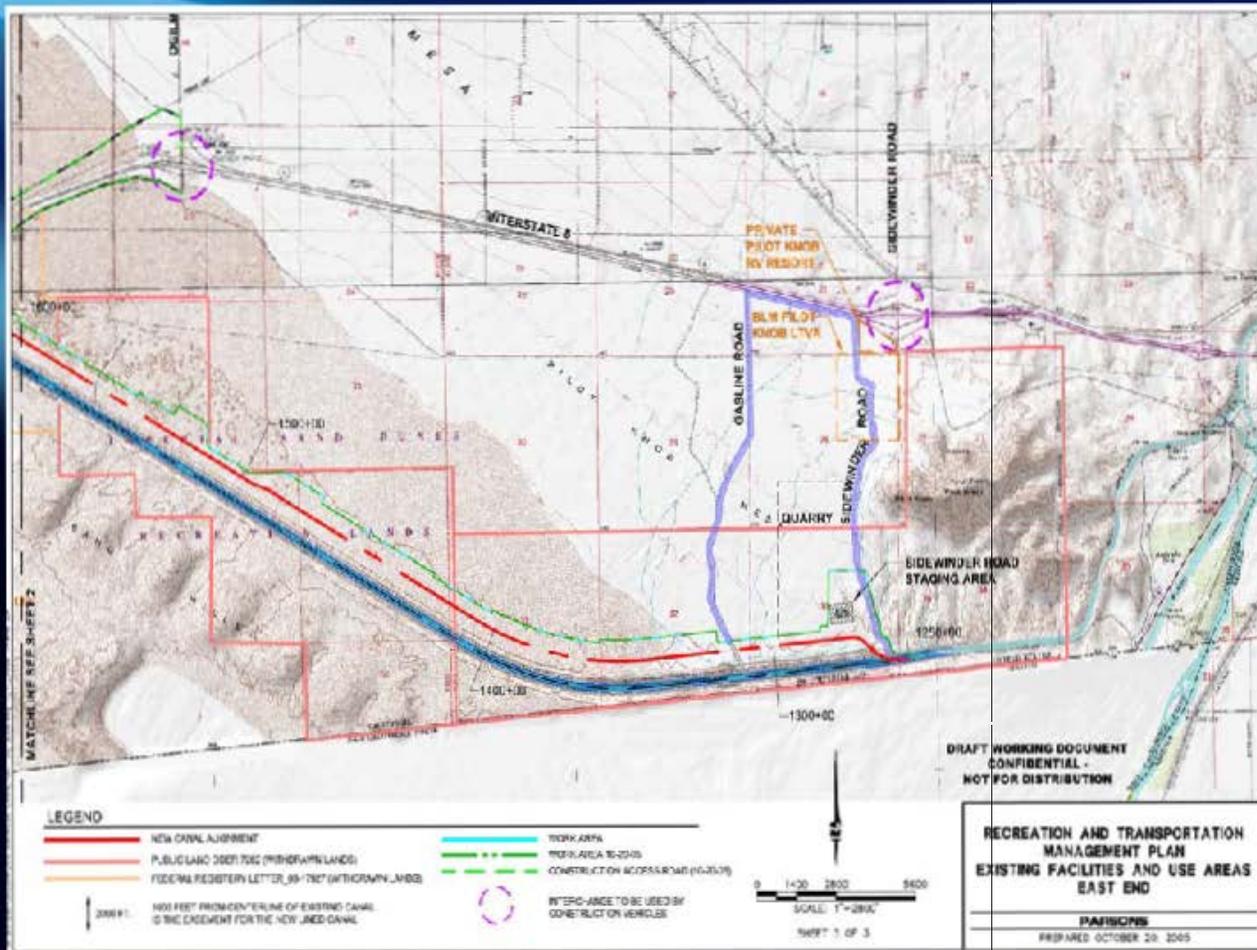
Colorado River Basin



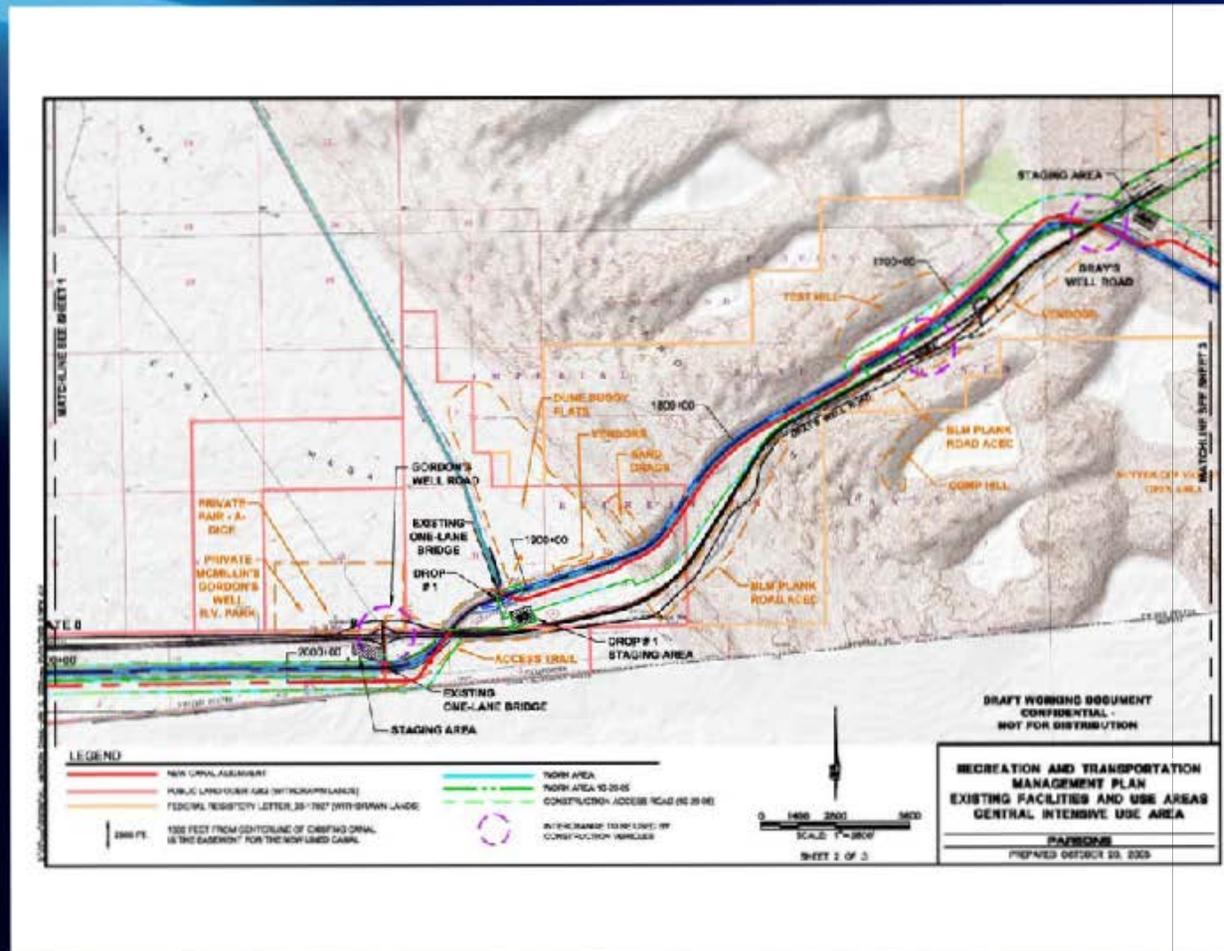
All American Cannel Lining Project Alignment



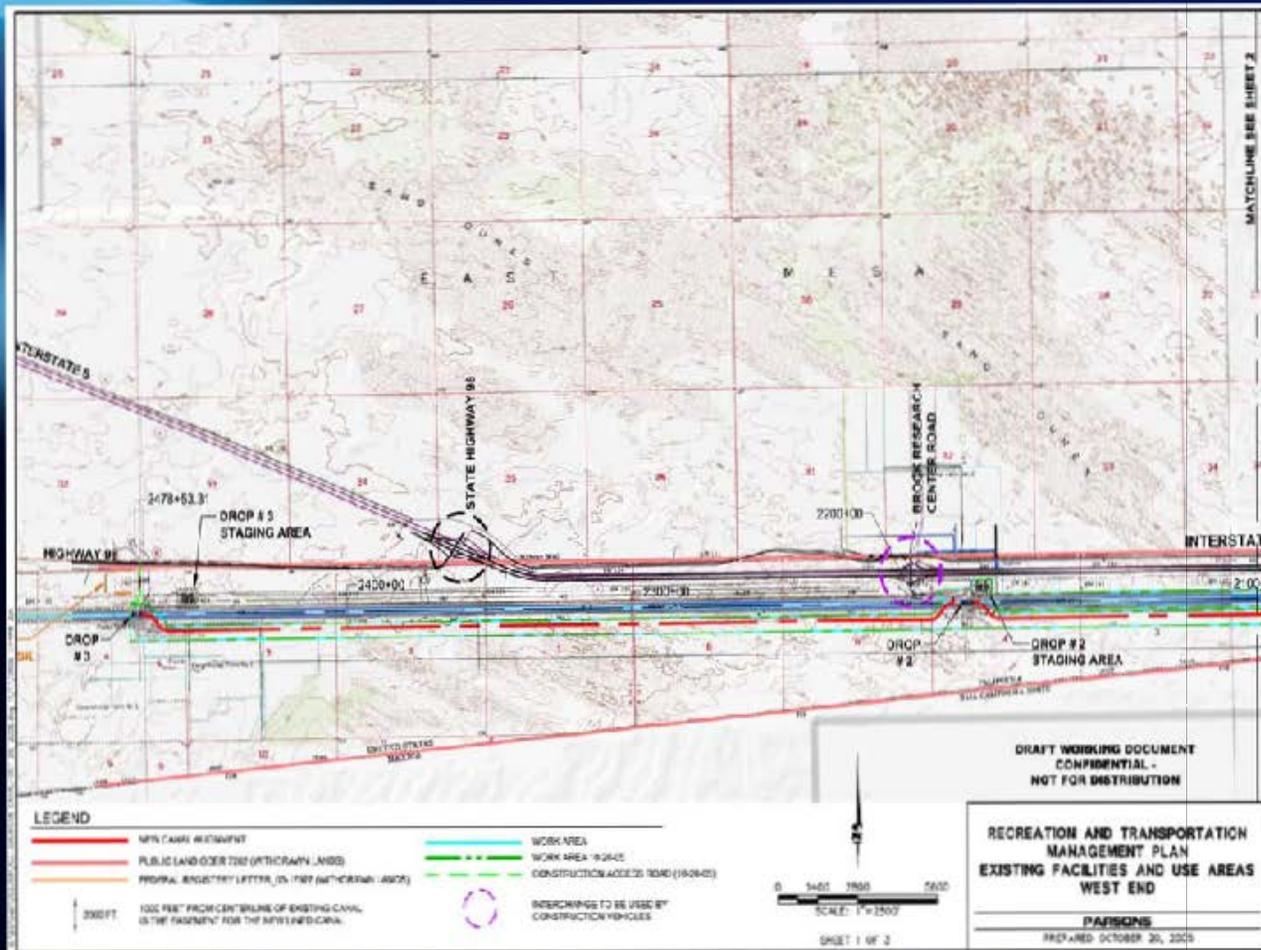
Eastern Portion of Lining Project



Central Portion of Lining Project

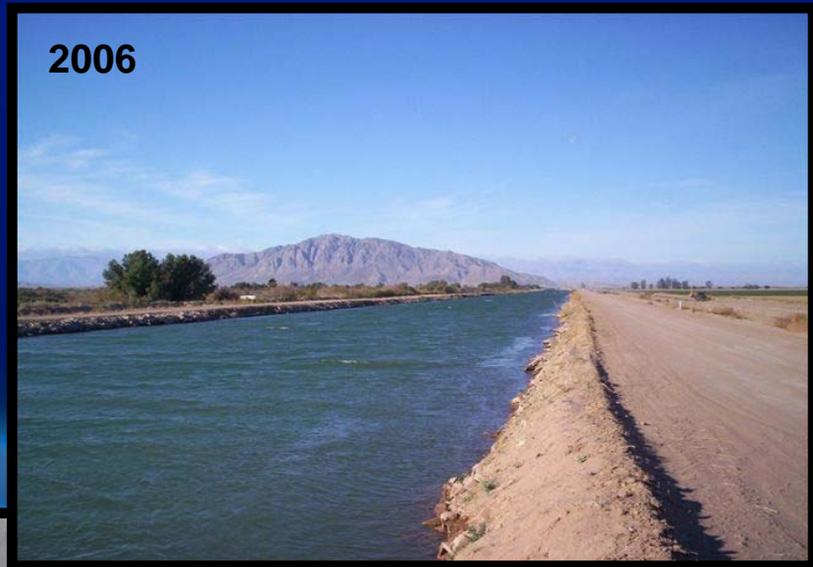


Western Portion of Lining Project



The Project

- Construct a 23 - mile long concrete canal parallel to the existing All-American Canal (AAC)
- Conserve up to 67,700 acre/feet of Colorado River Water (enough water for 500,000 people)
- Mitigate for all environmental impacts of the Project





© Miss. H. Burnett
Pasadena, CA
1912

SHAW'S CAMP
EASTSIDE HIGH LINE CANAL
IMPERIAL VALLEY,
CALIFORNIA.



Canal Photos - 1930





1635-L
A-A Canal - Sta. 315

Dec. 10, 1934



1926-L

A.A.C. Sta. 2780

Looking East

Jan. 31, 1936

Pre Construction



Environmental Issues

Yuma Clapper Rail



Colorado Fringed Toed Lizard



Peirson's Milk-Vech

Environmental Impact – Wetland Habitat

- **Loss of 99 acres of Scattered riparian vegetation**
- **Loss of 1 acre of marsh vegetation**
- **Loss of 24 acres of canal bank vegetation**



Environmental Mitigation – Wetland Habitat

- **Wetland Habitat**
- Creation of 44 acre wetland restoration site between Drop 3 and Drop 4
- Off site of AACLP
- In memory of my Supervisor's, Michel Remington, 14-year-old daughter who passed away in 2000 and who loved wildlife

Chanan Remington Memorial
Wetland Enhancement Area



Environmental Impact – Dune Habitat

- **Plants**
- **Peirson's Milk-vetch**
- **Algodones Dune Sunflower**
- **Giant Spanish Needle**
- **Wiggin's Croton**
- **Sand Food**



Environmental Mitigation – Dune Habitat

- **Dune Habitat Restoration Area within 45 – acres of old portion of abandoned All-American Canal**
- **Seed collection and storage for future distribution within spoil area and Dune Habitat Restoration Area**



Environmental Impact and Mitigation – Flat tailed horned Lizard

- Purchase 1,114 acres of habitat in the Borrego Badlands Management Area as off-site compensation
- Anza-Borrego State Park will be the owner and manager of the properties acquired at fair market value



Environmental Impact and Mitigation – Fisheries Habitat

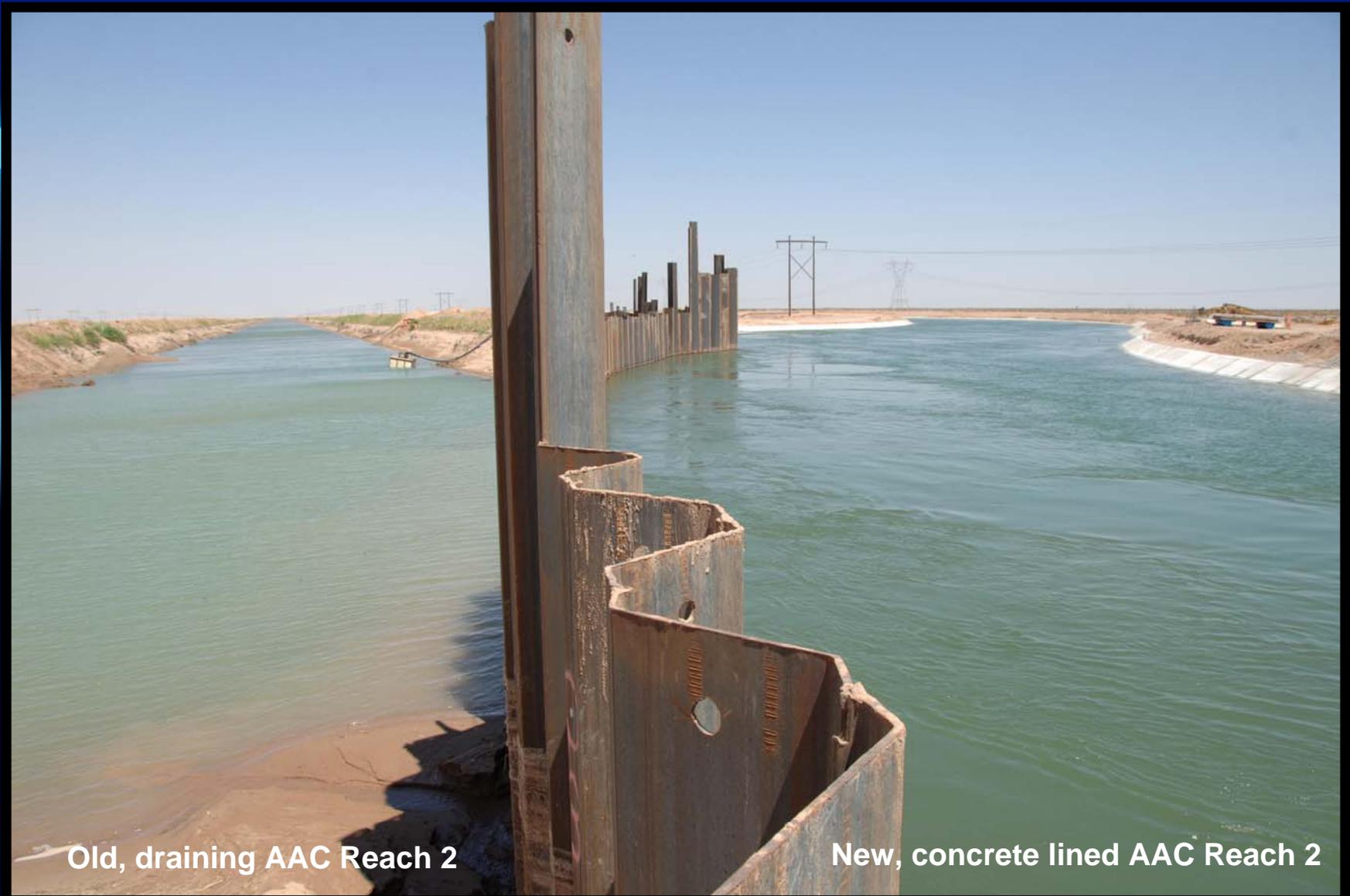
- Estimated loss of 96,000 fish due to loss of approximately 356 acres of fish habitat
- Negotiating a monetary endowment (\$300,000) for CDFG purchase of irrigation water for a new fish pond being constructed as mitigation for the Coachella Canal Lining Project at the CDFG Wister Unit



Fish Recovery in Reach 2 June 2008

California Fish & Game Code 5510:
CDFG can not condone wasting of fish





Old, draining AAC Reach 2

New, concrete lined AAC Reach 2

Reach 2 (5 miles) drained and cleared of fish



Reach 2 Fish Recovery

Two tons of:

Large mouth bass

Small mouth bass

Striped bass

Channel catfish

Flathead catfish

Blue gill

IID's Triploid grass carp

... and a bunch of common carp

One last rescued triploid grass carp



Reach 3 Fish Recovery using Reclamation's e-shocking boats November 2008



The Money Shots



Reaches 1A and 1B Fish Recovery using Reclamation's e-shocking boats March 2009

- Took the sport fish to Sunbeam Lake



Environmental Impact and Mitigation – Razorback Sucker

- **Entrained individuals found during fish recovery operations would have been pit tagged and transported back to the Colorado River under the direction of a qualified fishery biologist**



Environmental Impacts and Mitigation – Large Mammals

Negotiating with CDFG to construct DWU Wildlife Guzzlers and possibly installing Deer Fencing to protect large mammals





The successful rescue of a stranded kit fox



Environmental Impact & Mitigation – Cultural Resources

- Conducted Class III Cultural Resource surveys of full right-of-way and submitted results to the State Historic Preservation Office
- Reclamation consulted with local Native American tribes
- Developed and implemented Recovery and Discovery Plans
- Had a Cultural Resource and Tribal monitor on site during implementation of the Plan



Environmental Impact & Mitigation – Recreation, Transportation and Public Safety

- Developed Recreation and Transportation Plan to ensure public and construction crew safety during construction within the project site



Final Draft

**Recreation and Transportation Management Plan
for the
All American Canal Lining Project**



Prepared by

**The All American Canal Lining Project Work Group
Project Planning Committee**



January 16, 2006

DRAFT – CLIENT-PRIVILEGED DOCUMENT – NOT FOR DISTRIBUTION

Environmental Impact and Mitigation - Grubbing and Vegetation Removal Migratory Bird Treaty Act



Construction Photos





Aerial Shot of Flume Structure



Tie-In West of Drop 1 at Reach 2 Sta 1950+00 After Water Fill



Paving Equipment with Trimmer in Foreground



Looking East at Reach 2 New AAC and Old AAC



Aerial of Tie-Ins Up and Downstream of Drop 2



OLS Inlet during initial filling of OLS



08.29.2008 13:22

Looking Upstream of Reach 1A Vista Point



Reach 2 Half Lining



Thank You!

Questions?

