



Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

Imperial Ponds Conservation Area Habitat Creation and Monitoring

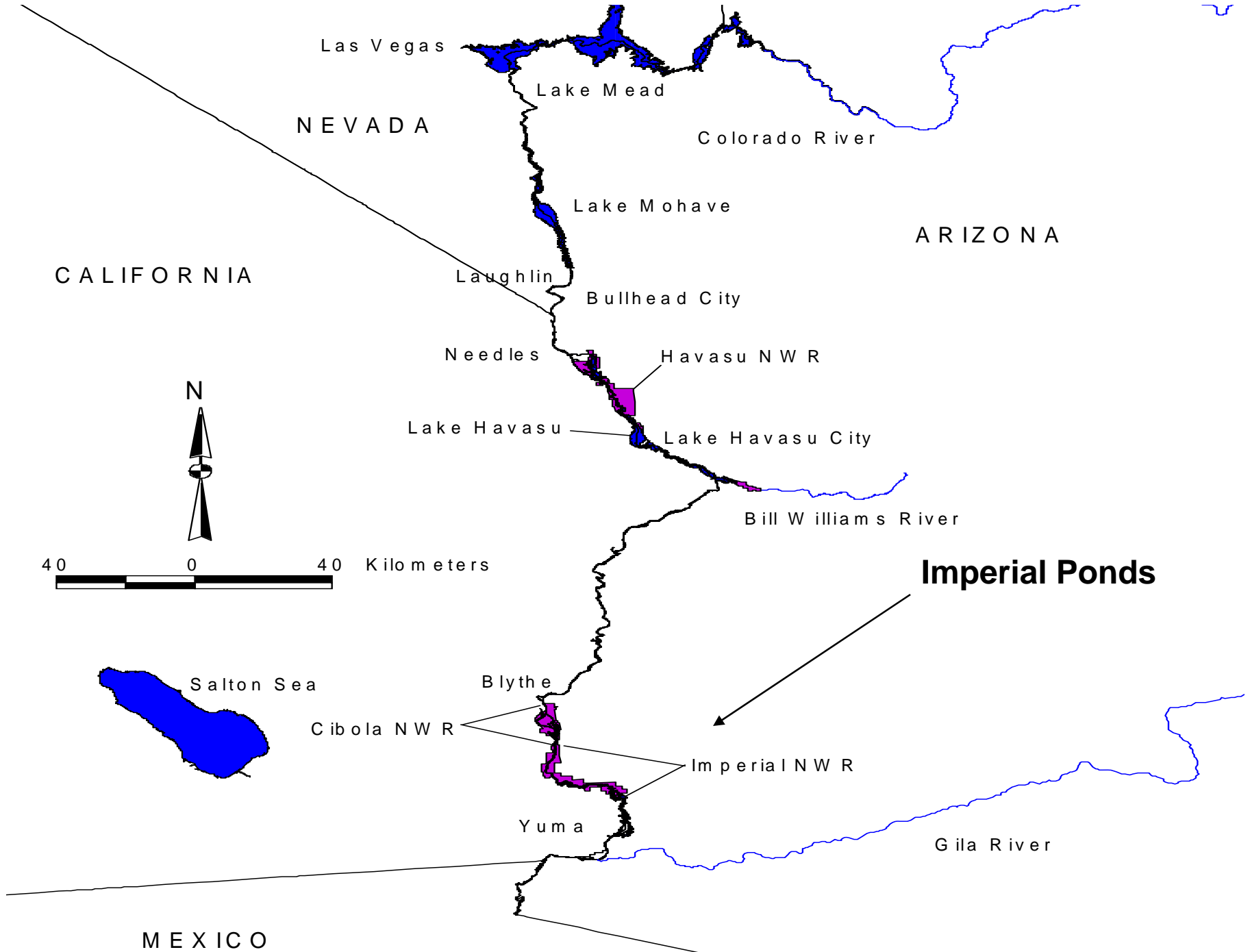
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Project Overview

- **Integrated mosaic of native land cover types**
 - 80 acres of backwaters (6 isolated ponds)
 - 34 acres cottonwood-willow
 - 12+ acres marsh
- **Situated within "Intensive Management Area", 360-acre area of focused management for sensitive wildlife species**
- **Partnership with Imperial National Wildlife Refuge**



Existing Site Conditions (2004)



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Conceptual Pond Design (2005)



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Site Preparation

Dewatering – Fall 2006



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Prescribed Burning – spring 2006



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Before & After



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Site Preparation

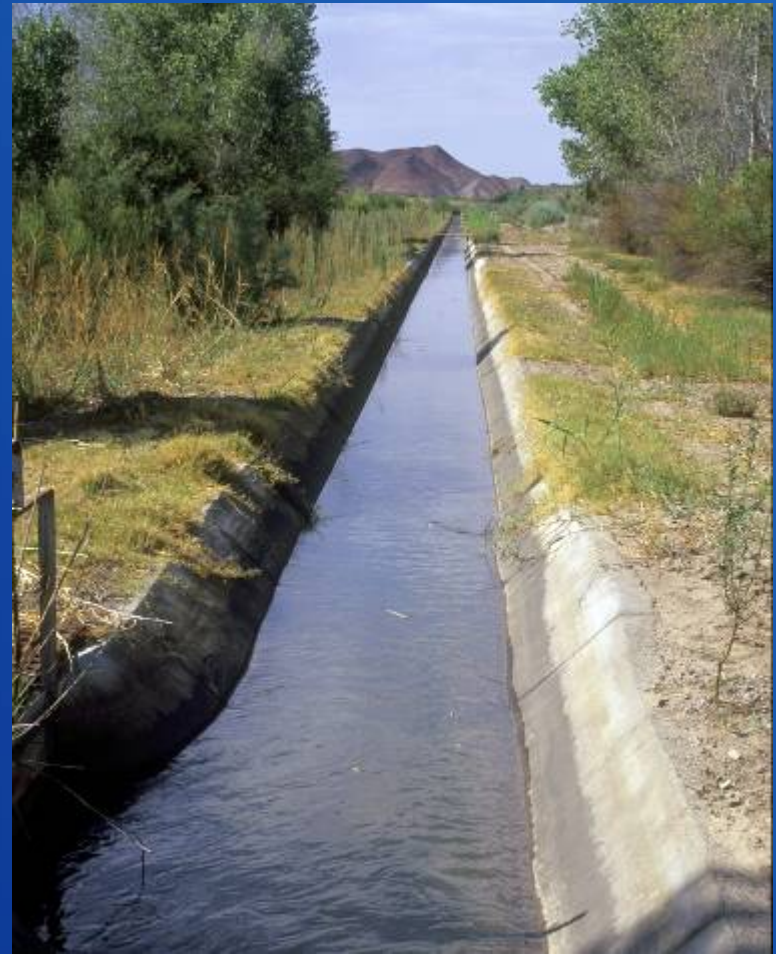
survey & staking – June 2006



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Site Preparation

temporary irrigation system – June 2006



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Ponds Construction 2006



Rip Rap Placement



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Completed Rip-Rapped Slope



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Completed Boat Ramp



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Pond 1 Completed



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October 2006



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December 2006



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Excavation Complete – April 2007



Fish Screen Installation – July 2007



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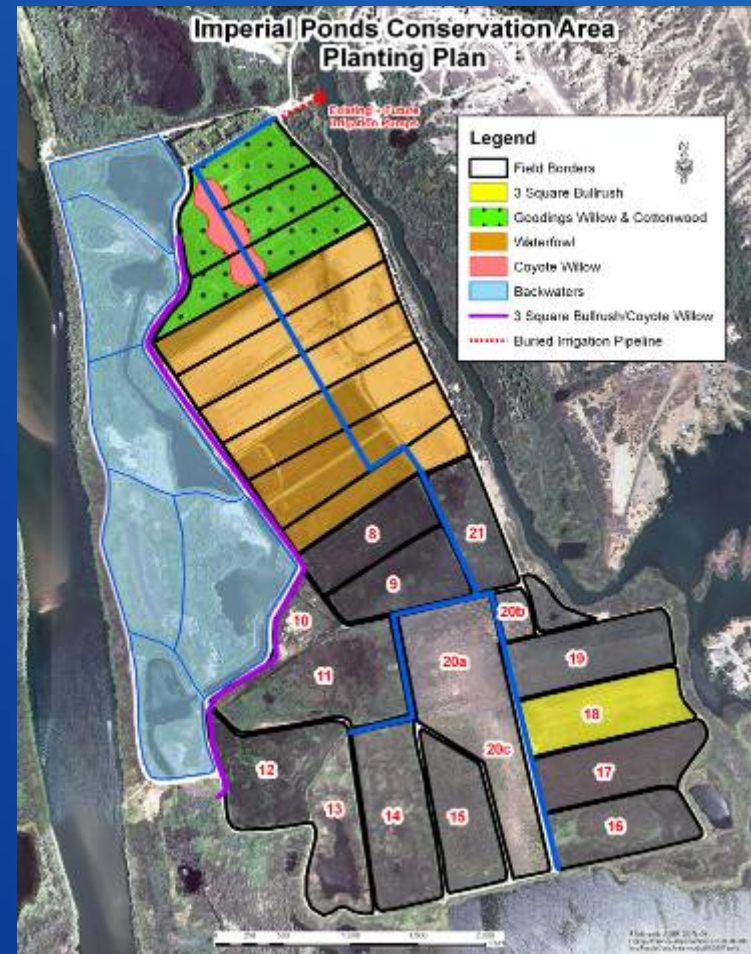
Ponds Dedication – November 2007



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Riparian Fields Timeline

- Field leveling & irrigation system construction (FY08)
- Soil Conditioning (FY09-FY10)
- Cottonwood-willow plantings (FY10)



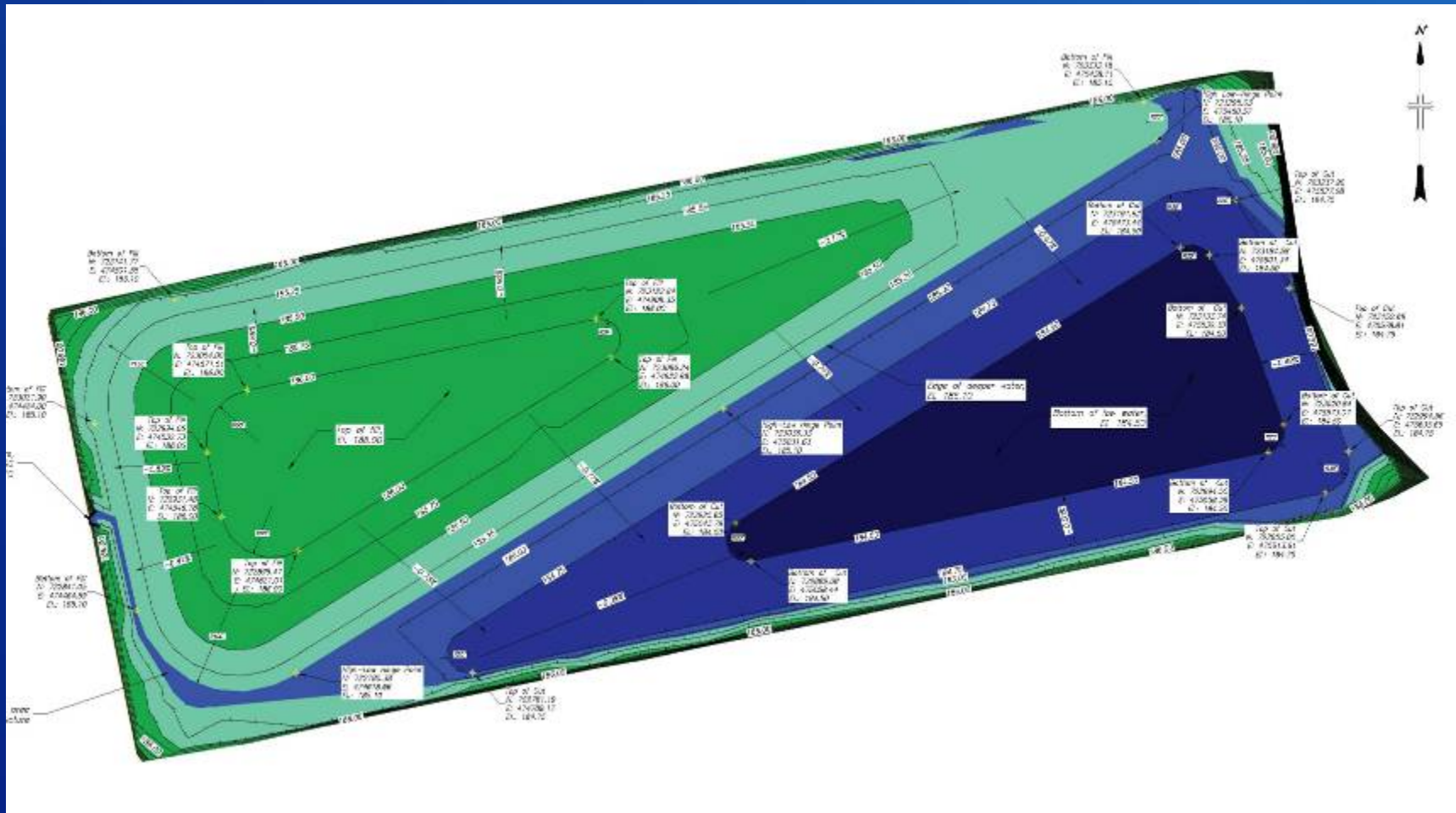
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Future Black Rail Marsh Unit



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Marsh Grading Plan



Upcoming Marsh Planting (June 2008)

- Common Three Square (*Scirpus pungens*)
- Olney's Three Square (*Scirpus olneyii*)
- Creeping Spikerush (*Eleocharis palustris*)
- Hardstem bulrush (*Scirpus acutus*)



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Monitoring Efforts

- Marsh bird surveys at each pond and field 18
- Photo points and vegetation survey at each pond
- Aerial Photos
- Small mammal trapping
- Avian surveys of created cottonwood-willow cover type.

Small Mammals

- *Sigmodons* are currently present at Imperial NWR
- Trapped in Phragmites habitat adjacent to the area to be planted with cottonwood and willow.



Avian Species



- Summer Tanager
- Yellow Warbler
- Gila Woodpecker
- Yellow-billed Cuckoo
- (migrant) Willow Flycatchers
- Yuma Clapper Rail
- Least Bittern
- Black Rail

Bat monitoring

- 4 MSCP species recorded at the site
- western red bat (*Lasiurus blossevilli*)
- Western yellow bat (*Lasiurus xanthinus*)
- California leaf-nosed bat (*Macrotus californicus*)
- Townsend's big-eared bat (*Corynorhinus townsendii*)

Good partners are the most important ingredient to a good project.

