Lower Colorado River Multi-Species Conservation Program

Balancing Resource Use and Conservation

Backwater Site Assessments and Conceptual Habitat Planning

A case study of Secret & Headquarters Lakes

Nathan Lenon (Reclamation)
Melissa Stamp (Bio-West)



A Stakeholder-Driven Evaluation and Planning Effort

- Fish and Wildlife Service
 - Imperial NWR (land manager)
 - Ecological Service (ESA Section 7)
 - Albuquerque Regional Office (water rights)
- Reclamation Offices
 - LCR MSCP (project proponent)
 - BCOO (water accounting)
 - YAO (river operations & maintenance)
 - Environmental Compliance
 - Public Affairs
- Arizona Game and Fish Dept (recreational use)

Major Planning Milestones

 $\sqrt{}$ indicates completed task

- Design Criteria February 15, 2008 √
- Initial List of Alternatives March 17, 2008 √
- Revised List of Alternatives April 30, 2008 √
- Preliminary Conceptual Alternatives June 1, 2008 √
 - include comparisons of relative cost/habitat benefit
- Revised Conceptual Design √
 - single/best option at each site
 - includes preliminary cost estimate
- Draft Final Report posted for public comments February 3, 2009
- LCR MSCP Technical Work Group Review February 18, 2009

Study Sites (Imperial NWR)

- Secret Lake (A62.3)
 - 11.2 acres
 - Connected backwater
 - Excellent rating
 - Moderately remote location
 - Currently open to public
- Headquarters Lake (A)
 - 7.3 acres
 - Connected backwater
 - High rating
 - Easily accessible
 - Currently closed to public

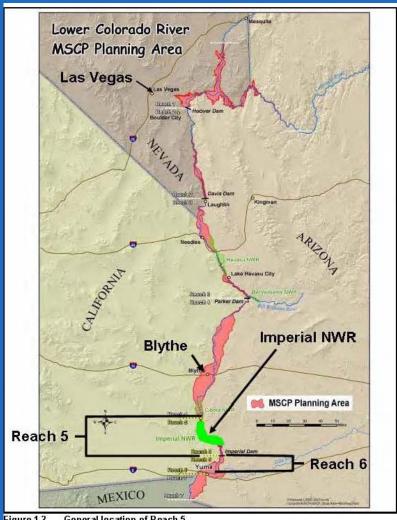


Figure 1.2. General location of Reach 5.

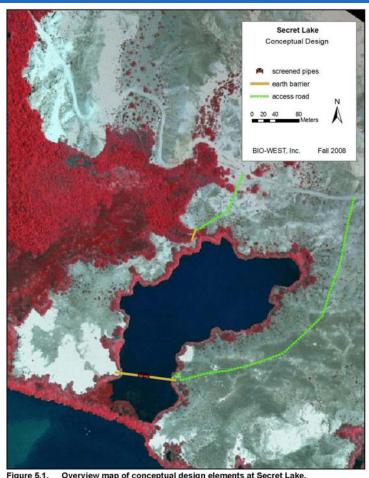
Design Criteria

- Primary Biological Criteria (fisheries)
 - Water quality
 - Habitat/cover features and complexity
 - Absence or minimal presence of non-native fish
 - Protection of existing habitat quality
- Secondary Biological Criteria (marsh/riparian)
 - Shoreline complexity/slope for marsh establishment
 - Riparian vegetation fringe for terrestrial habitat

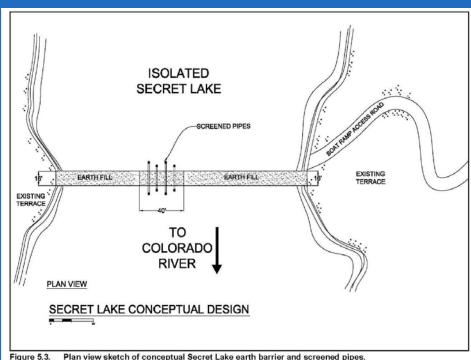
Design Criteria (cont'd)

- Logistical & Regulatory Criteria
 - Protection from overbank flooding
 - Site access considerations
 - Site closure to fishing and boating
 - Minimize import/export cuts & fills
 - No net loss of wetlands
 - Avoid impacts to known cultural artifacts

Secret Lake Conceptual Design



Overview map of conceptual design elements at Secret Lake.



Headquarters Lake Conceptual Design

