

Work Task E15: Backwater Site Selection (Revised)

FY08 Approved Estimate	FY08 Actual	Cumulative Accomplishment Through FY08	FY09 Approved Estimate	FY10 Proposed Estimate	FY11 Proposed Estimate	FY12 Proposed Estimate
\$387,000	\$433,665.01	\$1,120,797.01	\$209,000	\$286,750	\$300,000	\$300,000

Contact: Nathan Lenon, (702) 293-8015

Start Date: FY06

Expected Duration: FY14

Long-term Goal: Habitat creation

Conservation Measures: BONY2, RASU2, and FLSU1

Location: Reaches 3-6; California and Nevada, River Mile 22-276, AZ, CA, and NV

Purpose: The backwater site selection process is used to evaluate and prioritize potential sites for backwater habitat creation for razorback sucker, bonytail, and flannelmouth sucker.

Connections with Other Work Tasks (past and future): E16 is used with this work task to identify projects other than existing backwaters for habitat creation.

Project Description: Backwater site selection consists of a five-step process, to evaluate existing backwaters along the Colorado River, within the LCR MSCP planning area, between reaches 3-6, ultimately resulting in the conceptual-level planning efforts for a select number of sites, which would become available for the Program Manager to select for inclusion into the Program. New backwaters, which may be constructed separate from the existing river channel (and its associated backwaters), are excluded from this effort, and would follow the general Site Selection process (work task E16). Backwaters may be disconnected or connected with the main channel of the Lower Colorado River. Backwaters that are disconnected from the LCR channel are of considerably higher value to bonytail and razorback sucker than connected backwaters in the LCR and are the preferred type of backwater to achieve LCR MSCP conservation goals for these species.

Because some 1,000 backwaters currently exist (as of the 2004 mapping effort) within LCR MSCP reaches 3-6, the backwater site selection effort was divided into two phases: reaches 5-6 represent the first phase, and reaches 3-6 will represent the second.

Backwater Site Selection starts with Step 1, an inventory and review of existing GIS data, aerial videos, and photographs to quantify the number, size, and location of currently existing backwaters, and to identify land ownership at a broad level. Reclamation personnel work with land managers and resource agencies to identify land use issues, and other regulatory constraints,

which is used to generate a list of candidate sites (approximately 25) for further evaluation. Helicopter reconnaissance flights are conducted during winter low-flow periods to confirm the presence of water year-around at these candidate sites, prior to conducting any site visits.

Steps 2 and 3 entail conducting brief (1-2) day visits at each of the (25) candidate sites, and a biological rating effort. Biological and physical data is collected an input to a biological suitability model, established specifically for this effort. The model generates a “biological suitability rating”, such as poor, moderate, good, or excellent, to provide decision makers a basic scientific understanding of the potential of each site, in their existing conditions, to provide habitat for LCR MSCP covered fish species. Once the biological ratings are established, Reclamation solicits input from cooperating land managers, resource agencies, and the general public, as sites are selected and prioritized for further evaluation and planning. Approximately 4-5 sites are chosen for further evaluation, of the (25) candidate sites evaluated in steps 2-3.

Step 4 of the process includes conducting quarterly sampling, to construct a one-year environmental baseline for each of the 4-5 candidate backwater sites which proceed to this point. While this environmental baseline is being constructed, Reclamation works with the landowner (and appropriate project stakeholders) to develop a conceptual habitat creation plan and preliminary cost estimates for project implementation. At the conclusion of Step 4, sites may be selected by the Program Manager for implementation into the program Step 5. Site selection is considered to be final once an executed land use agreement is in place between Reclamation and the appropriate land manager.

FY08 Accomplishments: During FY08, Reclamation completed the initial site visits and biological suitability ratings (steps 2-3) for 25 candidate sites in reaches 5 and 6. The draft final report of this effort was posted to the Web site for a 30-day public comment period, during which time no comments were received. The document was subsequently finalized and published as *Backwater Inventory: Reaches 5 & 6, Steps 2-3: Screening and Evaluation (March 2008)*. Reclamation staff spent the remainder of FY08 engaged in discussions with land managers and resource agencies to solicit comments from agencies and the public, to guide decisions regarding which backwaters should enter (Step 4).

During FY08, Reclamation initiated Step 4 backwater habitat site assessments and conceptual planning for two sites on Imperial NWR: Secret Lake (A62.3) and Headquarters Lake (A59.7). At the time of this publication, it is anticipated that the final reports from this effort will have been posted to the Web site, following a 30-day comment period. This effort has involved coordination and participation between Reclamation, the USFWS, and AZGFD, with input from the general public.

During FY08, Reclamation also awarded a contract for the Step 4 backwater habitat site assessments and conceptual planning for three additional sites in LCR MSCP reaches 5 and 6, although the selection of these sites has not been finalized at this time. Reclamation has worked extensively with the USFWS, AZGFD, CAFGD, BLM, and the general public to solicit input toward the selection of these sites. This work will begin during FY09, and will be complete in FY10.

FY09 Activities: Reclamation intends to continue working towards completion of the assessment for the three additional backwater sites in reaches 5 and 6. Reclamation intends to solicit additional resource agency, land manager, and general public involvement in this process, as the site selection efforts proceed. Finally, Reclamation is in the process of constructing project management templates for initiating and planning backwater habitat creation projects, which will result in improved consistency and effectiveness of future planning efforts. Extensive interagency coordination and public outreach is being planned.

Proposed FY10 Activities: Reclamation has decided to postpone further conceptual planning for backwater habitat creation to provide additional time to perform further research on screening requirements for non-native fish, revising backwater habitat design criteria, and evaluating alternative water supply and filtration methods.

Backwater site selection will commence in reaches 3 and 4. Step 1 will be completed in FY10, with the final report posted to the Web.

Pertinent Reports: *Backwater Inventory: Reaches 5 & 6, Steps 2-3: Screening and Evaluation (March 2008); Backwater Site Selection for Reaches 5 & 6, Backwater Site Assessments*