

Work Task E15: Backwater Site Selection

FY07 Estimates	FY07 Actual	Cumulative Accomplishment Through FY07	FY08 Approved Estimate	FY09 Proposed Estimate	FY10 Proposed Estimate	FY11 Proposed Estimate
\$430,000	\$421,635	\$687,132	\$387,000	\$209,000	\$443,000	\$388,500

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Start Date: FY06

Expected Duration: FY11

Long-term Goal: Habitat creation.

Conservation Measures: BONY2, RASU2, and FLSU1.

Location: Reaches 3-6, CA and NV; river miles 22-276, AZ, CA, and NV.

Purpose: To establish and validate a consistent standardized technique for evaluating and selecting backwaters with the highest probability of success, based on biological and physical attributes, as well as other program considerations (e.g., cost, land ownership, and feasibility). The technique will then be used to inventory backwaters in reaches 3-6. This inventory is expected to identify potential backwater creation sites, develop conceptual restoration approaches, estimate the relative cost of habitat creation, and estimate the habitat credit potential of the backwater. This would generate a list of potential sites to be developed as habitat, which would be sequenced into the work plan process based on habitat creation goals and budget constraints.

Connections with Other Work Tasks (past and future): Work task vegetation and species monitoring is being conducted under F1, F2, F3, F4, F5, and D9.

Project Description: Reclamation has developed a standardized technique for evaluating and selecting backwaters for habitat creation, considering biological attributes and other program considerations (e.g., cost, land ownership, and feasibility). The backwater inventory process is being completed in two phases. The first phase, which started in FY06 and is scheduled to be completed in FY08, is the inventory and evaluation of backwaters in reaches 5 and 6. The second phase, which began in FY07 and is scheduled to be completed in FY11, is the inventory and evaluation of backwaters in reaches 3 and 4. Upon completion of the inventory and evaluation, backwaters selected for restoration will be addressed under site-specific work tasks. An additional effort may be undertaken in the future, specific to flannelmouth suckers in Reach 3, as additional information becomes available on life history and habitat creation requirements.

For planning purposes, each phase of the backwater inventory process is divided into five steps. The first step is the inventory of existing backwaters. Basic information that can be obtained

without visiting the sites is used to make these determinations. This information includes backwater size and connectedness to the river, and willingness of the landowner/manager to participate in the program. The end result of the inventory is a list of approximately 25 candidate backwater sites to move forward in the selection process.

During the second step, the candidate backwater sites are visited during the summer, with one site visit to each backwater. Physical and biological data are collected to generate biological ranking scores and habitat opportunity rankings as described in the Draft Final Guidelines for the Screening and Evaluation of Potential Conservation Areas. Trip reports are completed for review by the LCR MSCP Program Manager and a Technical Work Group. The estimated cost for the initial site visit, sampling effort, and bathymetry is \$10,000 per backwater. In the fourth step, habitat assessments are completed for the four or five sites with the final highest priority, which includes four quarterly monitoring trips. At the conclusion of these assessments, final reports will be completed and reviewed by the Technical Work Group. The estimated cost for 1 year of quarterly sampling is \$40,000 per backwater.

Previous Activities: The *Draft Guidelines for the Screening and Evaluation of Potential Conservation Areas* has been drafted, and includes guidelines specific to selecting backwaters. Through FY06, step 1 for Reaches 5 and 6 backwaters has been completed.

FY07 Accomplishments: During FY07, the *Final Model Evaluation Report* was completed and is posted on the LCR MSCP Web site. The final report updated the parameters and values for generating the biological rating for backwaters.

Step 1 of the backwater site selection process for reaches 5 and 6, creating a list of 25 candidate backwater sites to move forward in the process, was completed. Activities in support of Step 1 included: a helicopter survey of reaches 5 and 6 during winter low-flows to determine the degree of permanence of the candidate backwater sites, meetings with land owners and resource management agencies, and securing special use permits for gaining site access for further evaluations. During the summer of FY07, site visits (Step 2) were conducted at each of the 25 candidate backwater sites. Trip reports (Step 3) for these site visits are being completed during FY08.

The initial backwater inventory data review (Step 1) of Reach 3 and Reach 4 backwaters was initiated. During FY07, the data review of Reach 3 and Reach 4 backwaters and an initial list of candidate backwater sites to be evaluated during a helicopter survey in FY08 during winter low-flows was completed.

FY08 Activities: Trip reports (Step 3) for reaches 5 and 6 were discussed with the Technical Work Group of the Steering Committee in February of 2008.

During FY08, four to five sites in reaches 5 and 6 will be selected to undergo quarterly sampling (Step 4). At the completion of this sampling, habitat assessments will be prepared, which will include conceptual designs for habitat development and preliminary cost estimates. Completion of these reports is anticipated during FY09, after which time sites will be selected and prioritized for implementation, based on program needs and budgetary constraints. As discussed with the

Technical Work Group, two sites (Headquarters and Secret Lakes) have already been selected to be “fast tracked” to the next stage in the selection process (Step 4). Reclamation is planning to implement one of these two sites in FY10.

During FY08, Step 1 of the backwater site selection process for reaches 3 and 4, which will generate a list of 25 candidate backwater sites to move forward in the process, will be initiated. A helicopter survey has already been completed during winter low-flows. The final report will be posted to the LCR MSCP Web site.

Proposed FY09 Activities: During FY09, coordination with land owners in reaches 3 and 4 to secure access for completing site visits at approximately 25 candidate backwater sites is anticipated. Because many more land owners manage backwaters in reaches 3 and 4 than in reaches 5 and 6, additional time will be required to gain the necessary site access/permits. Site visits to reach 3 and 4 backwaters is planned for summer of FY10.

Pertinent Reports: *Draft Guidelines for the Screening and Evaluation of Potential Conservation Areas; Colorado River Backwaters Restoration Final Model Evaluation Report; and Backwater Inventory: Reaches 5 & 6, Step 1: Identification of Backwaters for Screening and Evaluation* are posted to the LCR MSCP Web site.