

Work Task C59: Selenium Monitoring in Created Backwater and Marsh Habitat

FY14 Estimate	FY14 Actual Obligations	Cumulative Expenditures Through FY14	FY15 Approved Estimate	FY16 Proposed Estimate	FY17 Proposed Estimate	FY18 Proposed Estimate
\$250,000	\$23,637.54	\$45,168.21	\$250,000	\$200,000	\$200,000	\$200,000

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Start Date: FY13

Expected Duration: FY25

Long-Term Goal: To develop a long-term selenium monitoring plan for the LCR MSCP

Conservation Measures: MRM2 and MRM5 (BONY, RASU, CLRA, and BLRA)

Location: BBKA, Hart Mine Marsh, and the IPCA

Purpose: To evaluate the selenium levels within created backwater and marsh habitats and establish a selenium monitoring plan as required by the HCP

Connections with Other Work Tasks (Past and Future): Monitoring for selenium will be conducted for habitat created through Conservation Area Development and Management (Section E) work tasks (E1, E9, E14, E15 [closed], E16, E25, E27, and E28) and will be incorporated into Post-Development Monitoring (Section F) work tasks (F1, F3, F5, and F7).

Project Description: As described in the HCP conservation measures, the LCR MSCP is developing 512 acres of marsh and 360 acres of backwaters as part of its habitat creation goals. These created habitats will be monitored over the term of the program to ensure that they maintain their function for all associated covered species. Sampling efforts will be implemented or continued at designated project sites for the purpose of determining baseline or changes in selenium concentrations. The initial sampling phase is expected to provide a representative baseline sample and assessment of variability across each site. Once this information is known, a long-term selenium monitoring plan can be recommended for each specific conservation area to be carried out under the appropriate Post-Development Monitoring (Section F) work task. Subsequent years' sampling may be reduced as appropriate. Multi-year sampling can then be used to develop a larger dataset on which management decisions can be based

through the adaptive management process. As new conservation areas are developed, this exploratory sampling phase will continue to be accomplished under this work task.

Previous Activities: Limited funds were expended under this work task in FY13 due to budget constraints, including budget reductions due to sequestration. Implementation of this project will be evaluated as funding becomes available.

FY14 Accomplishments: A draft study design for sampling three LCR MSCP conservation areas was completed in FY14. Sites identified included the BBCA, Hart Mine Marsh, and Imperial NWR. A small amount of FY14 funding was expended for the purchase of sampling supplies in preparation of this work. Implementation of this project is scheduled for FY15.

FY15 Activities: Water and substrate samples will be collected at the BBCA, Hart Mine Marsh, and Imperial NWR (multiple water bodies). Laboratory analyses of water and substrate samples will be compared to selenium thresholds suggested by the USFWS for aquatic species, and an annual report detailing methods, results, and recommendations will be prepared. The results from the first study year will be used to inform sampling intensity and frequency in subsequent years.

Proposed FY16 Activities: Selenium monitoring will continue at identified LCR MSCP conservation areas. Baseline sampling will be expanded to the LDCA and Yuma East Wetlands. Specific work proposed will be similar to the previous year and will include collecting water and sediment samples from each site, analyzing collected samples, comparing extant selenium levels to known thresholds, and providing an annual report. Additional sites may also be included for pre- and/or post-development sampling as they are identified. Individual site evaluations will be conducted for each new site in order to determine sampling locations, number of samples, and expected level of effort.

Pertinent Reports: N/A