

## Work Task E25: Big Bend Conservation Area

FY14 Estimate	FY14 Actual Obligations	Cumulative Expenditures Through FY14	FY15 Approved Estimate	FY16 Proposed Estimate	FY17 Proposed Estimate	FY18 Proposed Estimate
\$30,000	\$30,349.86	\$1,164,390.11	\$30,000	\$30,000	\$30,000	\$30,000

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**Start Date:** FY09

**Expected Duration:** FY55

**Long-Term Goal:** Habitat protection

**Conservation Measures:** BONY2, RASU2, and FLSU1

**Location:** Reach 3, Nevada, River Mile 266.5

**Purpose:** To protect an existing backwater from development, which will result in a 15-acre backwater credit

**Connections with Other Work Tasks (Past and Future):** Marsh bird surveys are conducted under Work Task D1, while fish surveys have been conducted under multiple work tasks in Species Research (Section C) and Work Task F5.

**Project Description:** The Boy Scout Camp purchased by the SNWA, combined with the adjacent backwater managed by the State of Nevada, has collectively been identified as the BBKA. The conservation area includes approximately 15 acres of backwater within the Nevada portion of the Colorado River that will be protected and approximately 15 acres of upland area adjacent to the backwater. The dry upland area is planned to be enhanced for education and outreach purposes by the SNWA at minimal cost to the program and is being completed in concert with protection of the backwater. The properties are adjacent to and buffered by Big Bend State Park.

Past native fish monitoring efforts have indicated the presence of native fishes in and adjacent to the existing backwater. Successfully securing the site will result in 15 acres of backwater habitat credit that benefits flannelmouth sucker, razorback sucker, and bonytail in Reach 3 of the LCR MSCP planning area. Reach 3 maintains the only self-sustaining population of flannelmouth sucker and has very few undeveloped backwaters, which make protection of the existing backwater a LCR MSCP priority. The Colorado River and Reach 3, in particular, are experiencing extensive urban development. The BBKA, formerly known as

the Boy Scout Camp, maintains access to the river via the adjacent backwater and would make the area a likely candidate for development. Securing the property for the LCR MSCP ensures the commitment of adjacent landowners and controls future development in the surrounding areas. Long-term security of the property provides protection to the backwater and allows for future restoration activities as warranted.

**Previous Activities:** The Land Use Agreement documents the roles and responsibilities of each party pertaining to continual management of the BBCA. In FY09, the SNWA assumed the responsibility of restoring the upland portion of the conservation area at minimal cost to the LCR MSCP. LCR MSCP staff reviewed and concurred with the site improvement plans to ensure compatibility with the program. Salt cedar was removed from the upland site, and roughly 800 mesquite trees were planted. LCR MSCP staff provided mesquite trees, developed the existing groundwater well, and procured a portion of the irrigation system in support of the SNWA's upland restoration action. In FY10, the NDOW received approval from the Nevada Wildlife Commission to install two buoys, which have been placed at the entrance of the backwater.

Prior to FY13, all fisheries activities were restricted to February through May as part of ongoing flannelmouth sucker activities associated with Work Task C15 (closed). Two razorback sucker and one flannelmouth sucker were contacted in FY12. Marsh bird and small mammal surveys were conducted annually.

#### **FY14 Accomplishments:**

**Maintenance/Restoration/Management.** Selective clearing of non-native vegetation to reduce the risk of fire was conducted using youth conservation crews funded with non-cost share dollars. Once cleared, non-native material was chipped and spread onto the trail system. Mulch allowed for dust control and road stabilization for work trucks entering the site. The SNWA's effort to establish native plants on the upland property and ensure compatibility with the goals of backwater protection will continue to be supported under the LCR MSCP. Erosional damage to the parking lot from a summer rainstorm was repaired, and access to the backwater was maintained.

The BBCA upland section also experienced flood damage in September 2014. The main wash leading into the site flooded and washed debris over Needles Highway and into the site, damaging the fencing and filling the culverts with sediment. The State of Nevada Department of Transportation/Clark County cleared the highway of sediment and debris but left the culverts full of sediment. Clark County is responsible for clearing the culverts, but road and fencing repairs are the responsibility of the SNWA. No repairs were conducted in FY14 because flood occurred near the end of the fiscal year.

**Monitoring:** Fish monitoring occurred 2 nights per month in December and February – May. A variety of techniques were used during the surveys in an attempt to contact multiple species and life stages. Eleven razorback sucker and one flannelmouth sucker were contacted via netting and remote PIT scanning. Electrofishing continued to be ineffective and will be discontinued in future years. Larval sampling resulted in the capture of several razorback sucker in February and March; these were the first larval razorback sucker contacted within this conservation area. Larval flannelmouth sucker were contacted at rates similar to past years. Under a sonic telemetry study (conducted under Work Task C53), continuous use of this backwater by one flannelmouth sucker was recorded; this fish was contacted repeatedly for 10 days. Water quality monitoring continued to indicate that this was not a cause for concern, as this was to be expected with such a substantial hydrological connection to the river.

Marsh bird surveys were conducted during March and April. No LCR MSCP species were detected.

Small mammal trapping was conducted in the fall and winter. One Colorado River cotton rat was captured in the spring. Fifty-four desert pocket mice were captured in the fall, and five were captured in the spring.

#### **FY15 Activities:**

**Maintenance/Restoration/Management:** Youth conservation crews funded with non-cost share dollars will continue to be used to clear vegetation. The site provides a good venue for youth to conduct habitat maintenance and is consistent with the goals and objectives of the conservation area. LCR MSCP staff will be available for coordination meetings, site visits, meetings with adjacent landowners, and similar meetings when required. Routine maintenance includes blading the roads to ensure access and performing minor repairs as necessary.

**Monitoring:** Fisheries monitoring will be conducted at a level and interval similar to FY13. Monitoring will include monthly survey trips during the razorback sucker and flannelmouth sucker spawning seasons. Trips will include larval light trapping, remote PIT scanning, and trammel netting. Water quality profiles will be performed during each monitoring event and quarterly outside of the monitoring period. Marsh bird surveys will be conducted during March, April, and May at the four established survey points. Small mammal trapping will be conducted in the fall and spring. MacNeill's sootywing surveys will be conducted in the spring and summer.

#### **Proposed FY16 Activities:**

**Maintenance/Restoration/Management:** Youth conservation crews funded with non-cost share dollars may continue to be used to perform maintenance

activities. The site provides a good venue for youth to conduct habitat maintenance and is consistent with the goals and objectives for the conservation area. The SNWA's effort to establish native plants on the upland property and ensure compatibility with the goals of backwater protection will continue to be supported under the LCR MSCP.

**Monitoring:** Fisheries monitoring will be conducted at a level and interval similar to previous years. Monitoring trips will include larval light trapping, remote PIT scanning, and trammel netting. Water quality profiles will be performed during each monitoring event and quarterly outside of the monitoring period. Marsh bird surveys will be conducted during March, April, and May at the four established survey points. Small mammal trapping will be conducted in the fall and spring. MacNeill's sootywing surveys will be conducted in the spring and summer.

**Pertinent Reports:** The *2013 Big Bend Conservation Area Annual Report*, which summarizes any planting conducted, site management, the results of monitoring, and any recommendations for future adaptive management, will be posted on the LCR MSCP Web site once integration of the data collected throughout the calendar year is complete.