

Final Project Report

Agency/Organization: Las Vegas Valley Water District

Project Name: Desert Tortoise (DT) Habitat at the Las Vegas Springs Preserve (LVSP)

Project Number: 2007-LVVWD-719Q

Term of Agreement: April 1, 2014 – January 20, 2016

Report Period: Final Report

Project Contact Name and Information: Kathy Flanagan
1001 S. Valley View Boulevard, M/S 760
Las Vegas, NV 89153
(702) 258-3173

Executive Summary

A 15-acre desert tortoise habitat was constructed at the Springs Preserve. The goal was to create a refuge for a controlled population of tortoises while also increasing public awareness and interest in desert tortoise recovery.

Introduction

Funded by the Clark County Multiple Species Habitat Conservation Plan (MSHCP), the Las Vegas Valley Water District (LVVWD) constructed a 15-acre habitat at the Springs Preserve. The Springs Preserve is a 180-acre attraction in Las Vegas that features botanical gardens, museums, family events, traveling exhibits, trails and other attractions designed to commemorate Las Vegas' dynamic history and to provide a vision for a sustainable future. The Springs Preserve is owned and operated by the Las Vegas Valley Water District.

Description of Project

MSHCP funding supported the construction of the 15-acre site at the northwestern corner of the Springs Preserve and included the materials, parts and labor associated with the acquisition and introduction of the tortoises; installation of desert tortoise exclusion fencing and access gates that follow approved U.S. Fish and Wildlife specifications; development and installation of interpretative signage; equipping tortoises with radio telemetry transmitters and associated equipment to monitor and report tortoise movement; habitat enhancements (including growing and installing native food sources); and development/implementation of educational programming.

Background and Need for the Project

The desert tortoise was listed as threatened on the Federal Endangered Species List in 1990 and is identified as a priority species in the MSHCP. Several factors have contributed to diminished desert tortoise populations:

- Urban development of western deserts, which resulted in a loss of tortoise habitat;
- Increased populations of ravens (birds of prey that feed on hatchling tortoises); and
- The release of former pet tortoises into the wild over the past several decades, which enabled a deadly bacterial infection to appear more and more frequently among wild tortoises.

The construction of the Springs Preserve's tortoise habitat and implementation of educational programming is key to expanding public knowledge and support for the recovery of this and other threatened and endangered species.

Management Actions Addressed *(as identified in MSHCP)*

Public education on the status and conservation of covered species is an important component of the MSHCP. Through education, the desire is to increase the public understanding and awareness of the value of Clark County's natural ecosystems. Finalization of the Springs Preserve's tortoise habitat, along with the implementation of educational programming will contribute to expanding public knowledge and support for the recovery of the desert tortoise.

Goals and Objectives of the Project

- Contribute to the recovery of the endangered desert tortoise by serving as a refuge for a controlled population.
- Expand public knowledge and interest in the recovery of the desert tortoise.
- Monitor the on-site desert tortoise population and report findings to stakeholders and the public.

Methods and Materials

- Acquire necessary permits and/or approvals for the introduction of desert tortoises at the Springs Preserve.
- Conduct formal survey of cultural and environmental resources within the project area.
- Installation of tortoise fencing.
- Creation and installation of interpretative panels at trail entrance points.
- Equip tortoises with transmitters and test reporting accuracy.
- Introduce desert tortoises into the Springs Preserve's project area.
- Utilize media based platforms to promote the project area (Springs Preserve website, Springs Elemental videos, and social media).
- Integrate tours, guest speakers, and special appearances of Mojave Max into Springs Preserve educational programming.

Results and Evidence of Results *(Objectives completed, evidence objectives/needs were met/fulfilled, tables, figures of data, maps, graphs, tables, etc.)*

- Conducted a formal survey of cultural and biological resources within the proposed project area.
- Drafted the required documentation for Section 106 Cultural Resource review and submitted to the State Historic Preservation Office (SHPO).
- Prepared the construction contract package, including project scope of work, for the installation of the tortoise exclusion fencing on-site. This was included as part of the bid process for securing a contractor.
- Received a written permit from USFWS regarding the acquisition of desert tortoise for the project area in late October 2014. Due to the closure of the Desert Tortoise Conservation Center in December 2014, Preserve Zoology staff acquired and temporarily housed the tortoises on-site at the Holding & Quarantine Facility ahead of the original schedule. Staff modified enclosures to provide appropriate heating and lighting requirements for the tortoises during the holding period. Acquisition of animals occurred in mid-November 2014.
- Conducted a pre-construction meeting with the fencing contractor in February 2015 to discuss construction timeline and operational expectations.
- Performed a final pre-construction site survey with Springs Preserve staff and identified areas of cultural significance as well as main irrigation lines for vegetation along existing trails system. The contractor flagged the final perimeter to prepare for soil trenching work.

- Cultural Resources staff coordinated with awarded contractor to perform construction oversight on-site to ensure permit compliance.
- Completed installation of the tortoise exclusion fencing on-site at Springs Preserve in spring of 2015.
- Drafted interpretive panel content to discuss the basic natural history information as well as the conservation challenges for the species to the general public.
- Sign content was approved by all stakeholders and interpretive panels were installed.
- All tortoises were sterilized by Springs Preserve's contracted veterinarian team.
- Tracking tags were obtained and radio telemetry equipment was tested.
- Animal wellness exams were performed by Springs Preserve veterinarian team.
- Animals were transferred into the project area on October 14, 2015.
- Trail access through the project area opened to the general public.
- Utilized media based platforms to promote the project area (Springs Preserve website, Springs Elemental videos, and social media).

Please refer to attached maps and photographs for the purpose of additional documentation of project progress and completion. Further information on the habitat can be found on the Springs Preserve website at: http://www.springspreserve.org/attractions/trails_tortoise.html

Evaluation/Discussion of Results

The construction of the Springs Preserve's desert tortoise habitat is now complete. Trail access through the project area is currently open to the general public. Media based platforms were utilized to promote the project area (Springs Preserve website, Springs Elemental videos, and social media).

Conclusion

Finalization of the Springs Preserve's tortoise habitat, along with the implementation of educational programming will contribute to expanding public knowledge and support for the recovery of the desert tortoise.

Recommendations

None

Literature Cited

None.

Please report on the status of each Milestone and Deliverable, indicate whether they are not started, in progress, or completed and provide comments on the status as necessary.

Due Date	Deliverable/ Milestone #	Deliverable/Milestone Title	Amount Allowed	Status
March 18, 2014	M01	Contract Award & Mobilization	\$0	Complete
April 1, 2014	M02	Project Kick-Off Meeting	\$0	Complete
April 15, 2014	M03	Begin Construction Activities	\$15,000	Complete
April 15, 2014	M04	Begin Interpretive Content Development	\$1,000	Complete
July 1, 2014	D01	Quarterly Progress Report (April 1, 2014 – June 30, 2014)	\$0	Complete
TBD	D02	2014 Annual Project Review Presentation	\$0	N/A
October 1, 2014	D03	Quarterly Progress Report (July 1, 2014 – September 30, 2014)	\$0	Complete
January 1, 2015	D04	Quarterly Progress Report (October 1, 2014 – December 31, 2014)	\$0	Complete
January 31, 2015	M05	Construction 20% Complete	\$15,000	Complete
April 1, 2015	D05	Quarterly Progress Report (January 1, 2015 – March 31, 2015)	\$0	Complete
April 15, 2015	M06	Construction 50% Complete	\$12,000	Complete
June 30, 2015	D06	Biennium Progress Summary Report	\$500	Complete
July 1, 2015	D07	Quarterly Progress Report (April 1, 2015 – June 30, 2015)	\$0	Complete
TBD	D08	2015 Annual Project Review Presentation (if requested)	\$0	Complete
July 15, 2015	M07	Construction 80% Completed	\$8,000	Complete
October 1, 2015	D09	Quarterly Progress Report (July 1, 2015 – September 30, 2015)	\$0	Complete
October 15, 2015	M08	Construction 100% Complete	\$5,500	Complete
October 15, 2015	M09	Introduce Tortoises to Habitat	\$5,500	Complete
November 30, 2015	M10	Complete Interpretive Content	\$5,000	Complete
TBD	D10	Receipt Submittal (if necessary)	\$0	N/A
December 15, 2015	D11	Final Biennium Progress Summary Report	\$500	Complete
December 15, 2015	D12	Final Report	\$7,760	Complete
December 31, 2015	D13	Final Project Review Summary & Project Claim Release	\$1,180	In progress
January 20, 2016	N/A	Project Ends	N/A	In progress