

Date: August 29, 2014

TO: DISTRIBUTION

RE: DESERT CONSERVATION PROGAM PROJECT COMPLETION NOTIFICATION:

MORMON MESA ECOHYDROLOGICAL ASSESSMENT 2011-PIC-915B

The work for the above referenced project has been completed. Please see the attached for all project related information.

### The purpose of the above referenced project was:

As a permit requirement of the Clark County Multiple Species Habitat Conservation Plan (MSHCP) and associated Section 10(a)(1)(B) Incidental Take Permit, Clark County owns property with riparian habitat along the lower Virgin River, known as the Virgin River Reserve Unit, Property 1 (Property). This approximately 80-acre parcel of riparian property serves as mitigation for impacts to riparian habitats and avian species covered under the MSHCP. Long-term goals for this property include the restoration and expansion of riparian habitat for covered avian species. To assist with the land management goals for the area, the Clark County Desert Conservation Program (DCP) initiated an ecohydrological assessment of the property and adjacent areas.

The goal of this project was to conduct an ecohydrological assessment and field surveys to develop detailed maps of relative elevation, vegetation canopy height, and field assessment of surface water and soils. This reach-scale assessment will provide an improved understanding of the key factors affecting restoration opportunities and constraints on the Reserve Unit. Results of the assessment will be used to make recommendations on locations and strategies for restoration. The results will also be valuable to the DCP in evaluating additional parcels that might be considered for acquisition in the future for restoration and conservation purposes.

### The major accomplishment or findings of this project include:

Tasks accomplished by the project consultant, Stillwater Sciences, included:

- *Ecohydrological Assessment*. Ecological and hydrological factors affecting river and riparian habitat dynamics were assessed for the Mormon Mesa reach of the Virgin River using geographic information systems (GIS) analysis combined with field survey data.
  - Relative Elevation Mapping: A GIS layer representing ground surface height above the low flow water surface of the river was generated from existing high-resolution imagery.
  - Vegetation Canopy Height. A GIS layer representing vegetation canopy height was generated using the existing imagery.
  - Synthesis. A GIS analysis was conducted using multiple sources to identify different restoration zones within the Property, and restoration strategies appropriate for each zone.
- *Field Surveys*. Field surveys were conducted to help ground-truth the remote sensing data and provide more site-specific information for restoration plan development.
  - Field-based Vegetation Mapping. Native and non-native vegetation on the Property were identified and mapped during field surveys. This provided a finer resolution vegetation map for the Property than was currently available.
  - o *Field Assessment of Surface Water and Soils*. A focused field assessment of the distribution of surface water, soil moisture, and other soil conditions were conducted in selected sites on the Property.

For more information about this project and/or for other Project Reports or Symposium Reports, please visit our website at: <a href="http://www.clarkcountynv.gov/Depts/dcp/Pages/default.aspx">http://www.clarkcountynv.gov/Depts/dcp/Pages/default.aspx</a>

If you have any questions, please contact Liz Bickmore at (702) 455-2972.

Sincerely,

Marci D. Henson Program Manager

cc:

US Fish and Wildlife Service Board of County Commissioners (7) Permittees' Executive Committee



# desert conservation

PROGRAM

Permittees' Process Management Group
Thomas Boldt, Purchasing
Catherine Jorgenson, District Attorney – Civil Division
Desert Conservation Program Community Advisory Committee
Desert Conservation Program Interested Parties List
Multiple Species Habitat Conservation Plan Implementing Agencies
Science Advisor
SNPLMA Office (for SNPLMA projects)
Congressional Office
DCP Staff

# DESERT CONSERVATION PROGRAM PROJECT COMPLETION NOTICE

Date of Issuance: 8/20/2014

# **General Project Information**

Project Category

**Compliance Category** 

Project Level

Project Title

Project Number Contractor

Contractor Person of Contact

Contractor Project Manager DCP Project Manager

DCP Person of Contact/Contract Manager

Competitive Award or Sole Source Contract Start Date

Purchase Order Number

Contract End Date

Commissioner & District

Congressional Rep & District

Conservation

9d-Research/Inventory/Monitoring

Level 1

Mormon Mesa Ecohydrological Assessment

2011-PIC-915B

Partners in Conservation

Elise McAllister Elise McAllister Liz Bickmore

Heather Green Sole Source

09/12/2013 4500220701-016 12/31/2013

A Steve Sisolak

D3 Joe Heck

#### Financial Breakdown

Funding Source	S10 11-13
Original Contract Amount	\$11,000.00
Total Change Request Amount	0.00
Revised Contract Amount (Original Award plus Change Requests)	\$11,000.00
Funds Not Used in Contract	0.00
Final Payout Amount	\$11,000.00

# Performance Information

Total Number of Change Requests	0
Number of Change Requests by Contractor	0
Number of Change Requests by DCP	0

Total Number of Deliverables	2
Number of Deliverables Accepted	2
Number of Deliverables Rejected	0
Number of Delinquent Deliverables	2

Total Number of Milestones	2
Number of Delinquent Milestones	0
Number of Milestones Met on Time	2

Total Number of Invoices Submitted	1
Number of Rejected Invoices	0