



Date: May 9, 2017

TO: DISTRIBUTION

RE: DESERT CONSERVATION PROGRAM PROJECT COMPLETION NOTIFICATION:
**VIRGIN RIVER BASELINE CONDITIONS ASSESSMENT
2015-STILLWATER 1521A**

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:

The purpose of this project was to assist with restoration and acquisition prioritization and planning. Stillwater Sciences conducted a baseline condition assessment for a portion of the Virgin River that flows through Clark County to identify areas best suited for future restoration projects and/or show the greatest value for potential acquisition.

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 Gold Butte-Mesquite reach of the Virgin River using geographic information systems (GIS) analysis combined with field survey data.
 - *Flood Scour.* Prior mapping of historical changes in the river position and areas of scour and deposition in the floodplain were used to define the portion of the floodplain that is most likely to be "reset" in the next large flood events (= the flood reset zone).
 - *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.

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- *Water Sources.* Irrigation diversions and associated canal/ditch systems, and locations of potentially important return flows to the river, were mapped from recent aerial photography (as available in Google Earth), maps (USGS topographic quadrangles and Google Maps), and the relative elevation GIS layer. In addition, some areas of potential water sources from washes and urban runoff in Mesquite were also mapped.
- *Soils.* Existing NRCS soils maps were reviewed to extract potentially useful information on soil salinity and texture.
- *Vegetation Canopy Height.* A GIS layer representing vegetation canopy height was generated using the existing the November 2011 LIDAR data.
- *Southwestern Willow Flycatcher Habitat.* Documented historical SWFL habitat locations were mapped using available GIS data from the 2011 SWFL breeding surveys, and current SWFL habitat suitability was mapped using results of the Landsat-based model provided by Jim Hatten (USGS).
- *Synthesis.* A GIS analysis was conducted using multiple sources to identify different restoration zones within the Gold Butte-Mesquite reach, and restoration strategies appropriate for each zone.

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

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

Sincerely,



Marci D. Henson
 Director, Air Quality
 Administrator, MSHCP

cc:

US Fish and Wildlife Service
 Board of County Commissioners (7)
 Permittees' Executive Committee
 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: 5/3/2017

General Project Information

Project Category	Conservation
Compliance Category	9c-Restoration/Rehabilitation
Project Level	Level 3
Project Title	VR Baseline Conditions Assessment
Project Number	2015-STILLWATER-1521A
Contractor	Stillwater Sciences
Contractor Person of Contact	Bruce Orr
Contractor Project Manager	Bruce Orr
DCP Project Manager	Caryn Wright
DCP Person of Contact/Contract Manager	Heather Green
Competitive Award or Sole Source	Competitive Award
Contract Start Date	09/09/2016
Purchase Order Number	4500252801-012
Contract End Date	02/28/2017
Commissioner & District	G Mary Beth Scow
Congressional Rep & District	D1 Dina Titus

Financial Breakdown

Funding Source	SNPLMA R15
Original Contract Amount	\$22,352.00
Total Change Request Amount	0.00
Revised Contract Amount	\$22,352.00
<small>(Original Award plus Change Requests)</small>	
Funds Not Used in Contract	0.00
Final Payout Amount	\$22,352.00

Performance Information

Total Number of Change Requests	1
Number of Change Requests by Contractor	0
Number of Change Requests by DCP	1
Total Number of Deliverables	4
Number of Deliverables Accepted	4
Number of Deliverables Rejected	0
Number of Delinquent Deliverables	1
Total Number of Milestones	2
Number of Delinquent Milestones	0
Number of Milestones Met on Time	2
Total Number of Invoices Submitted	3
Number of Rejected Invoices	1