



desert conservation
PROGRAM

February 5, 2016

TO: DISTRIBUTION

RE: DESERT CONSERVATION PROGRAM PROJECT COMPLETION NOTIFICATION:
**GEOTECH & CONCEPTUAL GRADING RECOMMENDATIONS
FOR MUDDY RIVER RESERVE PARCEL A, B,E
2013-STILLWATER-1446A**

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 determine the most desirable soil layer that will support a self-sustaining planting area and provide recommendations for soil removal that will maximize the creation and enhancement of riparian and wetland habitat with minimum costs at the site.

The major accomplishment or findings of this project include:

The major accomplishment of this project provided recommendations for a hydraulic analysis and development of a grading plan and planting plan to support a pilot restoration project on the Muddy River Reserve Unit. The findings of the geotechnical analysis include:

- Potential for slope instability issues and recommendations for slope-stability measures. Consultant recommends the use of deep-rooted vegetation to augment slope stability and use of biofabrics or rock riprap.
- Presence of moderately alkaline soil conditions with moderate salinity conditions and high presence of lime. These conditions will limit the types of plants that can be successfully used in the restoration project. Consultant provides recommendations for species that will be more tolerant of these soil conditions and also recommends consideration of soil amendments to improve planting suitability.

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- Depth to groundwater fluctuates seasonally. Consultant recommends that the grading plan lower the floodplain to bring the planting surface closer to the water table. Consultant further recommends that DCP continue to monitor groundwater levels for one year to fully assess water table fluctuations.
- Consultant provides preliminary recommendations for a grading plan, which would include creating an arcuate, semi-circle planform shape that would extend south-westward from the right-bank side of the river channel. Consultant further recommends that the surrounding land surface be sloped towards the wash channel and that the river banks and floodplain be lowered.

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

If you have any questions, please contact Kimberley Jenkins at (702) 455-5529.

Sincerely,



Marci D. Henson
Program Manager

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