

DEWATERING AND DISCHARGE PLAN

INTRODUCTION

In accordance with the project Mitigation Measure (MM) 4.6-5, this plan presents the dewatering and discharge approach that will be used for the construction of the 650 Line Upgrade Project. This plan was developed with the intent of protecting groundwater resources in addition to surface waters in the event that groundwater is intercepted during project activities. Multiple other Applicant Proposed Measures (APMs) are also included for reference and compliance under this plan. These specifically include APMs BIO-31, BIO-32, WQ-3 and WQ-5. Compliance is mandatory with these APMs and MMs addressed herein.

PURPOSE

The purpose of this plan is to provide the regulatory and permitting guidelines for the Contractor for implementation during the transmission line construction of the 650 Line project. It is anticipated that due to the Wetlands through the Martis Valley area, the Contractor will encounter both groundwater and surface water during some pole excavations. This plan will delineate both avoidance and dewatering measures that can be used. However, it will be the responsibility of the Contractor to submit a final dewatering plan that details means and methods for construction in full compliance with the requirements presented in this plan.

In addition to the requirements of this plan, Contractor shall also reference the Hazardous Material Management Plan, Emergency Management and Spill Prevention Plan and the general Applicant Proposed Measures as requirements throughout those plans address work in or around waterways and wetlands. As such, it will be the goal of the Contractor and Liberty Utilities to ensure protection of groundwater during excavations from potential contaminant releases during equipment use and refueling, such as specific spill control and clean up and response measures in the vicinity of excavations. These plans additionally discuss the requirements of the Contractor for collection and treatment of the sediment-laden water prior to releasing directly to a

surface or groundwater source or demonstrate that it can be used to irrigate or applied as dust control without short-circuiting directly to surface waters.

DEWATERING BEST MANAGEMENT PRACTICE and APM REQUIREMENTS

The following APMs and General Best Management Practices shall be implemented at all times.

Avoidance

It is Liberty Utilities and all Agencies' preference that dewatering be avoided if at all possible. As such, first and foremost, Contractor will schedule construction to be conducted during low-flow or dry conditions. To support this, work through the Martis Valley wetland will be completed in late fall 2015, within the approved earth disturbance window. As such, this work will be completed as close to October 15th as possible.

Dewatering APM and BMPs

- Contractor will utilize helicopter to set structures through the Martis Valley wetland area. However, limited number of small low-impact track mounted equipment will be allowed for excavation of the holes.
- Through extremely wet conditions, the Biological Monitor may require matting for equipment ingress and egress.
- Visibility permitting, all excavations will be inspected for sensitive aquatic wildlife prior to dewatering. Wildlife found in excavations will be allowed to leave passively or will be relocated by a qualified biologist
- If dewatering of an excavation is needed, all dewatering pump intakes will be fitted with filter screening to prevent impacts to aquatic wildlife that may accidentally enter excavations. Water will not be pumped directly from rivers,

streams, ponds, or other waters of the U.S. (although as stated above, dewatering of excavations are permitted).

- Where feasible (e.g., landowner approval is provided, sufficient space with permeable surfaces is available, slopes are gentle enough to allow control of potential sediment transport), all stormwater or groundwater removed from excavations will be discharged overland into well-vegetated areas to promote the settling of sediment. If overland discharge is not possible, then water removed from excavations will be collected, treated, and disposed of consistent with requirements of the Lahontan Regional Water Quality Control Board and any other agencies with jurisdiction over the activity.
- The Contractor shall have on hand, at all times, sufficient pumping equipment, filter sleeves, hoses and machinery in good working condition and shall have available, at all times, competent personnel for the implementation of dewatering. Adequate standby equipment and supplies shall be kept available at all times to insure efficient dewatering and maintenance of dewatering operation during power failure.
- Dewatering shall commence at an appropriate time prior to commencing excavation (if possible), or immediately upon encountering groundwater, and shall be continuous until the pole or anchor / structures are completed, backfilled.
- Contractor shall comply at all times with the project Stormwater Pollution Prevention Plan. This plan has been developed within all Lahontan Regional Water Quality Control Board requirements.
- The Contractor shall be responsible to design and control the dewatering operations such that disposal of water does not cause erosion or other damage and such that water to be disposed of is free from silt and other objectionable materials. Settling basins and/or other means shall be used as necessary.

- Work areas will be clearly marked with flagging, fencing and signage in accordance with the Flagging, Fencing and Signage Plan. This will ensure that all personnel understand that the area requires dewatering and must be completed within all permit and plan requirements.
- The termination of dewatering operations shall be performed in such a manner as to maintain the undisturbed state of the natural soils, prevent disturbance of compacted backfill and prevent flotation or movement of structures.