

**1) From Section 6.1.2.1 Agricultural/Cropland**

Agriculture is the predominant land use within proposed corridor in South Dakota. Construction of the pipeline will disturb approximately 2,504 acres (74 percent of the proposed corridor) of agricultural use lands. Keystone will implement mitigation measures to minimize short-term impacts on agriculture productivity. The mitigation measures will include:

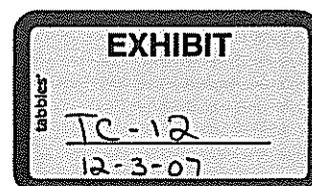
- Burying the pipeline deeper than typical tillage depths;
- Cleaning heavy equipment to limit transport of weeds or soil pests prior to project use;
- Prohibiting construction during prolonged, heavy rainfall to minimize the potentials for soil compaction and reduced productivity;
- Deep tilling or chisel plowing soils or other landowner or land management agency approved method to alleviate compaction;
- Stripping and storing topsoil from over the trench line and returning topsoil to original horizon during backfilling;
- Implementing temporary erosion and sediment control BMPs during construction to minimize loss of soil due to wind or water erosion;
- Removing rocks exposed at the surface during clean-up to restore conditions present prior to construction as closely as practicable;
- Applying tackifier, if required due to excessively windy conditions, following the removal of the topsoil;
- Compensating landowners for crop loss and associated damages;
- Coordinating irrigation and drainage systems disruptions with landowners and compensating for damages and resulting lost production; and
- Repairing, replacing, or compensating landowners where irrigation and/or drainage systems are damaged by construction.

Reclamation and revegetation will be in accordance with applicable permits. Land will be re-contoured to approximate pre-existing conditions and disturbed structures, ditches, bridges, culverts, fences, and slopes will be restored. Rocks that are exposed during construction activities, warning signs, and other construction materials will be removed. Temporary gates will be replaced with permanent fences unless the landowner requests otherwise. Additional mitigation measures are detailed in the CMR Plan.

Permanent impacts on agricultural production are not expected since the pipeline will be buried deep enough to allow continued use of the land. Agricultural production across the permanent ROW will be allowed to resume following final clean-up of pipeline construction. Keystone will be responsible for reclaiming all lands to an equivalent level of capability and will provide compensation for crop loss, diminished productivity and other damages to farmland.

**2) From Section 6.1.2.2 Grassland/Rangeland**

Construction of the pipeline will disturb approximately 679 acres (20 percent of the proposed corridor) of grassland/rangeland. Grassland and rangeland areas are primarily a mix of tall to short grass prairie with occasional occurrence of non-native, cool season grasses. Grasslands in South Dakota primarily support native grass and forb species typically associated with the mixed grass prairie and are considered important



TC-12

habitat areas for special status plant and wildlife species. Dominant species include bluestem, blue grama, green needlegrass, needle and thread and Western wheatgrass.

The proposed project will impact grassland and rangeland areas by temporarily clearing vegetation in the corridor. These areas are expected to recover in one to three growing seasons after construction is completed. Long-term or permanent impacts are not expected. Keystone will promote recovery of these areas by removing and then restoring topsoil and reseeding all disturbed areas with grass mixtures approved by the local Natural Resource Conservation Service office or the landowner.

Ranches and rangeland will be mainly affected during construction by the prohibition of grazing on those lands required for pipeline construction, which may result in obstacles to livestock movement across construction areas. Once construction is completed, grazing and livestock movement over the permanent ROW may resume. Landowners will be compensated for the temporary loss of land use. Grazing may return to normal after vegetation is re-established.

To minimize the impacts to grazing and movement, the proposed project will implement the following measures, where applicable:

- Arrange with landowners to move or keep livestock to fields not affected by the proposed project;
- Cut and brace fences crossed by the pipeline or other activities;
- Install temporary fencing where appropriate to prevent livestock movement across the ROW;
- Leave access lanes for movement of livestock across the ROW during the construction period, where necessary;
- Strip the existing topsoil, where there is a well-established sod layer, up to a maximum depth of 12 inches, from over the trench only;
- Store topsoil separately and return to its original horizon during backfill;
- Restore the work area to pre-construction contours and re-seed with native mixtures approved with landowner;
- Defer grazing in ROW area until vegetation becomes re-established; and
- Compensate landowners for incremental costs resulting from temporary loss of land use.

Access to and work on pasture and farmlands will be in accordance with applicable permits and regulations. Temporary gates used for access will remain closed at all times. The temporary gates will be replaced with permanent fence.

Keystone prohibits feeding or harassment of livestock or wildlife, firearms, and pets on the construction ROW. Food and food wastes will be stored and secured.