

Montana Department of Natural Resources and Conservation  
Water Resources Division  
Water Rights Bureau

**ENVIRONMENTAL ASSESSMENT**  
**For Routine Actions with Limited Environmental Impact**

**Part I. Proposed Action Description**

1. Applicant/Contact name and address: TransCanada Keystone Pipeline LP  
700 Louisiana Street, Suite 700  
Houston, TX 77002
2. Type of action: Application for Beneficial Water Use Permit No. 42M-30119938
3. Water source name: Yellowstone River
4. Location affected by project: NE Section 23 & SE Section 13, T13N, R53E, Dawson County
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

This permit application is for the diversion of a maximum of 6.68 CFS up to 159.99 AF, from points on either side of the Yellowstone River in the NE Section 23, T13N, R53E, Dawson County and one point north of the river in NWNWSW Section 13, T13N, R53E, Dawson County, for industrial use from January 1-December 31. The industrial use is comprised of horizontal directional drilling (HDD), hydrostatic testing (HST), pump station construction (PS), and dust control (DC). The place of use is the right-of-way and access roads along the pipe line route beginning in the NW of Section 27, T18N, R50E, Dawson County, passing through Prairie County, and ending in the SE of Section 18, T6N, R60E, Fallon County. The Applicant will benefit from this use in that it will allow them to construct and perform hydrostatic testing on the pipeline and pump stations prior to use. It will also provide water for directional drilling under the Yellowstone River. Dust control will be will benefit people working on the project as well as nearby landowners.

The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:
  - Montana Department of Fish, Wildlife, & Parks
  - Department of Environmental Quality
  - Environmental Impact Statement prepared by TransCanada Keystone XL and the finding of no significant impact. The FEIS can be viewed at <https://2012-keystonepipeline-xl.state.gov/finalseis/index.htm>.

## **Part II. Environmental Review**

### **1. Environmental Impact Checklist:**

<h2><b>PHYSICAL ENVIRONMENT</b></h2>
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### **WATER QUANTITY, QUALITY AND DISTRIBUTION**

**Water quantity** - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

*Determination:* The Yellowstone River is not identified as a chronically or periodically dewatered stream by the Montana Department of Fish, Wildlife & Parks. The DFWP has a water reservation on this portion of the Yellowstone River to maintain instream flows. Issuance of the requested appropriation would have no significant impact on the surface water flows.

**Water quality** - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

*Determination:* This reach of the Yellowstone River is listed on the TMDL 303(d) list as not fully supporting aquatic life and fully supporting agricultural. Neither drinking water nor primary contact recreation were assessed. The impairment on aquatic life is likely due to dam construction (other than upstream flood control projects). Issuance of the requested appropriation would have no significant impact on the surface water quality.

**Groundwater** - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

*Determination:* As this is a surface water diversion, it should not have any impact on the groundwater quality or supply.

**DIVERSION WORKS** - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

*Determination:* Horizontal directional drilling will be implemented at the Yellowstone River crossing to limit the impact on the environment by allowing the Applicant to install the oil pipeline under the riverbed. Some ground disturbances will occur while pump installation and removal occurs, however no significant impact will occur from the diversion works.

### **UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES**

**Endangered and threatened species** - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater,

*assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or “species of special concern.”*

*Determination:* The Montana Natural Heritage Program identified 2 animal species of concern potentially located within the project area. The Piping Plover and the Pallid Sturgeon is listed as “endangered” By the BLM.

TransCanada plans to use screens around their pump intakes which will reduce intake velocity to prevent entrainment of small or larval fish. To achieve an approach velocity of less than 0.36 feet per second for a withdrawal rate of 3000 GPM, a #60 wedge wire screen with a mesh opening of 0.10 inches and an open area of 63% would require a 3’x2.5’x2.5’ rectangular box screen to prevent entrainment of fish with a subcarangiform (pallid sturgeon) swimming mode.

Consultation with the USFWS in the Billings Ecological Services Field Office indicates that historical surveys have failed to identify nesting piping plovers within the project area and additional surveys were not recommended in Montana (Keystone XL FEIS).

**Wetlands** - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

*Determination:* The only wetland in the proposed project area is the Yellowstone River itself.

**Ponds** - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

*Determination:* The project area does not have any ponds within its boundaries.

**GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE** - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

*Determination:* The Keystone XL FEIS did not identify any significant issues near the Yellowstone River. There were three soil types located within the proposed points of diversion. Glendive loam, Hanly Soil, and Lambert-Dimyaw complex. All three of these soils are identified as nonsaline to moderately saline. Due to the size of the Yellowstone River and the low salinity of soils present near the river, this project will not significantly increase salinity in the Yellowstone River.

**VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS** - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

*Determination:* No vegetation was listed as endangered or threatened by the USFWS for the project area. The contractor for the project site will be required to clean all construction equipment prior to moving equipment to the job site to prevent the transportation of noxious weeds (Keystone XL FEIS).

**AIR QUALITY** - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

*Determination:* No significant deterioration of air quality will occur due to this project.

**HISTORICAL AND ARCHEOLOGICAL SITES** - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.

*Determination:* The project is located on a combination of private, state and federal land. Cultural resource surveys have been conducted and TransCanada continues to work with state and federal agencies and Indian tribes on mitigation plans for those properties where avoidance is not feasible. (Keystone XL FEIS)

**DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY** - Assess any other impacts on environmental resources of land, water and energy not already addressed.

*Determination:* No significant impacts to other environmental resources were identified.

## HUMAN ENVIRONMENT

**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

*Determination:* No known environmental plans or goals will be impacted by this project.

**ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES** - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

*Determination:* This project will not have any significant impact on the quality of recreational or wilderness activities.

**HUMAN HEALTH** - Assess whether the proposed project impacts on human health.

*Determination:* The project will have no significant impact on human health.

**PRIVATE PROPERTY** - Assess whether there is any government regulatory impacts on private property rights.

Yes \_\_\_ No X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

*Determination:*

**OTHER HUMAN ENVIRONMENTAL ISSUES** - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact identified
- (b) Local and state tax base and tax revenues? No significant impact identified
- (c) Existing land uses? No significant impact identified
- (d) Quantity and distribution of employment? No significant impact identified
- (e) Distribution and density of population and housing? No significant impact identified
- (f) Demands for government services? No significant impact identified
- (g) Industrial and commercial activity? No significant impact identified
- (h) Utilities? No significant impact identified
- (i) Transportation? No significant impact identified
- (j) Safety? No significant impact identified
- (k) Other appropriate social and economic circumstances? No significant impact identified

**2. *Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts    None Identified

Cumulative Impacts    None Identified

**3. *Describe any mitigation/stipulation measures:*** Mitigation measures

**4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** Under the no action alternative, TransCanada would not be able to efficiently install the oil pipeline or test the integrity of their pipeline. Oil would be transported by rail or truck.

**PART III. Conclusion**

**1. *Preferred Alternative*** Issue a beneficial water use permit if the applicant proves the criteria in 85.2.302, MCA are met.

**2**      *Comments and Responses*

**3.**      ***Finding:***

Yes \_\_\_ No X *Based on the significance criteria evaluated in this EA, is an EIS required?*

*If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:*

No significant impacts were identified in this environmental assessment of the proposed project. Furthermore an EIS has already been completed by TransCanada.

*Name of person(s) responsible for preparation of EA:*

*Name:* Todd Netto

*Title:* Water Resource Specialist

*Date:* April 30, 2019