

## CHECKLIST ENVIRONMENTAL ASSESSMENT

<b>Project Name:</b>	T-K Farms Weirs & Bank Armoring LUL# 6213
<b>Proposed Implementation Date:</b>	Spring 2013
<b>Proponent:</b>	T-K Farms, LLC
<b>Location:</b>	NE¼ of Section 1, Township 3 North, Range 31 East, SE¼ of Section 36, Township 4 North, Range 31 East, SW¼ of Section 31, Township 4 North, Range 32 East (Yellowstone River – Public Land Trust)
<b>County:</b>	Yellowstone

### I. TYPE AND PURPOSE OF ACTION

The Proponent has applied to the DNRC for a Land Use License (LUL) for the purpose of rebuilding three (3) 40' bendway weirs and constructing two new weirs between the existing ones while also placing 50 cubic yards of rock to replace and supplement existing bank armoring at an irrigation pumphouse in the Yellowstone River near Pompeys Pillar in Yellowstone County. The purpose of the project is to stabilize the north/west bank of the Yellowstone River that has become unstable due to flooding in 2011. The Yellowstone River is currently eroding this bank and is beginning to threaten the private land north of it. The reconstructed weirs would have their angle changed slightly to help better redirect river flow as well as adding two new weirs between the existing ones. All of the weirs would extend 40' into the channel. Additionally, 50 cubic yards of rock would be placed along the river bank to supplement existing armoring that protects an irrigation pumphouse. Project activities are expected to occur in early spring 2013 during low water flow.

### II. PROJECT DEVELOPMENT

#### 1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

*Provide a brief chronology of the scoping and ongoing involvement for this project.*

An on-site inspection was conducted on 9 October 2012 and agencies represented included the Montana Fish, Wildlife & Parks, Yellowstone County Conservation District, Yellowstone County, U.S. Army Corps of Engineers, DNRC Southern Land Office, Terracon and the landowner, T-K Farms. No formal public scoping was performed for this License application.

#### 2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

U.S. Army Corps of Engineers (Section 404 Permit)  
Yellowstone County Floodplain Permit  
Montana Department of Environmental Quality (318 Authorization)

#### 3. ALTERNATIVES CONSIDERED:

**Proposed Alternative:** Issue a Land Use License for the purpose of installing two (2) new 40' bendway weirs and reconstructing three (3) existing weirs in the Yellowstone River and placing 50 cubic yards of rock to replace and supplement existing bank armoring.

**No-Action Alternative:** A Land Use License would not be issued for the proposed weir construction and reconstruction and supplementing of the existing bank armoring.

### III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES* potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain **POTENTIAL IMPACTS AND MITIGATIONS** following each resource heading.
- Enter "NONE" if no impacts are identified or the resource is not present.

#### 4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

*Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.*

The proposed action would permit the construction of two (2) new and reconstruct three (3) existing bendway weirs extending 40' into the Yellowstone River along with placing 50 cubic yards of rock to provide additional bank armor for an irrigation pumphouse. The new weirs would be placed in between the three existing weirs. The applicant is also proposing to secure round hay bales along the bank to provide temporary bank stabilization and allow vegetation to be reestablished. Construction is expected to occur during low water during early spring 2013 once all necessary permits are secured. Due to the short duration of the proposed activities, no significant impacts to geology and soil quality are anticipated as a result of implementing the proposed alternative.

#### 5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

*Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.*

The construction of two (2) new and reconstruct three (3) existing bendway weirs extending 40' into the Yellowstone River along with placing 50 cubic yards of rock to provide additional bank armor for an irrigation pumphouse will cause some disturbance to the riverbed of the Yellowstone River. The project is intended to stabilize an existing cut bank that resulted from the 2011 floods. In addition, in some areas that bank will be laid back and re-seeded to allow for a more stable bank and to limit further erosion. No significant impacts to water quality, quantity and distribution are anticipated as a result of implementing the proposed alternative.

#### 6. AIR QUALITY:

*What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.*

A short duration increase in pollutants and particulates would occur from heavy machinery used during the proposed activities. No significant impacts to air quality are anticipated by implementing the proposed action.

#### 7. VEGETATION COVER, QUANTITY AND QUALITY:

*What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.*

The portion of the proposed project on State ownership is located on the bed of the Yellowstone River where there is not substantial vegetative cover. No significant impacts to vegetation cover are anticipated by implementing the proposed action.

#### 8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

*Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.*

This area is frequented by a variety of fish, reptiles, big game, small mammals, raptors and songbirds. There may be some temporary wildlife disruption during construction and installation of the weirs and bank armor. Due to the short duration of the proposed activities, no significant impacts to terrestrial, avian and aquatic life and habitats are anticipated as a result of implementing the proposed alternative.

**9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:**

*Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.*

A proposed project area search of the Montana Natural Heritage Program database identified nine vertebrate animals that are listed as a species of concern, threatened, or endangered: Great Blue Heron, Bald Eagle, Greater Sage-Grouse, Burrowing Owl, Sauger, Spotted Bat, Black-tailed Prairie Dog, Snapping Turtle and Spiny Softshell. Of these nine species, the Sauger, Snapping Turtle and Spiny Softshell would have the highest potential for negative impact since they could occupy the Yellowstone River in this area and the project includes work in the river. Additionally, the Great Blue Heron and Bald Eagle have confirmed nesting sites in the area and the proposed project could cause some temporary disturbance.

The remainder of the species may occupy lands in the area or traverse it, but it is not expected that this action will have any significant effect on any of the species identified. The disturbance from equipment will be of a relatively short duration.

**10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

*Identify and determine effects to historical, archaeological or paleontological resources.*

The proposed project is located on state-owned land between the low water marks of the Yellowstone River. No significant impacts to historical and archaeological sites are anticipated by implementing the proposed action.

**11. AESTHETICS:**

*Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.*

The proposed project site is located on a portion of the Yellowstone River that is not visible from Interstate 94 that is approximately 0.6 miles south or from Keller Welborn Road that is located approximately ½-mile north of the proposed project. The main impact would be to persons boating or floating on the river. No significant adverse impacts to aesthetics are anticipated by implementing the proposed action.

**12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:**

*Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.*

No significant adverse impacts to environmental resources of land, water, air or energy are expected to occur as a result of implementing the proposed alternative.

**13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:**

*List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.*

The only other known potential project in this area is a riprap project proposed by NorthWestern Energy to armor the river bank where twin high voltage power lines cross the Yellowstone River. At this time, no application has been submitted and a separate EA would be prepared at that time.

**IV. IMPACTS ON THE HUMAN POPULATION**

- RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.
- Enter "NONE" if no impacts are identified or the resource is not present.

**14. HUMAN HEALTH AND SAFETY:**

*Identify any health and safety risks posed by the project.*

No significant adverse impacts to human health and safety are expected to occur as a result of implementing the proposed alternative.

**15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:**

*Identify how the project would add to or alter these activities.*

The proposed action would allow for existing irrigated agricultural land to be protected from further erosion by the Yellowstone River as it gradually migrates north. Implementation of the proposed project is not expected have a significant adverse impact on industrial, commercial and agricultural activities and production.

**16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:**

*Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.*

The proposed action would not have a significant impact on employment.

**17. LOCAL AND STATE TAX BASE AND TAX REVENUES:**

*Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.*

The proposed action will not have an adverse impact on tax revenue.

**18. DEMAND FOR GOVERNMENT SERVICES:**

*Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services.*

The implementation of the proposed alternative is not expected to generate any additional demands on governmental services.

**19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:**

*List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.*

Yellowstone County has an adopted Growth Policy that covers the entire County and the proposed alternative does not conflict with it. In addition, the subject property is not in an area that is zoned by Yellowstone County.

**20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:**

*Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.*

The proposed project area is within the low water marks of the Yellowstone River and access would remain unchanged after the proposed action is implemented. The project would construct two additional weirs between three existing weirs. No significant adverse impacts to access or recreational use of the Yellowstone River are anticipated by implementing the proposed action.

**21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:**

*Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.*

No Impact.

**22. SOCIAL STRUCTURES AND MORES:**

*Identify potential disruption of native or traditional lifestyles or communities.*

No Impact.

**23. CULTURAL UNIQUENESS AND DIVERSITY:**

*How would the action affect any unique quality of the area?*

No Impact.

**24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:**

*Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.*

The proposed action has provided \$25 via a Land Use License application fee and would provide a one-time \$150 rental fee.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> Jeff Bollman	<b>Date:</b> 8 January 2013
	<b>Title:</b> Southern Land Office Area Planner	

**V. FINDING**

**25. ALTERNATIVE SELECTED:**

The proposed alternative has been selected and it is recommended that a Land Use License (LUL) be issued to T-K Farms, LLC for the purpose of rebuilding three (3) 40' bendway weirs and constructing two new weirs between the existing ones while also placing 50 cubic yards of rock to replace and supplement existing bank armoring at an irrigation pumphouse in the Yellowstone River near Pompeys Pillar in Yellowstone County. The purpose of the project is to stabilize the north/west bank of the Yellowstone River that has become unstable due to flooding in 2011. The Yellowstone River is currently eroding this bank and is beginning to threaten the private land north of it. The reconstructed weirs would have their angle changed slightly to help better redirect river flow as well as adding two new weirs between the existing ones. This alternative can be implemented in a manner that is consistent with the long-term sustainable natural resource management of the area.

**26. SIGNIFICANCE OF POTENTIAL IMPACTS:**

The potential for significant adverse impacts is minimal for the proposed project. Potential adverse impacts will be avoided or mitigated by the project size, short construction duration, and timing and through the implementation of the following conditions of the Land Use License:

1. All in-river work shall be completed in an expeditious manner to avoid unnecessary impacts to the river.
2. Licensee must carry general liability insurance for all its activities upon the tract that lists the Licensee and the State as co-insured. The minimum coverage shall be in the amount of \$1,000,000 combined single limit per occurrence.
3. All activities performed in the river and immediate vicinity shall be conducted in a manner to reduce turbidity along with minimizing disturbances to the riverbed and riverbank.

4. To prevent leaks of petroleum products into the river, no defective equipment shall be operated in the river or adjacent areas.
5. All necessary permits will be secured before any activities begin.

<b>27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:</b>
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EIS       More Detailed EA       No Further Analysis

<b>EA Checklist Approved By:</b>	<b>Name:</b> Matthew Wolcott
	<b>Title:</b> Southern Land Office Area Manager
<b>Signature:</b> /s/ Matthew Wolcott	<b>Date:</b> January 9, 2013