EA Form R 1/2007

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: Teton Prairie LLC
PO Box 7
Choteau, MT 59422

2. Type of action: Application for Beneficial Water Use Permit No. 41O 30049563

3. Water source name: Willow Creek

4. Location affected by project: Generally Sections 10,11,14 and 15, all in T23N, R6W, Teton County

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

This application proposes to appropriate water from Willow Creek from March 1 through June 30 inclusive of each year into a 279.2 acre-feet (AF) reservoir for irrigation purposes taking place from May 1 to October 31 inclusive of each year. The amounts of water requested for the irrigation purpose is up to 15.0 cubic feet per second (cfs) and up to a maximum of 279.2 AF annually. The diversion of water from the source of supply will occur from one point of diversion (dam and head gate) located in the NENWSE of Section 31, T24N, R6W, Teton County. The volume of water stored will be released back into the source and used to supplement the sprinkler irrigation of 387 acres associated with existing water rights 41O 152412, 41O 152414, 41O 152418 and 41O 152427.

The proposed project is located within the legislatively-created Teton River Basin Closure area. Applications for a permit to store water during high spring flows are a statutory exception under the closure pursuant to §85-2-330(2)(d), MCA.

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:
(include agencies with overlapping jurisdiction)

Montana Natural Heritage Program
USDA Natural Resources Conservation Service (NRCS) Soils Data Website

Montana Dept. of Environmental Quality Website (TMDL 303d listing)
Montana Dept. of Fish, Wildlife & Parks Website (Montana Rivers Information System)
USDI National Wetlands Inventory Website
Montana Natural Resource Information System

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

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: Willow Creek is not identified as a periodically or chronically dewatered stream by DFWP. It is unlikely that the proposed project will not worsen an already dewatered condition.

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: According to Montana Department of Environmental Quality (DEQ), all required Total Maximum Daily Load (TMDL) reports have been completed on Willow Creek. The 2010 water quality information obtained from DEQ's Clean Water Act Information Center indicates that quality of the water found in Willow Creek fully supports agricultural, drinking water, industrial and primary contact recreation use. The same information indicates that aquatic life and cold water fishery uses are partially supported. It is not anticipated that the proposed project will cause an adverse effect to water quality found in Willow Creek.

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: Minimal impacts to groundwater quality or supply are anticipated by the proposed new use of surface flows found in Willow Creek.

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: Water will be diverted from the source of supply by an existing diversion dam and head gate and conveyed via ditch know as the Smith Ditch to the proposed 279.2 AF reservoir. This conveyance system Water will then be released from the reservoir back into the

source where it will be pumped to the place of use. The project has already been developed therefore any impacts to stream channels, flow modifications, barriers, riparian areas and/or dams have already occurred.

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: According to the information provided by the Montana Natural Heritage program, there are four bird (aves) species of concern in the vicinity of the proposed project. The species identified are the Ferruginous Hawk, Bobolink, Long-billed Curlew and the McCown's Longspur. There is two potential bird (aves) species of concern which are the Short-eared Owl and the Swainson's Hawk and one fish (actinopterygll) species of concern which is the Brook Stickleback. The following charts contain specific information about the identified species:

Species of Concern
4 Species
Filtered by the following criteria:
Township = 23 N Range = 6 W

BIRDS (AVES) — *4 SPECIES* — *FILTERED BY THE FOLLOWING CRITERIA: TOWNSHIP = 23 N RANGE = 6 W*

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Buteo regalis / Ferruginous Hawk	*Accipitridae* / Hawks / Kites / Eagles	G4	S3B			SENSITIVE	2	11%	95%	Sagebrush grassland
		Species verified in these Counties: Beaverhead, Blaine, Broadwater, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Fallon, Fergus, Gallatin, Garfield, Glacier, Golden Valley, Hill, Jefferson, Judith Basin, Lewis and Clark, Liberty, Madison, McCone, Meagher, Musselshell, Park, Petroleum, Phillips, Pondera, Powder River, Prairie, Roosevelt, Rosebud, Sheridan, Stillwater, Teton, Toole, Valley, Wheatland, Yellowstone								
Dolichonyx oryzivorus / Bobolink	*Icteridae* / Blackbirds	G5	S3B			SENSITIVE	3	9%	100%	Moist grasslands
		Species verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Fallon, Fergus, Flathead, Gallatin, Granite, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Madison, Meagher, Missoula, Park, Petroleum, Phillips, Powell, Ravalli, Richland, Roosevelt, Sanders, Sheridan, Stillwater, Sweet Grass, Teton, Valley, Wibaux, Yellowstone								
Numenius americanus / Long-billed Curlew	*Scolopacidae* / Sandpipers	G5	S3B			SENSITIVE	1	19%	100%	Grasslands
		Species verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Deer Lodge, Fallon, Fergus, Gallatin, Glacier, Golden Valley, Granite, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Madison, McCone, Meagher, Missoula, Musselshell, Petroleum, Phillips, Powder River, Powell, Prairie, Ravalli, Roosevelt, Rosebud, Sanders, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone								
Rhynchophanes mccownii / McCown's Longspur	*Calcariidae* / Longspurs and Snow Buntings	G4	S3B			SENSITIVE	2	41%	79%	Grasslands
		Species verified in these Counties: Beaverhead, Blaine, Broadwater, Cascade, Chouteau, Daniels, Glacier, Golden Valley, Hill, Lewis and Clark, Liberty, Madison, McCone, Musselshell, Petroleum, Phillips, Pondera, Rosebud, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Valley, Wheatland, Yellowstone								

Potential Species of Concern
3 Species
Filtered by the following criteria:
Township = 23 N Range = 6 W

BIRDS (AVES) — *2 SPECIES* — *FILTERED BY THE FOLLOWING CRITERIA: TOWNSHIP = 23 N RANGE = 6 W*

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Asio flammeus / Short-eared Owl	*Strigidae* / Owls	G5	S4				3	2%	100%	Grasslands
		Species verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Hill, Jefferson, Lake, Lewis and Clark, Liberty, Madison, McCone, Meagher, Musselshell, Park, Petroleum, Phillips, Pondera, Powder River, Powell, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wibaux, Yellowstone								
Buteo swainsoni / Swainson's Hawk	*Accipitridae* / Hawks / Kites / Eagles	G5	S4B			SENSITIVE	2	5%	87%	Sagebrush grassland
		Species verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carter, Cascade, Chouteau, Daniels, Dawson, Deer Lodge, Fallon, Fergus, Gallatin, Garfield, Golden Valley, Hill, Jefferson, Lewis and Clark, Liberty, Madison, McCone, Missoula, Musselshell, Petroleum, Phillips, Pondera, Powell, Ravalli, Richland, Roosevelt, Rosebud, Sheridan, Stillwater, Teton, Toole, Valley, Wheatland, Wibaux, Yellowstone								

FISH (ACTINOPTERYGII) — *1 SPECIES* — *FILTERED BY THE FOLLOWING CRITERIA: TOWNSHIP = 23 N RANGE = 6 W*

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	CFWCS TIER ID	% OF GLOBAL BREEDING RANGE IN MT	% OF MT THAT IS BREEDING RANGE	HABITAT
Culaea inconstans / Brook Stickleback	*Gasterosteidae* / Sticklebacks	G5	S4				3		27%	Small prairie rivers
		Species verified in these Counties: Blaine, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Fallon, Fergus, Flathead, Garfield, Glacier, Hill, Lake, Liberty, McCone, Missoula, Park, Petroleum, Phillips, Pondera, Prairie, Richland, Roosevelt, Rosebud, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wibaux, Yellowstone								

The proposed project is located in a sparsely populated area primarily composed of primarily cropland, it is not anticipated that the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or the species of special concern identified. It is also not

anticipated that the proposed project will create a barrier to the migration or movement of fish or wildlife. No impacts are anticipated because the system has been constructed and in operation.

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: There are no wetlands identified from GIS mapping of the proposed project utilizing NWI data. Because there are no wetlands identified within the proposed project area, there are no impacts anticipated.

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

Determination: No ponds or reservoirs are associated with the proposed project therefore the assessment is not applicable.

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: Data from the NRCS soils website indicate soil types within the proposed project area. Three soil types dominate the proposed project area. The dominate soil types are identified as Bascovy-Neldore complex, 2 to 8 percent slopes, Marvan silty clay, wet, 0 to 4 percent slopes and Neldore-Bascovy-Rock outcrop complex, 25 to 60 percent slopes. Degradation of soil quality, alteration of soil stability or moisture content is expected to be minimal to non-existent. Saline seepage in the area does not appear to be problematic nor does the proposed project appear to worsen any saline seepage problems.

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 impacts are anticipated because the system has been constructed and in operation utilizing water delivered under contract by the US Bureau of Reclamation. However, it is the applicant's responsibility to control noxious weeds on their property.

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

Determination: The applicant included plans in their application to incorporate electric motor driven centrifugal pumps. No deterioration of air quality or adverse effects on vegetation due to an increase in air pollutants is expected.

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: NA-project is not located on State or Federal Lands.

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 additional impacts on 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: There are no known environmental plans or goals in this area.

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: The project should have no significant or harmful impact on recreational or wilderness activities.

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

Determination: The development should have no impact on human health.

PRIVATE PROPERTY - *Assess whether there are 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: No adverse effect on private property rights is anticipated from this development.

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

(*b) Local and state tax base and tax revenues?* No significant impact

(c) Existing land uses? No significant impact

(*d) Quantity and distribution of employment?* No significant impact

(e) Distribution and density of population and housing? No significant impact

(f) Demands for government services? No significant impact

(g) Industrial and commercial activity? No significant impact

(h) Utilities? No significant impact

(i) Transportation? No significant impact

(j) Safety? No significant impact

(k) Other appropriate social and economic circumstances?

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

Secondary Impacts: No secondary impacts have been identified.

Cumulative Impacts: No cumulative impacts have been identified.

3. *Describe any mitigation/stipulation measures:* None

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:*

No action alternative:

The applicant would not be able to develop their project as proposed.

Alternative 1:

Approve the application if the applicant proves the statutory criterion has been met.

PART III. Conclusion

1. ***Preferred Alternative:*** Alternative 1.

2 ***Comments and Responses:*** None to date.

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: An EA is the appropriate level of assessment for the proposed action as no significant impacts were identified.

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

Name: /s/ Matt Miles
Title: Water Resource Specialist
Date: August 17, 2011