

## CHECKLIST ENVIRONMENTAL ASSESSMENT

<b>Project Name:</b>	<b>Willow Cuttings 2022</b>
<b>Proposed Implementation Date:</b>	<b>September 2022</b>
<b>Proponent:</b>	<b>River Design Group, Inc.</b>
<b>Location:</b>	<b>N2SW4 and NW4 Section 16-T7S-R1W</b>
<b>County:</b>	<b>Madison</b>

### I. TYPE AND PURPOSE OF ACTION

The proposed action is the issuance of a land use license for the collection of 2600 live willow whip cuttings, ~5-6 feet in length and ¼ - 1 inch in diameter, on ~200 ac of Common School Trust Lands.

The purpose of the land use license is to procure willow whip cuttings for stream and wetland restoration projects on nearby lands.

(See Attachment A - Site Specific maps)

### II. PROJECT DEVELOPMENT

#### 1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: *Provide a brief chronology of the scoping and ongoing involvement for this project.*

The DNRC Bozeman Unit received an application for a land use license from the River Design Group for the collection of willow whip cuttings in June 2022.

A field review was conducted in October 2021 by DNRC forester Chuck Barone.

Scoping notices were sent in July 2022. One comment was received and it supported the project.

Other contacts:

DNRC Archaeologist P. Rennie and DNRC Acting Bozeman Unit Manager E. Eneboe.

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

The Madison County Weed District Board administers the State weed laws in Madison County.

#### 3. ALTERNATIVES CONSIDERED:

No Action Alternative: A land use license would not be issued. Current management actions would be maintained.

Action Alternative: A land use license would be issued for the collection of 2600 live willow whip cuttings with additional mitigations.

### 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.*

Soils are the Scravo Series with very cobbly, sandy loam. Soils tend to be very deep and well drained, formed in alluvium or colluvium. The infiltration rate and rate of water transmission is moderate. Erosion rating on or off road is slight. Soil rutting rating is negligible and the soil compaction rating is moderately resistant.

Access within the harvest area would utilize up to 4080 feet of an existing two-track road which may have short crossings of standing water depending on the time of activities. Only ATV's or UTV's would be allowed to use the road. Additionally, the meadow areas adjacent to the road may be used only when ground is dry or frozen. Harvesting of willow cuttings would be done on foot and cuttings would be physically carried back to the meadow areas or two-track road. Harvest is proposed during the mid-September through October.

With recommended best practices and mitigation measures, no significant impacts or cumulative effects are expected to soil resources.

#### 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 proposed project is located within a fluctuating water table. Standing water, riparian areas and wetlands are present within the proposed harvest area. The water table may subside depending on weather and time of activities. Access within the harvest area would utilize up to 4080 feet of an existing two-track road which has short crossings of standing water. Only ATV's or UTV's would be allowed to use the road. Additionally, the meadow areas adjacent to the road may be used only when ground is dry or frozen. Harvesting of willow cuttings would be done on foot and cuttings would be physically carried back to the meadow areas or two-track road. Harvest is proposed during the mid-September through October.

With recommended best practices and mitigation measures, impacts and cumulative effects to water quality, water yield, watershed conditions, fisheries or any other beneficial uses associated with the watersheds adjacent to the proposed project area or any downstream tributaries are not expected. Direct, indirect or cumulative effects to surface waters are expected to be minimal.

#### 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.*

No impacts to air quality are expected.

**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 State parcel is located ~8.5 miles south of Ennis, MT in the Madison River valley, ~one-half mile east of the Madison River. The east half of the parcel is predominately grasslands while the west half has a much higher water table and produces predominately willows and cottonwoods along with grasslands. Surrounding lands have similar vegetation depending on the depth of the water table. The parcel has a grazing lease for 195 AUM's and receives moderate recreational use. A plant species of concern, Spiny Skeletonweed, has been observed within the State parcel.

The harvest area is ~200 acres and has many "clumps" or "thickets" of varying sizes of willows distributed throughout the area. The predominate willow is Sandbar and would be the main targeted specie for harvest. Yellow willow is present along with some Bebb willow. Sandbar willow tends to grow as single stems as opposed to a bush with multiple stems. Willow whip cuttings removed will be ~5-6 feet in length and ¼ - 1 inch in diameter.

2100 willow whips were harvested in this area in October 2019 and 2000 willow whips were harvested in this area in October 2021. Only clumps or thickets of willows and individual plants that have not been previously harvested and are multiple stemmed would be allowable for harvesting. Additionally, clumps or thickets of willows and individual plants would be restricted to a maximum of 20% removal of stems or branches. At no time would more than 30% of the overall willow canopy cover of the harvest area be removed.

Harvesting stems or branches would stimulate the willows to produce new growth where the stems or branches were removed. The new growth could then be harvested in 2-3 years for willow whip cuttings again.

The proposed collecting of willow whips would be accomplished with ATV's or UTV's using ~4080 feet of a restricted two-track access road in the West 1/4 of the State parcel. Additionally, the adjacent meadow areas may be used only when ground is dry or frozen. Personnel would travel by foot into the willow thickets/clumps to harvest and carrying cuttings back to the meadow areas or two-track road. The project is estimated to take 2-3 days.

The DNRC requires the washing of equipment, seeding and monitoring of disturbed areas to minimize the potential of noxious weeds being introduced.

With recommended best practices and mitigation measures, impacts or cumulative effects to vegetative communities are expected to be minimal from 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.*

A variety of big game, small mammals, raptors and songbirds potentially use this area. The project area does not support any fishery.

There would be no human development that would decrease linkage value and proposed activities would not impede wildlife movements across the landscape, valleys or mountain ranges.

No impacts are expected to terrestrial, avian or aquatic habitats.

**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.*

The State parcel does not support any cold-water fishery. Due to the location and short duration of the project, topography, and distance from any cold-water fishery, the proposed project would not affect fisheries habitats.

The proposed project area lies outside of any grizzly bear recovery area or occupied habitat. The nearest recovery area is the GYE grizzly bear recovery zone situated ~6.5 miles east of the project area. Lands considered occupied habitat lie ~6 miles to the east and southwest of the project area. The proposed project area is located in the Madison River valley and is composed of grasslands and wetland/riparian habitat. Potential riparian habitat for grizzly bears is present within the project area and grizzly bear use of the area may occur. Adverse direct, indirect and cumulative impacts to bears as a result of this project are expected to be minor.

No suitable lynx habitat is found within the project area. Adverse direct, indirect or cumulative impacts to lynx as a result of this project are not expected.

No known gray wolf denning or rendezvous sites occur within 1 mile of the project area. However, wolves may occasionally use the project area and occasional sightings have been noted in the area. No direct, indirect or cumulative effects that would result in harm to wolves would be anticipated.

The proposed project area does not fall within the range of wolverines and high elevation areas with persistent snow late into the spring do not occur in the project area. However, periodic or transient use of the proposed project area could occur. Due to the size, nature, duration and location of the proposed project, adverse direct, indirect or cumulative impacts to wolverines as a result of this project are not expected.

Several bird species of concern have been observed near or in the State parcel, such as, Great Blue Heron, Long-billed curlew, Burrowing Owl, Bald Eagle, Ferruginous Hawk, Veery and Green-tailed Towhee. Adverse direct, indirect or cumulative impacts to bird species of concern as a result of this project are not expected.

A plant species of concern, Spiny Skeletonweed, has been observed within the State parcel. Adverse direct, indirect or cumulative impacts to Spiny Skeletonweed as a result of this project are not expected.

No other threatened/endangered species, sensitive species or species of special concern have been documented within the proposed project area. No impacts are expected to threatened/endangered species, sensitive species or species of special concern.

(See Attachment E –CLO Checklist for Endangered, Threatened and Sensitive species)

**10. HISTORICAL AND ARCHAEOLOGICAL SITES:**

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

A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search results revealed that no cultural or paleontological resources have been identified in the APE, but it should be noted that Class III level inventory work has not been conducted there to date.

Considering the lack of ground disturbance associated with the proposed project, willow cutting activities are expected to have *No Effect to Antiquities*. No additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

**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 project area is visible from a county road but the cuttings would not. It is unlikely that the cuttings would be noticed to the casual observer walking through the harvest area. Due to the size and nature of proposed action impacts concerning aesthetics are not expected.

**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 measurable direct, indirect, or cumulative impacts on resources of land, water, air or energy are anticipated.

**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.*

16-T7S-R1W Willow Cuttings EAC, October 2019.  
16-T7S-R1W Willow Cuttings 2021 EAC, October 2021.

**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.*

Direct, indirect or cumulative effects to health and human safety are not expected.

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

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

No measurable direct, indirect, or cumulative impacts are anticipated.

**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.*

No measurable impact to quantity and distribution of jobs is anticipated as a result of this proposal.

**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.*

No measurable direct, indirect, or cumulative impacts to local and state tax base and revenues are anticipated.

**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*

No measurable direct, indirect, or cumulative impacts to the demand for government services are anticipated.

**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.*

The DNRC adopted the Administrative Rules for State Land Surface Management (ARM 36.25.101 through 36.25.817), applicable to management activities on school trust lands.

**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 State parcel is accessible from a county road along the north section line. Persons possessing a valid state lands general recreational use license or FWP conservation license may conduct specific recreational activities on the State parcel. The State parcel sees moderate use by the public, especially during hunting season. The proposed project would not affect the existing access for the

public but may displace some recreationists for 2-3 days during project activities. Direct, indirect or cumulative effects to recreational experience are expected to be minimal.

**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 measurable impact to density and distribution of population and housing is anticipated.

**22. SOCIAL STRUCTURES AND MORES:**

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

No measurable disruption of social structures and mores is anticipated.

**23. CULTURAL UNIQUENESS AND DIVERSITY:**

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

No impact to cultural uniqueness and diversity is anticipated.

**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.*

Costs, revenues, and estimates of return are estimates intended for relative comparison of alternatives. They are not intended to be used as absolute estimates of return. The estimates of return are based upon a fee schedule.

The estimated return to the trust would be \$390.00 for a five-month term land use license.

<b>EA Checklist Prepared By:</b>	<b>Name:</b> Chuck Barone	<b>Date:</b> September 7, 2022
	<b>Title:</b> Bozeman Unit Forester	

**V. FINDING**

**25. ALTERNATIVE SELECTED:**

Action Alternative: A land use license would be issued for the collection of 2600 live willow whip cuttings, ~5-6 feet in length and ¼ - 1 inch in diameter, to the Proponent.

With the following stipulations:

1. All equipment would be washed and inspected for weeds prior to its use on State lands.
2. Contact State contract administrator 48 hours prior to starting any activities on State lands.
3. Only clumps or thickets of willows and individual plants that have not been previously harvested and are multiple stemmed would be allowable for harvesting. Clumps or thickets of willows and individual plants would be restricted to a maximum of 20% removal of stems or branches. At no time would more than 30% of the overall willow canopy cover of the harvest area be removed.

4. Cuttings would be collected evenly from a single bush, clump or thicket in harvest area to reduce concentrated over-harvesting.
5. Do not leave sharp stumps or "stubs" on the willow plant where cutting is harvested. Residual cut would be level or perpendicular to stem.
6. Remove whole willow cutting from State lands and leave minimal slash. Lessee is required to consolidate slash left from 2021 activities and place into 2-3 burnable piles or remove.
7. Collecting of willow whips would be accomplished using ATV's or UTV's restricted to an existing two-track access road in the W4 of the State parcel as identified in Attachment A – Site Map. Personnel would travel by foot from the two-track road to harvest and carrying cuttings back to the two-track road.
8. The Proponent would be responsible for rehabilitation of the two-track access road should damages occur from harvest activities.
9. The Proponent would be responsible for keeping the harvest area free of trash and debris from harvest activities.
10. Use of blaze orange clothing is recommended during harvest activities as hunters are likely to be present in the harvest area.

**26. SIGNIFICANCE OF POTENTIAL IMPACTS:**

**27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:**

EIS     
  More Detailed EA     
  No Further Analysis

<b>EA Checklist Approved By:</b>	<b>Name:</b> Erik Eneboe
	<b>Title:</b> Acting Bozeman Unit Manager
<b>Signature:</b> /S/ ERIK ENEBOE	<b>Date:</b> 9/7/22

ATTACHMENTS

Attachment A - Vicinity Map/Site Map