Application for Use of State-owned Aquatic Lands

Applicant Name: Methow Salmon Recovery Foundation
County: Okanogan County
Water Body: Methow River
Type of Authorization - Use: Right of Entry–Construction/maintaining engineered logjams
Authorization Number: 23-088640
Term: 5 years

Description: This agreement will allow the use of State-owned aquatic lands for the sole purpose of constructing engineered logjams to improve habitat. It is located in Methow River, in Okanogan County, Washington.
Vicinity Map

Legal Description
Lat: 48.44532N, Long: 120.16152W
S13 T34N R21WE
M2 Whitefish Island

Prepared By: BJM Date: 4/19/2012
APPLICATION FOR AUTHORIZATION
TO USE STATE-OWNED AQUATIC LANDS

No work can be started on the project area until a use authorization has been granted by the state Department of Natural Resources.

I. SUBMISSION OF APPLICATION

This application form will be reviewed by the state Department of Natural Resources upon receipt at the address given below, and also posted on the DRR website as public information. Applicants will be notified in writing if the application will be accepted for further review. However, this application may be rejected at any time before signed execution of a use authorization. APPLICATION MUST BE FILLED OUT IN BLUE OR BLACK PEN.

Please send the completed application form to your region land manager at:

Washington State Department of Natural Resources
Pacific Cascade Region
Rivers District
P.O. Box 280
601 Bond Rd
Castle Rock, WA 98611-0280
Attention Restoration Program

Enclose a $25.00 non-refundable application processing fee with the application. (This fee is not required for local, state, and other government agencies).

II. APPLICANT INFORMATION

Date of Application: March 22, 2012

Authorization to be Issued To (If new name is to appear in the lease document): Methow Salmon Recovery Foundation

Applicant’s Representative: Chris Johnson

Relationship to Applicant: Executive Director

Address: PO Box 1608
City: Okanogan
State: WA
Zip Code: 98840

Telephone: (509) 422-0300
Fax: (509) 422-1766
E-Mail: chrisj@methowsalmon.org
II. APPLICANT INFORMATION cont'

Department of Revenue Tax *Registration Number (Unified Business Identifier) is Required: 602134958

Which of the following applies to Applicant (Check One and Attach written authority to sign - bylaws, power of attorney, etc):

<table>
<thead>
<tr>
<th>Corporation</th>
<th>(501(c)(3) non-profit)</th>
<th>Limited Partnership</th>
<th>General Partnership</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of Registration: WA</td>
<td>Yes</td>
<td>No</td>
<td></td>
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Sole Proprietorship | Marital Community Spouse: | Government Agency |
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<tr>
<td>No</td>
<td>Yes</td>
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Other ☐ (Please Explain)

Has the site use been authorized before or is it currently under lease? Yes ☐ Lease Number:

No ☒ Don’t Know ☐

III. LOCATION

The Body of Water on which the state property is located:
Methow River

County in which the state property is located: Okanogan

Government Lot:

<table>
<thead>
<tr>
<th>Section: 13</th>
<th>Township: 34 N</th>
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<tbody>
<tr>
<td>Range: 21</td>
<td>E ☒ or W ☐</td>
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Note: A legal property survey including the legal description and other information about the property is required to obtain a use authorization. WA DNR survey requirements are attached to this form. The survey plat will be attached to the lease/easement as Exhibit A. **DO NOT HAVE THIS SURVEY CONDUCTED UNTIL YOU HAVE BEEN NOTIFIED IN WRITING THAT THE APPLICATION HAS BEEN ACCEPTED FOR PROCESSING.**

Physical description of Project Area (For example, Marsh, Tideflat adjacent to the Chehalis River, etc.): Bed and adjacent floodplain of Methow River.

Name of Owner(s) of Upland(s), Shorelands, and/or Tidelands shoreward and adjacent to the Property:
Methow Salmon Recovery Foundation

Address: PO Box 1608
City: Okanogan
State: WA
Zip Code: 98840

Phone Number: (509)422-0300
Fax Number (509)422-1766
E-mail: chrisj@methowsalmon.org

Note: Except for property located within established Harbor Areas, proof of ownership, or authorization to use the adjacent tideland, shoreland, or upland property may be required. If the applicant is the owner of the adjacent land, attach a copy of the deed.

County Parcel No(s). for adjacent properties, upland, and/or adjacent tideland properties: 3421130029, 3421130026
IV. USE OF PROPERTY

The majority of the proposed actions are located on the adjacent property owned by Methow Salmon Recovery Foundation. Actions on State Owned Aquatic Lands include a portion of one bar apex ELJ at the head of the island, and 6 multiple log placements on main channel gravel bars.

The Project is an element of a larger multi-agency effort to implement reach-based habitat restoration projects within the Middle Methow (M2), identified as the reach of the Methow River between the towns of Twisp and Winthrop. The specific project actions have been developed in support of federally adopted Upper Columbia Salmon Recovery Plan (Recovery Plan). Actions include both short- and long-term actions focused on recovery of ESA-listed spring Chinook and steelhead in the Methow River.

This project will restore natural processes to the greatest degree feasible while adding sustainable features that immediately improve habitat based on reach-level goals. The project primarily targets rearing juvenile fish during low water, but project features are also intended to provide benefits for both juvenile and adult fish during all flows.

The M2-Whitefish Island (WFI) project sub-area is located from RM 48.5 - RM 49 and includes the main channel, floodplain, an over-widened seasonal side channel, a high-flow alcove, and a forested island. The river in the project area has little cover or complexity and is affected by historic and on-going woody removal, riparian vegetation loss, bank hardening, and other factors leading to channel simplification. The side channel flows an average of three months per year. While habitat in the side channel is simplified, it has several perennial groundwater-fed pools that hold water year round and an alcove accessible only during high flows. Overwinter survival of juvenile salmonids is limited to the largest groundwater-fed pool, which typically supports less than 50 fish. A failing side slope supporting Highway 20 threatens this existing habitat; without alternative action, continued erosion of the slope will likely result in WSDOT placing additional riprap that could negatively impact the pool habitat.

The project will include the following actions to improve habitat:
- Construct 5-engineered logjams (ELJs) along the side channel banks,
- Construct 1-ELJ at the head of the side channel,
- Construct 1-bar apex ELJ in the side channel;
- Place logs on gravel bars;
- Construct a live crib along the failing highway bank, and
- Plant riparian vegetation.

These actions should benefit juvenile salmonids by restoring river function, increasing channel complexity, and improving off-channel habitat.

The project includes the specific elements detailed below. See attached map (Sheet 4 in attached plans) for the locations of each feature.

**Engineered Logjam (ELJ) at head of island:** This action includes constructing a bar apex logjam at the head of the island. This ELJ will protrude further upstream than the existing natural logjam and will be constructed so that it interacts with low flows and is persistent through high flow events. This structure is designed to capture mobile wood, and is expected to scour out a pool with complex cover in the mainstem during all flows. This structure is one of the only project elements designed to increase mainstem channel complexity. The scour associated with this structure will convey more water into the side channel during low flows, extending the duration of the upstream connection. The existing logjam at this location provides good habitat during high flows; however, it is not active during mid-range to low flows and does not currently provide any cover during the low flow period. The historical photo record shows the size of the structure has been stable, which indicates a balance between accumulation and loss of material. At project completion, the low water flow through the side channel will be about 20 cfs. The scour associated with this feature is expected carry more water into the side channel during low flows, but not affect the flow split during flood flows. The project is not designed to maintain a perennial channel during all years.

**ELJ’s in the side channel:** The design includes building five ELJ’s incorporated into the left bank and one bar apex ELJ in the side channel. These features are designed to create scour pools with good cover. The resulting narrower and deeper channel, when combined with the ELJ at the head of the island, is intended to provide increased habitat for a longer period of time each year. These structures and the associated scour should provide more pool habitat and more complex habitat in the side channel, and they are expected to increase the carrying capacity for juvenile
steelhead and Chincok in the side channel.

Live Crib: Located at the southern edge of the project, this feature includes constructing a vegetated log crib along the failing bank supporting Hwy 20 and Witte Road. The live crib wall feature will provide cover and habitat while addressing immediate agency concerns relative to slope stability. The live crib is designed to prevent additional erosion and likely riprap placement in an effort to protect the highway and county road. The live crib will support dense willow growth and provide cover in the existing groundwater-fed pool in the lower portion of the side channel.

LWD on gravel bars: This includes installing logs individually and in small groups on the gravel bars adjacent to the main and side channels. These logs will provide some refuge habitat for out-migrating juveniles during high flows. They will cause some deposition behind them and may have some minor scour around the rootball. These logs are intended to support vegetation establishment on the gravel bar, and allow for temporary sediment storage. The logs will be anchored by a combination of pinning between existing trees and burying sections of logs to act as deadmen. The logs are not designed to change the nature of the gravel bars.

Riparian Restoration: This includes supplementing the existing riparian vegetation to improve stand structure and provide future shade and a source of wood recruitment to the river.

Is or will the Property be subleased to another party? Yes ☐ No ☒
If yes, submit a copy of the sublease agreement.

What are the current and past uses of the site?
The project area is currently undeveloped land historically associated with the adjacent residential ownership. The property has been used for natural habitat and recreation. The portion of the property affected by this proposal has recently been acquired by MSRF with state and federally funding in anticipation of this project. As part of this acquisition, the property is now in permanent natural habitat conservation/protection.
A portion of the project area is right of way for a state highway and a county road.

Do you have any knowledge of contamination of the site by toxic or hazardous substances, or of past uses or practices that might have lead to contamination by such substances? Yes ☐ No ☒
If so, please explain: N/A

Do you know if any fill material has been placed on the property in question? Yes ☒ No ☐
If yes, please explain: A portion of State Highway 20 is built on fill placed following the 1948 flood of record.

V. IMPROVEMENTS
Physical improvements are structures placed on the land that cannot be removed without damage to the land. Examples of such structures include: pilings, dolphins, piers, wharves, piling-supported buildings, structures built on fill or concrete foundations, buried pipelines and cables, and support structures for bridges.

What physical improvements currently exist on the site? (Photos may be required.)
Structures on the property include three piezometer test wells for groundwater data collection. Structures on adjacent properties include a state highway, a county road, and an associated guard rail.

If there are physical improvements currently on the site, who owns them?
Mothow Salmon Recovery Foundation owns the piezometer test wells.

If there are physical improvements currently on the site, describe their condition: n/a

Which, if any, of the existing physical improvements will be removed, remodeled, or reconstructed? n/a

Describe any physical improvements that the applicant is proposing to construct on the site:
This project includes constructing 1 engineered log jam (ELJ), and 6 multiple log placement on state owned aquatic lands. The ELJ will be located at the head of the island. This structure is a gravity supported log structure buried to depth and secured with cables at each corner. The 6 wood placements will be placed on a gravel bar on river right. These structures are low in profile and consist of 5 logs each secured to buried rootwad pilings. All material used to build
these structures will be scoured, untreated wood.

Has any fill material been placed on the site? Yes ☒ No ☐
If Yes, please describe: A portion of State Highway 20 is built on fill placed following the 1948 flood of record.

VI. LOCAL, STATE, AND FEDERAL REGULATORY PERMITS Copies of all Government Regulatory Permits, or Permit Waivers Are Required Before Issuance of a DNR Use Authorization. Your project may require all or some of the following.

Please include the following permit applications, permits, or waivers with the application:

JARPA (Joint Aquatic Resource Permit Application) - This form is used to apply for all of the following individual permits:
1. Section 10 Permit (Required by the US Army Corps of Engineers for any work in or affecting navigable waters, e.g., floats, docks, piers, dredging, pilings, bridges, overhead power lines.)
2. Shoreline Substantial Development, Conditional Use, Variance Permit or Exemption (Issued by Local Government, and is required for work or activity in the 100 year flood plain, or within 200 feet of the Ordinary High Water mark of certain waters; and which included any one of the following: dumping, drilling, dredging, filling, placement or alteration of structures or any activity which substantially interferes with normal public use of the waters.)
3. Hydraulic Project Approval (Required by the Department of Fish and Wildlife if the project includes work that will use, divert, obstruct, or change the natural flow or bed of any fresh or salt water of the state.)
4. Section 404 Permit (Required by the US Army Corps of Engineers if your project will discharge or excavate any dredged or fill material waterward of the Ordinary High Water mark or the Mean Higher High Tide Line in tidal areas.)
5. Section 401 Water Quality Certification (Required by the Department of Ecology if a Section 404 permit is required.)

NPDES (National Pollutant Discharge Elimination System Permit) - Required by the Department of Ecology under delegated authority from the Federal Environmental Protection Agency for projects that include the discharge of fluid on or into surface water.

SEPA (State Environmental Policy Act) Checklist and Environmental Assessments - When you submit a permit application to any agency, if the project is not exempt, the lead agency will ask you to fill out an environmental checklist. Based on checklist answers and the reviewers knowledge of the project site, agency personnel will determine the types of impacts the project may have on the environment. The agency assessments may be the following forms: Determination of Non-significance, Determination of Significance, scoping documents, draft or final Environmental Impact Statements (EIS) or others prepared for the purpose of compliance.

Describe any habitat mitigation required by any of the permitting agencies identified above and identify where such mitigation is proposed to occur:

All answers and statements are true and correct to the best of my knowledge.

Applicant Name (please print): Chris Johnson
Title: President

Applicant or Authorized Signature: [Signature]

Date: 3/22/2012
- Please provide photos of project site and vicinity with captions.

Figure 3 Looking downstream at Project location. Red arrow indicates location of proposed bar-apex jam at head of island.
Figure 4 Location of proposed bar-apex logjam at head of island. Main channel is to left in background. Yellow flag in center indicates position of proposed logjam. Photo September 2011.
Figure 5 Looking upstream from side channel outlet. Red arrows indicate location of proposed LWD structures on gravel bars. Photo February 2010.