

FINAL Environmental Assessment

Eurasian Watermilfoil, Curlyleaf Pondweed, and Flowering Rush Treatment on Noxon and Cabinet Gorge Reservoirs

6/10/2021



**MONTANA FISH,
WILDLIFE & PARKS**

Draft Environmental Assessment

MEPA, NEPA, MCA 23-1-110 CHECKLIST

PART I. PROPOSED ACTION DESCRIPTION

1. Type of proposed state action: Treat Eurasian watermilfoil and hybrids of Eurasian watermilfoil and native watermilfoils (both referred to as EWM hereafter), curlyleaf pondweed (CLP), and flowering rush (FR) with herbicides and mechanical means to decrease presence in high use areas and to create favorable aquatic habitat.

2. Agency authority for the proposed action: Montana Fish, Wildlife and Parks (FWP)

3. Anticipated Schedule:

Estimated Commencement Date: 5/1/21

Estimated Completion Date: 5/1/31

Current Status of Project Design (% complete): 25%

4. Location affected by proposed action (county, range and township – included map): Noxon and Cabinet Gorge reservoirs, Sanders County, Montana; See Appendix A.

5. Project size -- estimate the number of acres that would be directly affected that are currently:

	<u>Acres</u>		<u>Acres</u>
(a) Developed:		(d) Floodplain	<u>0</u>
Residential	<u>0</u>		
Industrial	<u>0</u>	(e) Productive:	
(existing shop area)		Irrigated cropland	<u>0</u>
(b) Open Space/	<u>0</u>	Dry cropland	<u>0</u>
Woodlands/Recreation		Forestry	<u>0</u>
(c) Wetlands/Riparian	<u>0</u>	Rangeland	<u>0</u>
Areas		Other	<u>0</u>
		(f) Nearshore and open waters	<u>up to 200</u>

6. Permits, Funding & Overlapping Jurisdiction.

(a) Permits: permits will be filed at least 2 weeks prior to project start.

<u>Agency Name</u>	<u>Permits</u>
Montana Fish, Wildlife and Parks	Agreement between the agency and the entity harvesting EWM/CLP/FR; Stream Protection Act 124 permit
Montana Department of Agriculture	Commercial Pesticide Applicator License

(b) Funding:

<u>Agency Name</u>	<u>Funding Amount</u>
Avista (Clark Fork Settlement Agreement)	~\$40,000/yr
State and Federal grants	TBD

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

<u>Agency Name</u>	<u>Type of Responsibility</u>
Montana Department of Natural Resources and Conservation	Landowner
U.S. Fish and Wildlife Service	Cooperator
U.S. Forest Service	Landowner
Avista	Landowner/Cooperator
Sanders County (represented by the Sanders County Aquatic Invasive Plants Task Force ¹)	Develops treatment plan and treatment contracts and addresses permitting requirements

7. Narrative summary of the proposed action:

Eurasian watermilfoil was first confirmed in Noxon Reservoir in 2007. In 2008, the Sanders County Commissioners established the Sanders County Aquatic Invasive Plants Task Force (Task Force) to develop and implement an integrated weed management approach to contain and manage infestations of EWM. In May 2010, an environmental assessment was prepared that covered herbicide treatment of EWM, CLP, and FR in Noxon and Cabinet Gorge reservoirs (Tetra Tech 2010). This environmental assessment was subsequently approved in July 2010 (Ames 2010). Widespread herbicide treatment of EWM in Noxon Reservoir occurred from 2012 to 2016 and primarily focused on large dense beds of EWM throughout the reservoir. In 2017 no treatment occurred while the Task Force conducted an alternatives analysis for treatment of EWM in the reservoirs (DeBruyckere and Pennington 2017). Based on this analysis and input from stakeholders, treatment of EWM shifted from reservoir-wide to treatment of priority areas near public and private access sites, including public and private boating access sites and shoreline dock areas, and when funding is available, high density shallow access areas with significant boat traffic. Priority treatment areas within the proposed action area are determined annually based on pretreatment sampling results and available funding.

¹ Members of the Sanders County Aquatic Invasive Plants Task Force include representatives of Montana State University Extension, Avista, Green Mountain Conservation District, Montana BASS Federation, Noxon-Cabinet Shoreline Coalition, Sanders County Commission, Sanders County Weed District, U.S. Forest Service, FWP, the Confederated Salish and Kootenai Tribes, NorthWestern Energy, Private industry, and the Public.

In recognition of this shift and the low probability that EWM will be extirpated from either Noxon or Cabinet Gorge reservoirs, there is interest in managing this invasive plant to benefit the reservoirs' fishes and fisheries. Modifying EWM beds to benefit the fisheries is consistent with the findings of Kusnierz (*In prep.*). These actions are also consistent with FWP's fishery management goals (FWP 2019) for Noxon and Cabinet Gorge reservoirs as well as with the purpose and goal of the Montana Tributary Habitat Acquisition and Recreational Fishery Enhancement Program under the the Clark Fork Settlement Agreement (Avista 1999), which has funded much of the EWM treatment to this point.

The proposed action will maintain the use of herbicide treatment of EWM, CLP, and FR as described in the previous environmental assessment (Tetra Tech 2010) as well as allow for the use of new herbicides as they become approved for aquatic use by the U.S. Environmental Protection Agency and Montana Department of Agriculture (Table 1). Herbicides will be used to reduce coverage of EWM at access sites and high use areas (DeBruyckere and Pennington 2017). All herbicides will be used in accordance with their labels.

Table 1. Summary of proposed action treatments and associated techniques.

Action	Herbicides / Methods	Acreage
Herbicide treatment	Liquid diquat Liquid endothall Liquid diquat + liquid endothall Granular endothall Procellacor Triclopyr Other combinations of above compounds as appropriate New herbicides approved for use as appropriate	Up to 200
Physical treatment	Cutting (machinery and hand) Pulling (machinery and hand) Raking Diver dredging Bottom barriers	

The proposed action will also involve the use of physical means of treating or harvesting aquatic plants including cutting, pulling, raking, diver dredging, and bottom barriers (Table 1). Similar to herbicides, these methods may be used to reduce coverage at boat launches and other high use areas (e.g., docks, swimming areas). Physical means of treatment may be used earlier during the recreation season because they are not as constrained by flow and turbidity conditions as herbicide treatment. Mechanical harvest (cutting and/or pulling) may be used for any of the aforementioned purposes, but is anticipated to be the primary method to modify EWM beds for the benefit of the fisheries resources in Noxon and Cabinet Gorge reservoirs. Initially EWM beds will be treated with mechanical harvest such that paths are made that create edge habitat and reduce overall EWM coverage within the bed. "Control" EWM beds that are not treated will also be

selected. Both the treated and control beds will be sampled to evaluate fish response and EWM regrowth. In addition, fishermen perception of the project will be evaluated. Based on the outcome of this research, mechanical harvesting of EWM may continue to be employed as a fisheries management tool. If mechanical harvesting of EWM results in a desirable amount of control, and boat launches and other high use areas can effectively be cleared of EWM, then it may eventually be used along with or instead of herbicides.

8. Description and analysis of reasonable alternatives:

Alternative A: No Action

This alternative would result in EWM, CLP, and FR being untreated in Noxon and Cabinet Gorge reservoirs. This could result in excessive growth, degraded fish habitat, and an increased likelihood of EWM and CLP attaching to watercraft or trailers and being transported to new waterbodies. This alternative is inconsistent with the management of EWM, CLP, and FR in Noxon and Cabinet Gorge reservoirs over the last ten years and with the adaptive management framework that has been implemented on these reservoirs since 2017 (DeBruyckere and Pennington 2017).

Alternative B: Proposed Action

The Proposed Action would allow for the continued management of EWM, CLP, and FR by the Task Force and cooperating entities in Noxon and Cabinet Gorge reservoirs and reduce potential negative effects of these invasive aquatic plants. In addition, the Proposed Action includes more methods to control EWM, CLP, and FR than the previous environmental assessment and facilitates the use of any of these methods to manage EWM and CLP to benefit the fisheries present in each reservoir. Treatment under the proposed action will occur at locations determined annually based on pretreatment sampling results and available funding. Herbicide treatment will typically consist of a single event in late summer due to flow and turbidity conditions associated with spring runoff. Physical treatment may occur whenever necessary; however, it is most likely to occur as a single event in early summer with the potential for a second treatment in mid- to late summer. Depending on size, one or several priority and/or fish habitat areas may be treated daily. While it typically takes < 3 days to treat both reservoirs with herbicides, physical treatment may take up to a week per reservoir. Minimal disruption to recreation is anticipated because treatment is restricted to specific locations within a reservoir and will occur over a brief time period (≤ 1 day) at each location. Overall, the Proposed Action seeks to improve the health of the fish habitat and provide more fishing and recreational access to the reservoirs earlier in the season.

Alternatives considered but dismissed:

An alternative considered but dismissed was to continue with the use of herbicides only. This alternative was dismissed because herbicide treatment typically cannot occur in Noxon and Cabinet Gorge reservoirs until late summer due to flow and turbidity conditions. Treating EWM beds so late would minimize potential fisheries benefits as

EWM would only be controlled during a portion of the growing season and only after much of the summer fishing season had occurred. This alternative would have limited the methods available to manage EWM, CLP, and FR in Noxon and Cabinet Gorge reservoirs and would have constrained the number of EWM control and fisheries management options that could be explored.

9. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:

NA

PART II. ENVIRONMENTAL REVIEW CHECKLIST

Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment.

A. PHYSICAL ENVIRONMENT

1. <u>LAND RESOURCES</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?		X				
c. Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				

2. <u>AIR</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Emission of air pollutants or deterioration of ambient air quality? (Also see 13 (c).)		X				
b. Creation of objectionable odors?		X				
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e. For P-R/D-J projects, will the project result in any discharge, which will conflict with federal or state air quality regulations? (Also see 2a.)						NA

3. <u>WATER</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?			X		Yes	X
b. Changes in drainage patterns or the rate and amount of surface runoff?		X				
c. Alteration of the course or magnitude of floodwater or other flows?		X				
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in the quality of groundwater?		X				
g. Changes in the quantity of groundwater?		X				
h. Increase in risk of contamination of surface or groundwater?			X		Yes	X
i. Effects on any existing water right or reservation?		X				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		X				
l. For P-R/D-J, will the project affect a designated floodplain? (Also see 3c.)						NA
m. For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a.)						NA

Notes: 3a and 3h – Herbicide labels will be followed.

4. <u>VEGETATION</u> Will the proposed action result in?	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?				X Beneficial		X
b. Alteration of a plant community?				X Beneficial		X
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?			X		X	X
f. For P-R/D-J, will the project affect wetlands, or prime and unique farmland?						NA
g. Other:						NA

Notes: 4a and 4b – Reduce invasive EWM, CLP, and FR; 4e – EWM, CLP, and FR are already established within and downstream of these reservoirs and are not expected to cause additional problems. When mechanical treatment is used, EWM, CLP, and FR plants and fragments will be collected and disposed of offsite to minimize the potential for establishment of new plants within the reservoirs and downstream waters.

5. <u>FISH/WILDLIFE</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Deterioration of critical fish or wildlife habitat?		X				
b. Changes in the diversity or abundance of game animals or bird species?		X				
c. Changes in the diversity or abundance of nongame species?			X Beneficial			X
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?		X	X		X	X
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?			X Beneficial			X
h. For P-R/D-J, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f.)						NA
i. For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d.)						NA

Notes: 5c – A goal of this project is to increase fish habitat quality which could lead to an increase in the abundance of nongame fish species; 5f – Herbicide labels will be followed, and harvesting is anticipated to have no effects as Bull Trout are unlikely to be found in EWM and CLP beds; 5g – A goal of this project is to increase fish habitat quality which could lead to an increase in legal fish harvest. Small treatment areas and the relatively short time period required to treat is anticipated to have minor and short-term effects to amphibians, insects, and birds.

B. HUMAN ENVIRONMENT

6. <u>NOISE/ELECTRICAL EFFECTS</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Increases in existing noise levels?		X				
b. Exposure of people to serve or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				

7. <u>LAND USE</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				

8. <u>RISK/HEALTH HAZARDS</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?			X		X	X
b. Affect an existing emergency response or emergency evacuation plan, or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?		X				
d. For P-R/D-J, will any chemical toxicants be used? (Also see 8a)						NA

Notes: 8a – All regulations and best management practices will be employed to avoid such risk.

9. <u>COMMUNITY IMPACT</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				

10. <u>PUBLIC SERVICES/TAXES/UTILITIES</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		X				X
b. Will the proposed action have an effect upon the local or state tax base and revenues?		X				
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Will the proposed action result in increased use of any energy source?		X				
e. Define projected revenue sources		X				
f. Define projected maintenance costs.		X				

Notes: 10a – Although mechanical harvesting will require the disposal of harvested material, it will not result in the need for new or altered government services. Harvested material be transported offsite and will either be disposed of at a local landfill or composted.

11. <u>AESTHETICS/RECREATION</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		X				
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report.)			X Beneficial			X
d. For P-R/D-J, will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted? (Also see 11a, 11c.)						NA

Notes: 11c – Improved fish habitat and more fishing opportunity.

12. <u>CULTURAL/HISTORICAL RESOURCES</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?		X				
b. Physical change that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				
d. For P-R/D-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance. (Also see 12.a.)						NA

SIGNIFICANCE CRITERIA

13. <u>SUMMARY EVALUATION OF SIGNIFICANCE</u>	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
Will the proposed action, considered as a whole:						
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources that create a significant effect when considered together or in total.)		X				
b. Involve potential risks or adverse effects, which are uncertain but extremely hazardous if they were to occur?		X				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		X				
f. For P-R/D-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e.)						NA
g. For P-R/D-J, list any federal or state permits required.						NA

PART III. NARRATIVE EVALUATION AND COMMENT

Implementation of the Proposed Action may result in impacts to water quality, aquatic vegetation, fish abundance, and recreational opportunities. However, it is expected that any negative impacts would be minor due to the implementation of the mitigating activities described in the review checklist. Treatment of EWM, CLP, and FR may result in minimal, short-term (<1 day) disruption of recreational opportunities at some locations. In addition, some of the impacts to aquatic vegetation, fish abundance, and recreational opportunities are desired and considered beneficial. This project has the potential for few negative impacts, but also has the potential to reduce EWM, CLP, and FR coverage at high use areas such as boat launches and docks, limit the spread of these invasive species to other waterbodies, and improve fish habitat within Noxon and Cabinet Gorge reservoirs.

PART IV. PUBLIC PARTICIPATION

1. Public involvement:

The public will be notified in the following manners to comment on this current EA, the proposed action and alternatives:

- Two public notices in each of these papers: *Independent Record*, *Flathead Beacon*, and *Sanders County Ledger*
- One statewide press release;
- Public notice on the Fish, Wildlife & Parks web page: <http://fwp.mt.gov>.

Notice of the environmental assessments availability will be distributed to the neighboring landowners and interested parties to ensure their knowledge of the proposed project.

This level of public notice and participation is appropriate for a project of this scope having limited impacts, many of which can be mitigated.

2. Duration of comment period:

The public comment period will extend for (30) thirty days. Written comments will be accepted until 5:00 p.m., April 24, 2021 and can be mailed or emailed to the addresses below:

Attn: Paul Kusnierz
PO Box 1469
Noxon, MT 59853

paul.kusnierz@avistacorp.com

PART V. EA PREPARATION

1. **Based on the significance criteria evaluated in this EA, is an EIS required? (YES/NO)?** No

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

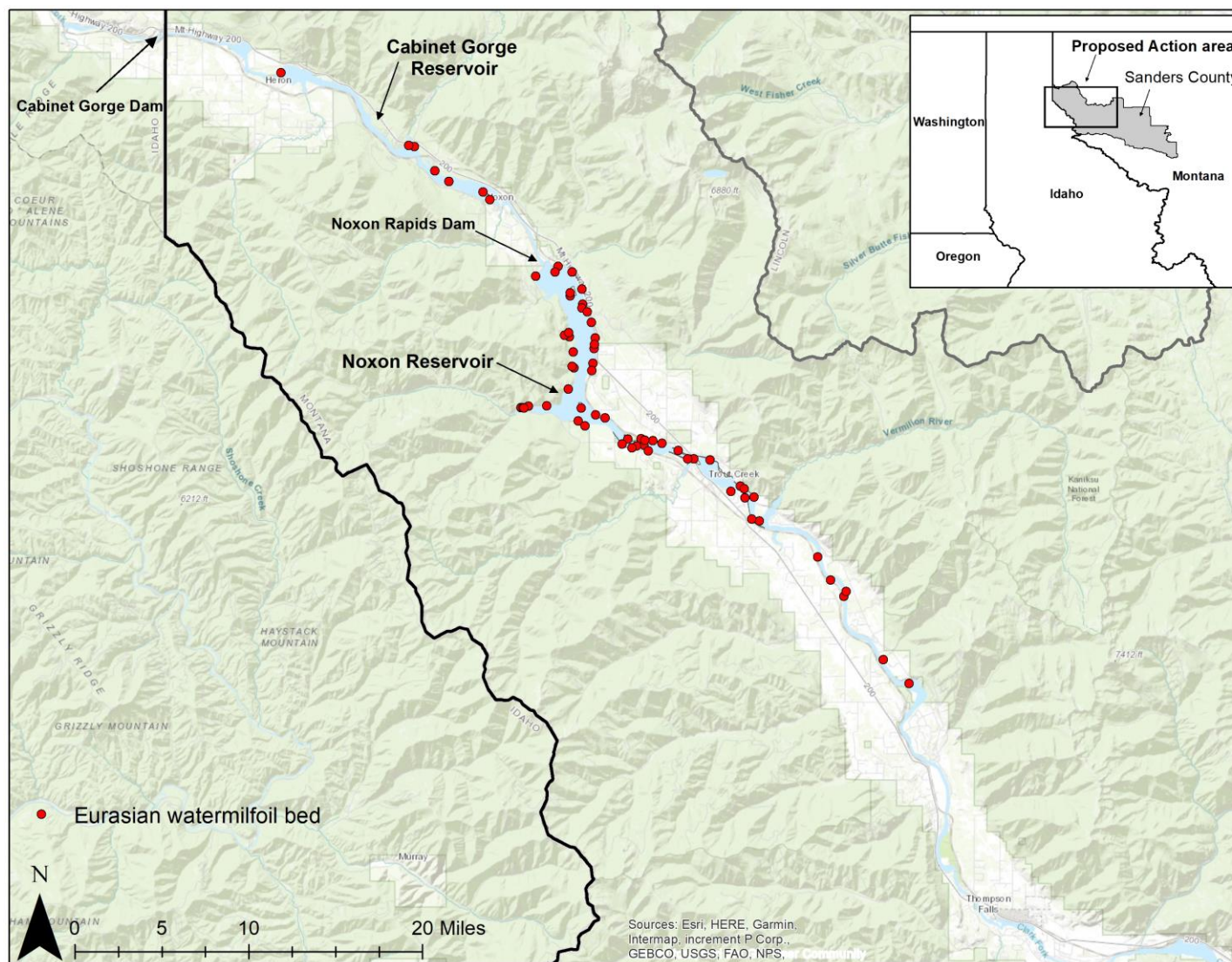
After considering the potential impacts of the proposed action, FWP has determined that an environmental impact statement is not warranted. Potential impacts anticipated by this project are minor and/or temporary and can be mitigated in many cases.

2. **Person(s) responsible for preparing the EA:** Paul Kusnierz, Avista designated representative on the Sanders County Aquatic Invasive Plants Task Force; Jason Blakney, FWP
3. **List of agencies or offices consulted during preparation of the EA:** FWP Fisheries Division and FWP Responsive Management Unit; U.S. Fish and Wildlife Service Montana Ecological Services Office; U.S. Forest Service Cabinet Ranger District

REFERENCES

- Ames, G. H. 2010. Eurasian watermilfoil / Curlyleaf pondweed research and implementation project environmental assessment decision notice. Montana Department of Agriculture, Helena, Montana.
- Avista. 1999. Appendices to the Clark Fork Settlement Agreement protection, mitigation and enhancement measures. Avista, Spokane, Washington.
- DeBruyckere, L. A., and T. Pennington. 2017. Analysis of treatment alternatives for invasive watermilfoil in Noxon Rapids and Cabinet Gorge Reservoirs, Sanders County, Montana.
- Kusnierz, P. *In prep.* Eurasian Watermilfoil as Fish Habitat. Avista, Noxon, Montana.
- FWP (Montana Fish, Wildlife and Parks). 2019. 2019-2027 Statewide Fisheries Management Program and Guide. Montana Fish, Wildlife and Parks, Helena, Montana.
- Tetra Tech. 2010. Environmental assessment - Eurasian watermilfoil / Curlyleaf pondweed research and implementation project: phase 2. Tetra Tech, Helena, Montana.

Appendix A: Map of location affected by proposed action



Notes: Red dots denote the location of Eurasian watermilfoil beds, but not the extent as this can change annually. Priority treatment areas within the proposed action area are determined annually based on pretreatment sampling results and available funding.