DRAFT

ENVIRONMENTAL ASSESSMENT

CHECKLIST

Bluewater Springs Trout Hatchery New Zealand Mud Snail Barrier Project

FWP-CEA-FSH-R9-26-001

January 19, 2026

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Checklist Environmental Assessment

The Montana Department of Fish, Wildlife and Parks (FWP) has prepared this Draft Environmental Assessment (EA) in accordance with the requirements of the Montana Environmental Policy Act (MEPA). The purpose of an EA is to identify, analyze, and disclose the impacts of a proposed state action. This document may disclose impacts that have no required mitigation measures, or over which FWP, more broadly, has no regulatory authority.

Local governments and other state agencies may have authority over different resources and activities under separate regulations. FWP actions will only be approved if the proposed action complies with all applicable regulations. FWP has a separate obligation to comply with any federal, state, or local laws and to obtain any other permits, licenses, or approvals required for any part of the proposed action.

I. Compliance with the Montana Environmental Policy Act

Before a proposed project may be approved, environmental review must be conducted to identify and consider potential impacts of the proposed project on the human and physical environment affected by the project. The Montana Environmental Policy Act (MEPA) and its implementing rules and regulations require different levels of environmental review, depending on the proposed project, significance of potential impacts, and the review timeline. § 75-1-201, Montana Code Annotated ("MCA"), and the Administrative Rules of Montana ("ARM") 12.2.430, General Requirements of the Environmental Review Process.

FWP must prepare an EA when:

- *It is considering a "state-proposed project," which is defined in § 75-1-220(8)(a) as:*
  (i) a project, program, or activity initiated and directly undertaken by a state agency;
  (ii) … a project or activity supported through a contract, grant, subsidy, loan, or other form of funding assistance from a state agency, either singly or in combination with one or more other state agencies; or
  (iii) … a project or activity authorized by a state agency acting in a land management capacity for a lease, easement, license, or other authorization to act.
- *It is not clear without preparation of an EA whether the proposed project is a major one significantly affecting the quality of the human environment. ARM 12.2.430(3)(a));*
- *FWP has not otherwise implemented the interdisciplinary analysis and public review purposes listed in ARM 12.2.430(2) (a) and (d) through a similar planning and decision-making process (ARM 12.2.430(3)(b));*
- *Statutory requirements do not allow sufficient time for the FWP to prepare an EIS (ARM 12.2.430(3)(c));*
- *The project is not specifically excluded from MEPA review according to § 75-1-220(8)(b) or ARM 12.2.430(5); or*
- *As an alternative to preparing an EIS, prepare an EA whenever the project is one that might normally require an EIS, but effects which might otherwise be deemed significant appear to be mitigable below the level of significance through design, or enforceable controls or stipulations or both imposed by the agency or other government agencies. For an EA to suffice in this instance, the agency must determine that all the impacts of the proposed project have been accurately identified, that they will be mitigated below the level of significance, and that no significant impact is likely to occur. The agency may not consider compensation for purposes of determining that impacts have been mitigated below the level of significance (ARM 12.2.430(4)).*

MEPA is procedural; its intent is to ensure that impacts to the environment associated with a proposed project are fully considered and the public is informed of potential impacts resulting from the project.

II. Background and Description of Proposed Project

Name of Project: Bluewater Hatchery New Zealand Mud Snail Barrier Project

Montana Fish, Wildlife & Parks (FWP) is proposing a project to prevent New Zealand Mud Snails (NZMS) from accessing the state-owned and operated Bluewater Springs Trout Hatchery's water sources, Bluewater and Tillet springs. The hatchery, located near the town of Bridger in Carbon County, is the third largest fish production facility in Montana. Its primary purpose is stocking sport fish into urban ponds, reservoirs and other public waterbodies. Montana designates NZMS as an aquatic invasive species (AIS) and they are present in Bluewater Creek, which is adjacent to the hatchery. In 2020 and in 2022, NZMS were detected in the hatchery's lower raceways and effluent. These detections resulted in significant costs and FWP staff time to decontaminate and clean the system and a loss of production fish. The hatchery effluent system was then modified to prevent NZMS from accessing into the raceways again. In late 2025, NZMS were detected in a drainage channel that flows out of the Bluewater Spring. The snails are approximately 15 feet from the spring outlet. The water temperature of the spring and subsequent drainage channel is consistently $55^{\circ F}$ which prevents winter kills and provides conditions for the snails to reproduce year-round.

The proposed project to upgrade Bluewater Hatchery's current infrastructure and install new features is intended to prevent NZMS from gaining access to the hatchery's water sources at the springs. The existing vault on the spring will be retrofitted with a new end wall and stop board structure to control Bluewater Spring's water levels. The overflow pipe from the Tillet diversion structure will be replaced and increased from an 8-inch diameter pipe to an 18-inch diameter pipe. The overflows for both Bluewater and Tillet springs will terminate in a new concrete vault. The vault will provide a monitoring point for the system and additional protection against NZMS invasion. The vault will have a 36-inch diameter outlet pipe that will be placed in the existing drainage channel. The new pipe would replace an existing culvert under the road crossing. Two additional 6-inch pipes will be placed adjacent to the 36-inch pipe to allow stormwater to pass under the road. The 36-inch pipe terminates at a concrete drop structure downstream of the road crossing. The final step is At burying these features and revegetating the project area. This project will create two abrupt elevation changes in the water flow creating physical barriers and serving as a biosecurity measure from future NZMS invasions.

FWP is anticipating the construction portion of the project to be contracted with work beginning in early 2026.

Affected Area / Location of Proposed Project:

- Legal Description
    - Latitude/Longitude: 45.3298 - 108.79972
    - Section, Township, and Range: 09, 6S, 24E
    - Town/City, County, Montana: Bridger, Carbon County, Montana
- Location Maps
    - Figure 1 state-wide reference location
    - Figure 2 project area map

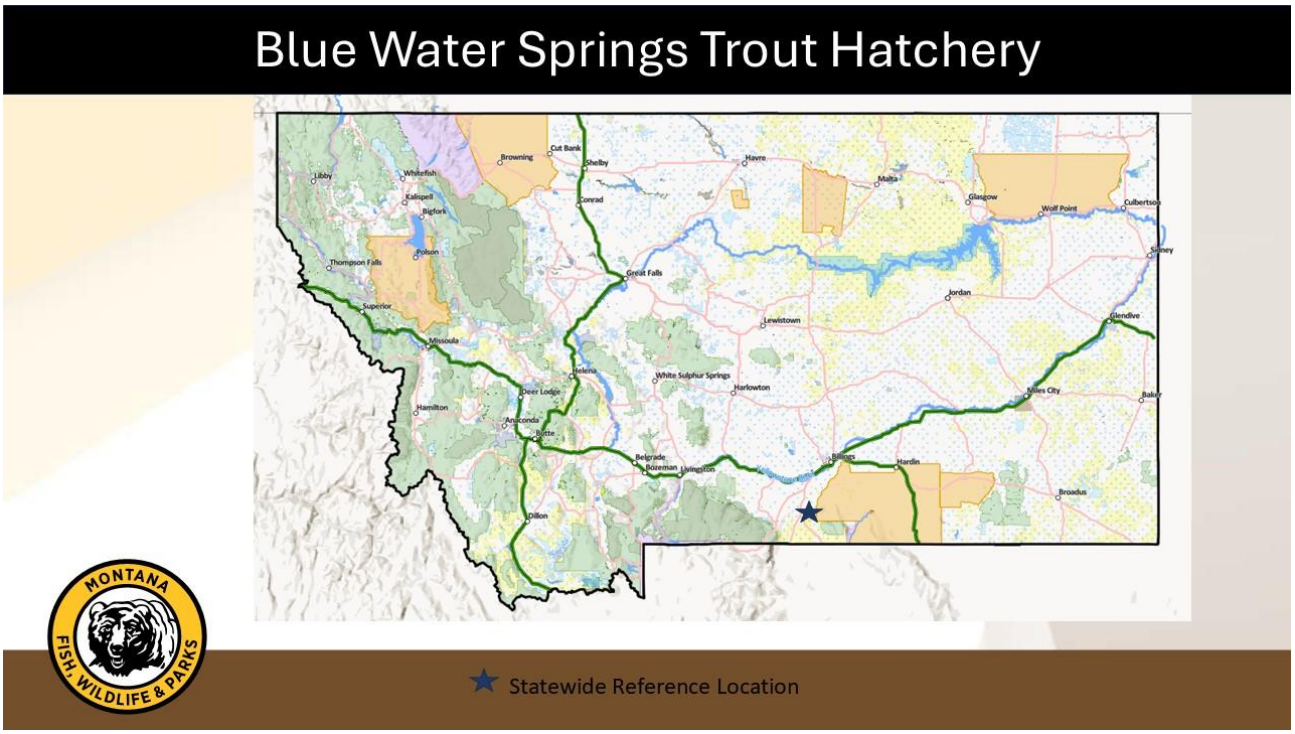

Figure 1. Location of Bluewater Springs Trout Hatchery in reference to the state of Montana.

Figure 2. Location of project area at Blue Water Springs Trout Hatchery.

III. Purpose and Need

The EA must include a description of the purpose and need or benefits of the proposed project. ARM 12.2.432(3)(b). Benefits of the proposed project refer to benefits to the resource, public, department, state, and/or other.

The purpose of this project is to construct a physical barrier to prevent NZMS from entering Bluewater Springs Trout Hatchery's water sources. By rerouting the overflow from Bluewater and Tillet springs from a drainage channel into a pipe allows the channel to dry out and freeze. Desiccation and subsequent freezing would kill any snails above the proposed outlet drop structure. The channel will remain dry to prevent future movement of snails into the springs and hatchery system.

If FWP prepared a cost/benefit analysis before completion of the EA, the EA must contain the cost/benefit analysis or a reference to it. ARM 12.2.432(3)(b).

	Yes*	No
Was a cost/benefit analysis prepared for the proposed project?	☐	☒

* If yes, a copy of the cost/benefit analysis prepared for the proposed project is included in Attachment A to this Draft EA

IV. Other Agency Regulatory Responsibilities

FWP must list any federal, state, and/or local agencies that have overlapping or additional jurisdiction, or environmental review responsibility for the proposed project, as well as permits, licenses, and other required authorizations. ARM 12.2.432(3)(c).

*A list of other required local, state, and federal approvals, such as permits, certificates, and/or licenses from affected agencies is included in **Table 1** below. **Table 1** provides a summary of requirements but does not necessarily represent a complete and comprehensive list of all permits, certificates, or approvals needed for the proposed project. Agency decision-making is governed by state and federal laws, including statutes, rules, and regulations, that form the legal basis for the conditions the proposed project must meet to obtain necessary permits, certificates, licenses, or other approvals. Further, these laws set forth the conditions under which each agency could deny the necessary approvals.*

Table 1: Federal, State, and/or Local Regulatory Responsibilities

Agency	Type of Authorization (permit, license, stipulation, other)	Purpose
FWP Heritage Program; Montana State Historic Preservation Office; Tribal Historic Preservation Office(s)	Cultural Assessment	By Montana law (22-3-433, MCA), all state agencies are required to consult with the State Historic Preservation Office (SHPO) to identify heritage properties on land owned by the state that may be adversely impacted by a proposed action or development project. FWP's Heritage Program staffs a qualified archaeologist(s) and/or historian(s) to facilitate the required consultation and associated activities. FWP's Heritage Program also consults with all Tribal Historic Preservation Offices (THPO) affiliated with each affected property in accordance with FWP's Tribal Consultation Guidelines. Construction of parking areas and other ground disturbing activities would

		require consultation with the SHPO/THPO to ensure adequate protection of such resources.
DNRC – Montana Sage Grouse Habitat Conservation Program/U.S. Fish and Wildlife Service	Consultation	Required for work that may occur in Greater Sage Grouse general and critical habitat.

V. List of Mitigations, Stipulations

Mitigations, stipulations, and other enforceable controls required by FWP, or another agency, may be relied upon to limit potential impacts associated with a proposed Project. The table below lists and evaluates enforceable conditions FWP may rely on to limit potential impacts associated with the proposed Project. ARM 12.2.432(3)(g).

Table 2: Listing and Evaluation of Enforceable Mitigations Limiting Impacts

Are enforceable controls limiting potential impacts of the proposed action? If not, no further evaluation is needed.			**Yes ☒**	**No ☐**
If yes, are these controls being relied upon to limit impacts below the level of significance? If yes, list the enforceable control(s) below			**Yes ☒**	**No ☐**
Enforceable Control	**Responsible Agency**	**Authority (Rule, Permit, Stipulation, Other)**	**Effect of Enforceable Control on Proposed Project**	
Impact to Greater Sage Grouse habitat	DNRC – Montana Sage Grouse Conservation Program	Compensatory Mitigation System – 14.6.104	Reduce impacts to either general or critical, core area habitat for Greater Sage Grouse.	
Cultural Resource Protection	SHPO, FWP Heritage Program	Cultural Assessment and Inventory	A cultural resource inventory will be completed prior to any construction of the project. If cultural resources are unexpectedly discovered during project implementation, FWP will cease implementation, and contact FWP's Heritage Program for further evaluation.	
Noxious Weed Management Plan	FWP, Carbon County	Montana FWP Statewide Integrated Weed Management Plan	Requires FWP to monitor and control the spread of noxious weeds at the site.	
Natural Heritage Animal and Plant Species of Concern	Montana Natural Heritage Program	Informational with expertise in endangered, threatened, species of concern, and documentation of species presence and status.	Assist to identify and reduce or mitigate impacts for endangered, threatened, or species of concern in project areas.	
Aquatic Invasive Quarantine Measures Within Invasive Species Management Area	Contractors, FWP	ARM 12.5.706	All equipment used in the drainage channel currently containing NZMS shall be left on site for a minimum of 7 days after last contact with the channel and soil to freeze or dry to prevent moving NZMS off site.	

VI. Alternatives Considered

In addition to the proposed project, and as required by MEPA, FWP analyzes the "No-Action" alternative in this EA. Under the "No Action" alternative, the proposed project would not occur. Therefore, no additional impacts to the physical environment or human population in the analysis area would occur. The "No Action" alternative forms the baseline from which the potential impacts of the proposed Project can be measured.

If the No Action alternative is selected, NZMS will continue to migrate and eventually enter the water supply for Bluewater Springs Trout Hatchery. When the snails successfully enter and colonize the springs, water quality will be compromised and millions of fish reared and held at the hatchery would be negatively affected. This could result in the hatchery's closure as production and distribution of fish would have to cease because the risk of transporting and further invasive NZMS is too high.

	Yes*	No
Were any additional and reasonable alternatives considered?	☒	☐

* If yes, a list and description of the other alternatives considered, but not carried forward for detailed review is included below

In addition to the proposed project and the No Action alternative, FWP analyzed the following alternatives:

Alternative 3: Install barrier at original location prior to NZMS detection

This alternative would include installation of a "snail barrier" structure at the original proposed location downstream of the road crossing. The natural terrain features allow for easy installation of a barrier structure that would contain Tillet Creek into a pipe for a short distance. The pipe would have a 12" fall at its outlet and would be copper lined. The structure could be constructed with a small headwall and cantilevered pipe. The upstream channel would need to be chemically treated to remove NZMS and frequent testing would be required to confirm removal was successful. This alterative was dismissed because it would require the use of chemicals and intensive monitoring. Even if NZMS were successfully removed with chemicals, the threat of reintroduction (while greatly reduced) still exists, due to the proximity of suitable habit and the potential movement of NZMS by other vectors. NZMS have been eradicated in closed environments like hatcheries but complete eradication in natural open waters has not been feasible with current methods or technologies.

Alternative 4: Divert all overflow from Bluewater and Tillet springs into a vault without outlet at natural features

This alternative would include all aspects of alternative #1 but would reduce the outlet pipe from 320' to 70'. The pipe would still be required to accommodate the 12" drop from Bluewater Springs overflow. This would allow for less disruption to the channel. However, the outlet would not have a 12" drop and would be prone to water backflowing upstream during high flows. This is not best option because a physical barrier is needed to prevent to NZMS migration.

	Yes*	No
Were any additional alternatives considered and dismissed for cause?	☒	☐

* If yes, a list and description of the other alternatives considered, but not carried forward for detailed review, is included below

Other Alternatives Not Carried Forward for Detailed Analysis

Alternative 5: Direct Tillet Spring overflow to Bluewater Spring intake screening structure

This alternative was proposed to install approximately 215' of 8" HDPE pipe to connect to the existing Tillet overflow pipe to the intake screening structure downstream of Bluewater Springs. The solution would remove existing overflow from the Tillet Overflow and add it to the Intake Screening Structure. This solution would allow the Tillet overflow water to be captured and used within the hatchery. This solution would combine Tillet and Bluewater water sources at the Intake Screening Structure. This alternative would not resolve the issue of leaking dam boards at the Bluewater outflow.

This alternative would require excavation near Bluewater Springs and the pipe would need to be installed 4' below grade to provide adequate flow from the existing Tillet overflow to the intake screening structure. This excavation would be below the water table of Bluewater Springs and would result in groundwater infiltration of the excavation making excavation and placement of the pipe difficult. The alternative would also require alteration to the existing intake screening structure and could pose a risk of damage to this structure during installation. This is a harder option in terms of construction and costs and does not allow for a physical barrier of springs for biosecurity.

Alternative 6: Extend pipe from Tillet diversion structure into Bluewater Spring

This alternative would include installation of an 8" pipe to extend the overflow pipe from the Tillet diversion structure into Bluewater Springs. The elevation of the pipe invert at the diversion structure is 3992.06 and the elevation of the pool in Bluewater Springs is 3992.52. The pipe would need to be installed below the elevation of the pool, and the static water elevation would back up to the diversion structure. This alternative was not investigated any further due to infeasibility. This option was not chosen due to concerns over biosecurity. This would not allow the spring's water to be separated going to the facility.

VII. Summary of Potential Impacts of the Proposed Project on the Physical Environment and Human Population

*The impacts analysis identifies and evaluates **direct**, **secondary**, and **cumulative impacts**.*

- ***Direct impacts** are those that occur at the same time and place as the action that triggers the effect.*
- ***Secondary impacts** "are further impacts to the human environment that may be stimulated or induced by or otherwise result from a direct impact of the action." ARM 12.2.429(18).*
- ***Cumulative impacts** "means the collective impacts on the human environment of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures." ARM 12.2.429(7).*

*Where impacts are expected to occur, the impact analysis estimates the **extent, duration, frequency,** and **severity** of the impact. The duration of an impact is quantified as follows:*

- ***Short-Term**: impacts that would not last longer than the proposed project.*
- ***Long-Term**: impacts that would remain or occur following the proposed project.*

The severity of an impact is measured using the following:

- ***No**: there would be no change from current conditions.*
- ***Negligible**: an adverse or beneficial effect would occur but would be at the lowest levels of detection.*
- ***Minor**: the effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.*
- ***Moderate**: the effect would be easily identifiable and would change the function or integrity of the resource.*

- ***Major**: the effect would irretrievably alter the resource.*

Some impacts may require mitigation. As defined in ARM 12.2.429, mitigation means:

- *Avoiding an impact by not taking a certain action or parts of a project;*
- *Minimizing impacts by limiting the degree or magnitude of a project and its implementation;*
- *Rectifying an impact by repairing, rehabilitating, or restoring the affected environment; or*
- *Reducing or eliminating an impact over time by preservation and maintenance operations during the life of a project or the time period thereafter that an impact continues.*

*A list of any mitigation strategies including, but not limited to, design, enforceable controls or stipulations, or both, as applicable to the proposed project is included in **Section VI** above.*

FWP must analyze impacts to the physical and human environment for each alternative considered. The proposed project considered the following alternatives:

- **Alternative 1: No Action. Evaluation and Summary of Potential Impacts on the Physical Environment and Human Population**

  Under the "No Action" alternative, the proposed project would not occur. Therefore, no additional impacts to the physical environment or human population in the analysis area would occur. The "No Action" alternative forms the baseline from which the potential impacts of the proposed Project can be measured. If no action is taken and NZM's expand into the water system there is potential the hatchery would be closed, or other actions would be necessary to resecure the system.

- **Alternative 2: Proposed Project. Evaluation and Summary of Potential Impacts on the Physical Environment and Human Population**

  See *Cumulative Impacts Analysis; Table 3*, *Impacts on Physical Environment*; and *Table 4, Impacts on Human Population*, below.

VIII. Cumulative Impacts Analysis

For the purposes of MEPA, "cumulative impact" means the collective impacts on the human environment of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location or generic type. Related future actions must also be considered when such actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures. ARM 12.2.429(7).

"Action" means a project, program or activity directly undertaken by the agency; a project or activity supported through a contract, grant, subsidy, loan or other form of funding assistance from the agency, either singly or in combination with one or more other state agencies; or a project or activity involving the issuance of a lease, permit, license, certificate, or other entitlement for use or permission to act by the agency, either singly or in combination with other state agencies. ARM 12.2.429(1).

Under the "No Action" alternative, the proposed project would not occur. Therefore, no cumulative impacts to the affected human environment would occur. The "No Action" alternative forms the baseline from which the potential impacts of the proposed project are measured. Past and present actions are accounted for as part of the existing, or

"baseline," environmental conditions of the affected human environment prior to approval and implementation of the proposed project, and any known future related project(s).

FWP is unaware of any future related actions that would cumulatively impact the affected human environment with consideration for the proposed project and/or any past and present actions. For the purposes of the proposed project, the cumulative impacts analysis applies to all resources analyzed under Alternative 2, Proposed Project. See Tables 3 and 4 of this Draft EA.

Related Past, Present, and Future State Actions:

Past, Present, and Future Related MEPA Review

The following list identifies environmental review conducted to assess potential impacts to the affected human environment from past, present, and known future related projects or actions. Past and present actions are accounted for as part of the existing, or "baseline," environmental conditions of the affected human environment prior to approval and implementation of the proposed project, and any known future related project(s).

Guiding Documents

Further, several guiding documents inform, have informed, and will continue to inform actions such as the proposed action. These guiding documents outline strategies and considerations for taking management action and addressing any potential impacts from such management actions. These guiding documents, and affected regulatory entities, include the following:

- Montana Statewide Fisheries Management Plan 2023–2026
- Montana Aquatic Invasive Species Management Plan (2025)
- Montana FWP Statewide Integrated Weed Management Plan
- Montana Natural Heritage Program Field Guide and Species of Concern Report

Again, the guiding documents identified above outline strategies and considerations for taking management action to address potential adverse impacts from such management actions and thereby ensure the proposed project is conducted in a manner consistent with limiting the potential for adverse cumulative impacts. Therefore, no significant adverse cumulative impacts would be expected because of the proposed project. For additional information see the resource-specific impacts analyses contained in section XII.A and XII.B of this Draft EA.

Table 3 - Potential Impacts of Proposed Project on the Physical Environment

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Terrestrial, avian, and aquatic life and habitats	☐	☒	☒	☐	☐	☒	☒	☐	FWP staff do expect moderate short-term and long-term impacts to the terrestrial, avian, aquatic life, and habitats because of this project. The proposed project includes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering the hatchery system. The project would be near habitat linked to the persistence of several Montana Species of Special Concern including but limited to Yellowstone cutthroat trout, greater sage grouse, greater short-horned lizard, and western milksnake[1]. Golden and bald eagles are also documented near the project site. Construction activities would occur during the winter and early spring when species are less active and avoiding critical spawning periods. There will a slight increase in turbidity in the lower drainage channel and Bluewater Creek water while heavy equipment is in channel. Impacts to terrestrial, avian and aquatic life and habitat would be temporary and minor, lasting only as long as the project. There will also be long-term, moderate, beneficial impacts because of the proposed project as the upper section of the channel is to remain dry, serving as a physical barrier between the springs and hatchery, and NZMS. The project will result in a permanent reduction in fish and aquatics for approximately 550 feet where a portion of a drainage channel will be funneled into a pipe and no longer contain water. The purpose of a dry channel is to eradicate NZMS from the upper channel and stop further migration towards the hatchery's water sources. This project is necessary to protect the state hatchery from another

[1] Montana Natural Heritage Program. Environmental Summary for Latitude 45.32593 to 45.34356 and Longitude -108.79115 to -108.81504. Retrieved on 12/29/2025.

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
									invasion of NZMS which has devasting results on the fishes reared at the hatchery. Over 1.5 million rainbow trout and 1 million arctic graylings are reared annually and creates the further threat of NZMS spreading to waters across the state where fish are stocked.
Water quality, quantity, and distribution	☐	☒	☒	☐	☐	☒	☒	☐	FWP does expect significant adverse impacts to the water quality, quantity, and distribution because of the proposed project. The proposed project includes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering the Bluewater and Tillet springs and the hatchery system. A minor, short-term increase in the turbidity of Bluewater Creek could occur because of the disturbances to the drainage channel while installing pipes and a culvert. Contractors will use BMPS to minimize disturbance areas, and revegetating the site would reduce negative impacts to water quality, quantity and distribution. The proposed project will have long-term moderate impacts as the upper channel bed will remain dry for approximately 550 feet. The volume of flow is not expected to change but be carried through buried pipes instead of an exposed channel. This is necessary to create a physical barrier and ensure biosecurity for the springs and hatchery from NZMS. If the snails successfully enter and colonize the spring, water quality would be compromised and negatively impact the fish reared at the hatchery.
Geology	☒	☐	☐	☒	☐	☐	☐	☐	No significant adverse impacts to the area's geology would be expected because of the proposed project of installing new flow-control structures, replacing and upsizing overflow piping, constructing a new monitoring vault, and replacing the road-crossing culvert to improve system control at Bluewater Springs State Hatchery. Some

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
									ground disturbance could occur but would be minimal and occur in areas that have already been disturbed. The proposed project would not affect any geologic features in the project area; therefore, no impacts to geology would be expected because of the proposed project.
Soil quality, stability, and moisture	☐	☐	☒	☐	☐	☒	☒	☐	FWP staff do not expect significant, long-term impacts to the soil quality, stability, and moisture because of the project. The proposed project includes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering the Bluewater and Tillet springs and the hatchery system. Soil disturbance would be concentrated at either end of the pipe where the box structures will be installed, and the culvert and overflow infrastructure will be replaced. However, these areas have been previously disturbed. There would be long-term, minor to moderate impacts on soil moisture in the upper section of the drainage channel as it will remain dry. These impacts would be limited to just the immediate project area and be beneficial by not allowing NZMS to survive.
Vegetation cover, quantity, and quality	☐	☐	☒	☐	☐	☒	☐	☐	No significant adverse impacts to vegetation cover, quantity, and quality in the affected area would be expected because of the proposed project. The proposed project includes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering the Bluewater Hatchery water sources. Currently, the vegetation above the banks is upland grasses whereas the vegetation on and below the banks is trees and shrubs. There will be minor, long-term impacts to vegetation cover in the upper section of the channel. After the work is completed, some of these plants will not have suitable habitat and water needed to survive. However, some of the vegetation

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
									serves as habitat for NZMS in the project area and its removal will be beneficial for successful eradication. Swamp milkweed *Asclepias incarnata* had been documented near the proposed project[1,2]. The hatchery is only one of the few known locations for the plant in Montana and is a species of concern. A survey completed January 13, 2026, as part of this process found the population has persisted since the last survey and individual plants were found outside of the proposed work area and should not be impacted by this project. The Montana Natural Heritage Program and volunteer botanists would work with hatchery staff to preserve the population near the work area. To maintain existing vegetation, the footprint of the disturbed area will be minimized and the site revegetated with native seeds. Weeds control requires that all equipment is washed before arriving at the site.
Aesthetics	☐	☒	☒	☐	☒	☐	☐	☐	FWP staff do not expect significant impacts to the aesthetics because of this project. The proposed project includes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering the Bluewater and Tillet springs and the hatchery system. There may be short-term, negligible impacts to aesthetics associated with the use of heavy machinery during construction but lasting only as long as the project and likely only affecting hatchery staff. Any long-term impacts are also likely to be negligible with the loss of 550 linear feet of the drainage channel because this area is rarely accessed by the public and trees and shrubs will block the view form roads.
Air quality	☐	☒	☐	☐	☒	☐	☐	☐	No significant adverse impacts to air quality in the affected area would be expected because of the proposed project. Air quality in the area affected by the proposed

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
									project is currently unclassifiable or in compliance with applicable National and Montana ambient air quality standards (NAAQS/MAAQS). Further, no significant point sources of air pollution exist in the area affected by the proposed project. Existing sources of air pollution in the area are limited and generally include unpaved county roads (fugitive dust source), vehicle exhaust emissions, and various agricultural practices (vehicle exhaust emissions and fugitive dust). FWP staff and contractors completing the project would follow best management practices for working near streams and water sources, mitigating any potential impacts. Fugitive dust and vehicle exhaust emissions resulting from the movement of use of vehicles and materials during the proposed project may directly impact air quality in the area. Any impacts to air quality would be short-term, and negligible.
Unique, endangered, fragile, or limited environmental resources	☐	☒	☐	☐	☐	☒	☒	☐	FWP does not expect significant adverse impacts to unique, endangered, fragile, or limited environmental resources in the affected area. The proposed project includes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering the Bluewater and Tillet springs and the hatchery system. There are designated wetlands in the nearby area, and three plant species listed as a Montana Species of Special Concern Species of Greatest Conservation Need: Joe-pye weed, beaked spikerush, and swamp milkweed[1,2]. Swamp milkweed was not documented in the proposed work area during a January 13, 2026, survey conducted by Montana Natural Heritage Program botanists. Previous surveys

[2]Montana Natural Heritage Program. 2025. Asclepias incarnata (Swamp Milkweed) predicted suitable habitat models developed on January 31, 2025. Montana Natural Heritage Program, Helena, MT. 5 pp.

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
									have noted bald eagles and golden eagles in the greater project area. Other threatened/endangered species that could occur near the proposed project include grizzly bear, monarch butterfly, and the greater sage grouse, but the project area does not contain designated critical habitat for these vertebrate species. Thus, there may be short-term, minor-to-moderate impacts to unique, endangered, fragile, or limited environmental resources with the use of heavy machinery and burying 550 linear feet of the drainage channel and its banks, but the imminent threat of NZMS entering the hatchery's water source is high and needs to be eliminated.
Historical and archaeological sites	☒	☐	☐	☒	☐	☐	☐	☐	No significant adverse impacts to historical and archaeological sites would be expected from the proposed project. The proposed project includes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering Bluewater and Tillet springs and the hatchery system. In December 2025, an inventory and cultural survey was conducted and concluded that the proposed project would have no effect on historic properties. If any heritage properties are uncovered during construction, the contractor would be advised to stop work immediately and consult with FWP's heritage program on appropriate next steps.
Demands on environmental resources of land, water, air, and energy	☐	☒	☐	☐	☒	☐	☐	☐	FWP does not expect significant adverse impacts to demand on the environmental resources of land, water, and air because of the proposed project. Fuel would be required to operate heavy machinery and vehicles used for the proposed project. There are no other demands on the environmental resources of land, water, air, and energy because of the proposed project. Therefore, any impacts to demands on environmental resources of land,

PHYSICAL ENVIRONMENT	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
									water, air, and energy in the affected area would be short-term and negligible.

Table 4 - Potential Impacts of Proposed Project on the Human Population

HUMAN POPULATION	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Social structures and mores	☒	☐	☐	☒	☐	☐	☐	☐	No significant adverse impacts to social structures and mores would be expected because of the proposed project. The proposed project includes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering the hatchery system. FWP does not anticipate visitation numbers to increase or use patterns to change because of the proposed project. Therefore, no impacts to social structures and mores would be expected because of the proposed project.
Cultural uniqueness and diversity	☒	☐	☐	☒	☐	☐	☐	☐	No significant adverse impacts to cultural uniqueness and diversity would be expected because of the proposed project. The proposed project constitutes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering the hatchery system. The proposed project would not be expected to result in any relocation of people into or out of the affected area. Therefore, no impacts to existing cultural uniqueness and diversity of the affected area would be expected because of the proposed project.

HUMAN POPULATION	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
Access to and quality of recreational and wilderness activities	☐	☐	☒	☐	☐	☐	☐	☒	No significant adverse impacts to access to or quality of recreational and wilderness activities would be expected because of the proposed project. The proposed project constitutes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering the hatchery system. Recreational activities, such as angling, would be negatively affected as fish consume and transport NZMS and would need to be euthanized to prevent additional introductions should the snails enter the hatchery's water source. As such, over 1.5 million fish would not be stocked in reservoirs and lakes and result in a statewide reduced angling opportunity. Any impact to access and quality of recreational and wilderness activities in the affected area would be long-term, beneficial and major.
Local and state tax base and tax revenues	☐	☒	☐	☐	☒	☐	☐	☐	No significant adverse impacts to local and state tax base and tax revenues would be expected because of the proposed project. The proposed project constitutes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs Trout Hatchery to prevent NZMS from entering the system. The construction portion of the proposed project is expected to be contracted out which would slightly increase state and local tax revenues from the sale of fuel, supplies and/or equipment needed to complete the project. Therefore, any impacts from the proposed project to local and state tax base and tax revenues would be short-term, negligible, and beneficial.
Agricultural or Industrial production	☒	☐	☐	☒	☐	☐	☐	☐	No significant adverse impacts to agricultural or industrial production would be expected because of the proposed project. The proposed project constitutes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from

HUMAN POPULATION	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
									entering the hatchery system. No agricultural or industrial production currently occurs at the state hatchery and no change in land use would occur because of the proposed project. Therefore, no impacts to agricultural or industrial production would be expected because of the proposed project.
Human health and safety	☒	☐	☐	☒	☐	☐	☐	☐	No significant adverse impacts to human health and safety would be expected because of the proposed project. The proposed project constitutes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering the hatchery system and would not affect human health and safety.
Quantity and distribution of employment	☐	☒	☐	☐	☒	☐	☐	☐	No significant adverse impacts to the quality and distribution of employment would be expected because of the proposed project. The proposed project constitutes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering the hatchery system. Some impacts to the local quantity and distribution of employment may be realized because contracted services would be used to construct the proposed project. Therefore, any impacts from the proposed project on the quantity and distribution of employment would be short-term, negligible and beneficial.
Distribution and density of population and housing	☒	☐	☐	☐	☒	☐	☐	☐	No significant adverse impacts to the distribution and density of population and housing would be expected because of the proposed project. The proposed project constitutes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering the hatchery system. The proposed project would not be expected to result in the movement of existing or new populations

HUMAN POPULATION	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
									into or out of the affected area. Therefore, no impacts to the distribution and density of population and housing needs would be expected because of the proposed project.
Demands for government services	☐	☐	☒	☐	☐	☐	☐	☒	No significant adverse impacts to the demands for government services would be expected because of the proposed project. The proposed project constitutes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering the hatchery system. This project would eradicate the existing NZMS population in the portion of the channel above the proposed outlet structure and stop further migration into the Bluewater Spring, which would have devastating impacts on the hatchery and require a high demand for government services if this were to occur. Therefore, any impacts from the proposed project on the demands for government services would be long-term, major, and beneficial.
Industrial, agricultural, and commercial activity	☒	☐	☐	☐	☒	☐	☐	☐	No significant adverse impacts to industrial, agricultural, and commercial activity would be expected because of the proposed project. The proposed project constitutes upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering the hatchery system. The proposed project area is owned and managed by FWP as a state hatchery and no industrial, agricultural, or commercial activities occur at the site.
Locally adopted environmental plans and goals	☐	☐	☒	☐	☐	☐	☐	☒	No significant adverse impacts to locally adopted environmental plans and goals would be expected because of the proposed project. The proposed project of upgrading and retrofitting existing spring and overflow infrastructure at Bluewater Springs State Hatchery to prevent NZMS from entering the hatchery system

HUMAN POPULATION	Duration of Impact			Severity of Impact					
Resource	None	Short-Term	Long-Term	None	Negligible	Minor	Moderate	Major	Summary of Potential Direct, Secondary, and Cumulative Impacts and Mitigation Measures
									supports FWP's SWFMP regarding AIS (1.21.1), AIS rapid response and control/eradication (1.2.1 (5)), and hatchery biosecurity (1.3.1 (1)). Additionally, this project supports the Montana Aquatic Invasive Species Management Plan[3] and the Montana Invasive Species Framework. Therefore, any impacts from the proposed project on locally adopted environmental plans and goal would be long-term, major, and beneficial. FWP is unaware of any other locally adopted environmental plans or goals that might be impacted by the proposed project.
Other appropriate social and economic circumstances	☒	☐	☐	☐	☒	☐	☐	☐	No significant adverse impacts would be expected because of the proposed project. FWP is unaware of any other appropriate social and economic circumstances that might be impacted by the proposed project. Therefore, no impacts would be expected because of the proposed project.

Table 5: Determining the Significance of Impacts on the Quality of the Human Environment

If the EA identifies impacts associated with the proposed project FWP must determine the significance of the impacts. ARM 12.2.431. This determination forms the basis for FWP's decision as to whether it is necessary to prepare an environmental impact statement. An impact may be adverse, beneficial, or both. If none of the adverse effects of the impact are significant, an EIS is not required. An EIS is required if an impact has a significant adverse effect, even if the agency believes that the effect on balance will be beneficial. ARM 12.2.431.

According to the applicable requirements of ARM 12.2.431, FWP must consider the criteria identified in this table to determine the significance of each impact on the quality of the human environment. The significance determination is made by giving weight to these criteria in their totality. For example, impacts identified as moderate or major in severity may not be significant if the duration is short-term. However, moderate or major impacts of short-term duration may be significant if the quantity and quality of the resource is limited and/or the resource is unique or fragile. Further, moderate or major impacts to a resource may not be significant if the quantity of that resource is high or the quality of the resource is not unique or fragile.

[3] Montana Fish, Wildlife & Parks. 2025. Montana Aquatic Invasive Species Management Plan. Helena, MT. 112 pp.

Criteria Used to Determine Significance	
1	The **severity, duration, geographic extent,** and **frequency** of the occurrence of the impact **"Severity"** describes the density of the potential impact, while **"extent"** describes the area where the impact will likely occur, e.g., a project may propagate ten noxious weeds on a surface area of 1 square foot. Here, the impact may be high in severity, but over a low extent. In contrast, if ten noxious weeds were distributed over ten acres, there may be low severity over a larger extent. **"Duration"** describes the time period during which an impact may occur, while **"frequency"** describes how often the impact may occur, e.g., an operation that uses lights to mine at night may have frequent lighting impacts during one season (duration).
2	The probability that the impact will occur if the proposed project occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur
3	Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts
4	The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values
5	The importance to the state and to society of each environmental resource or value that would be affected
6	Any precedent that would be set as a result of an impact of the proposed project that would commit FWP to future actions with significant impacts or a decision in principle about such future actions
7	Potential conflict with local, state, or federal laws, requirements, or formal plans

IX. Private Property Impact Analysis (Takings)

The 54th Montana Legislature enacted the Private Property Assessment Act, now found at § 2-10-101. The intent was to establish an orderly and consistent process by which state agencies evaluate their proposed projects under the "Takings Clauses" of the United States and Montana Constitutions. The Takings Clause of the Fifth Amendment of the United States Constitution provides: "nor shall private property be taken for public use, without just compensation." Similarly, Article II, Section 29 of the Montana Constitution provides: "Private property shall not be taken or damaged for public use without just compensation..."

The Private Property Assessment Act applies to proposed agency projects pertaining to land or water management or to some other environmental matter that, if adopted and enforced without due process of law and just compensation, would constitute a deprivation of private property in violation of the United States or Montana Constitutions.

The Montana State Attorney General's Office has developed guidelines for use by state agencies to assess the impact of a proposed agency project on private property. The assessment process includes a careful review of all issues identified in the Attorney General's guidance document (Montana Department of Justice 1997). If the use of the guidelines and checklist indicates that a proposed agency project has taking or damaging implications, the agency must prepare an impact assessment in accordance with Section 5 of the Private Property Assessment Act.

Table 6: Private Property Assessment (Takings)

PRIVATE PROPERTY ASSESMENT ACT (PPAA)			
Does the Proposed Action Have Takings Implications under the PPAA?	**Question #**	**Yes**	**No**
Does the project pertain to land or water management or environmental regulations affecting private property or water rights?	1	☐	☒
Does the action result in either a permanent or an indefinite physical occupation of private property?	2	☐	☒
Does the action deprive the owner of all economically viable uses of the property?	3	☐	☒
Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 4a and 4b and continue with question 5)	4	☐	☒
Is there a reasonable, specific connection between the government requirement and legitimate state interest?	4a	☐	☐
Is the government requirement roughly proportional to the impact of the proposed use of the property?	4b	☐	☐
Does the action deny a fundamental attribute of ownership?	5	☐	☒
Does the action have a severe impact of the value of the property?	6	☐	☒
Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public general? (If the answer is NO, skip questions 7a-7c.)	7	☐	☒
Is the impact of government action direct, peculiar, and significant?	7a	☐	☐
Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?	7b	☐	☐
Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?	7c	☐	☐
Does the proposed action result in taking or damaging implications?		☐	☒

Taking or damaging implications exist if **YES** is checked in response to Question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if **NO** is checked in response to question 4a or 4b.
If taking or damaging implications exist, the agency must comply with MCA § 2-10-105 of the PPAA, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.
Alternatives: The analysis under the Private Property Assessment Act, §§ 2-10-101 through -112, MCA, indicates no impact. FWP does not plan to impose conditions that would restrict the regulated person's use of private property to constitute a taking.

X. Public Participation

The level of analysis in an EA will vary with the complexity and seriousness of environmental issues associated with a proposed action. The level of public interest will also vary. FWP is responsible for adjusting public review to match these factors (ARM 12.2.433(1)). Because FWP determines the proposed action will result in limited environmental impact, and little public interest has been expressed, FWP determines the following public notice strategy will provide an appropriate level of public review:

- *An EA is a public document and may be inspected upon request. Any person may obtain a copy of an EA by making a request to FWP. If the document is out-of-print, a copying charge may be levied (ARM 12.2.433(2)).*
- *Public notice will be served on the Montana Fish, Wildlife and Parks website at: https://fwp.mt.gov/news/public-notices. Public notice will announce the availability of the Draft EA, summarize its content, and solicit public comment.*
- *Copies will be distributed to neighboring landowners to ensure their knowledge of the proposed project and opportunity for review and comment on the proposed action.*
- *FWP maintains a mailing list of persons interested in a particular action or type of action. FWP will notify all interested persons and distribute copies of the Draft EA to those persons for review and comment (ARM 12.2.433(3)).*
- *FWP issues a biweekly press release containing all FWP public commenting opportunities.*

    - ***Duration of Public Comment Period:** The public comment period begins on the date the Draft EA is published on FWP's website. Written or e-mailed comments will be accepted until 5:00 p.m., MST, on the last day of public comment period, as listed below:*

      Length of Public Comment Period: 15 days
      Public Comment Period Begins: January 19, 2026
      Public Comment Period Ends: February 2, 2026

      Comments must be summited by email as listed or by mail addressed to the FWP address below.

    - ***Where to Mail or Email Comments on the Draft EA:***
      Email: fwpregion5pc@mt.gov and use subject title: **Bluewater Springs Trout Hatchery NZMS EA**
      Note: this email is only monitored for FWP Region 5 EA public comments.
      Mail:
      Montana Fish, Wildlife & Parks
      ATTN: Fisheries Bluewater Springs Trout Hatchery NZMS EA
      2300 Lake Elmo Drive
      Billings, MT 59105

XI. Recommendation for Further Environmental Analysis

NO further analysis is needed for the proposed action	☒
FWP must conduct **EIS** level review for the proposed action	☐

XII. EA Preparation and Review

	Name	**Title**
EA prepared by:	Shannon Blackburn Jeff Williams	Regional Fisheries Manager Bluewater Springs Trout Hatchery Manager
EA reviewed by:	Ken Staigmiller Mike Ruggles	Acting Hatchery Bureau Chief Region 5 Supervisor