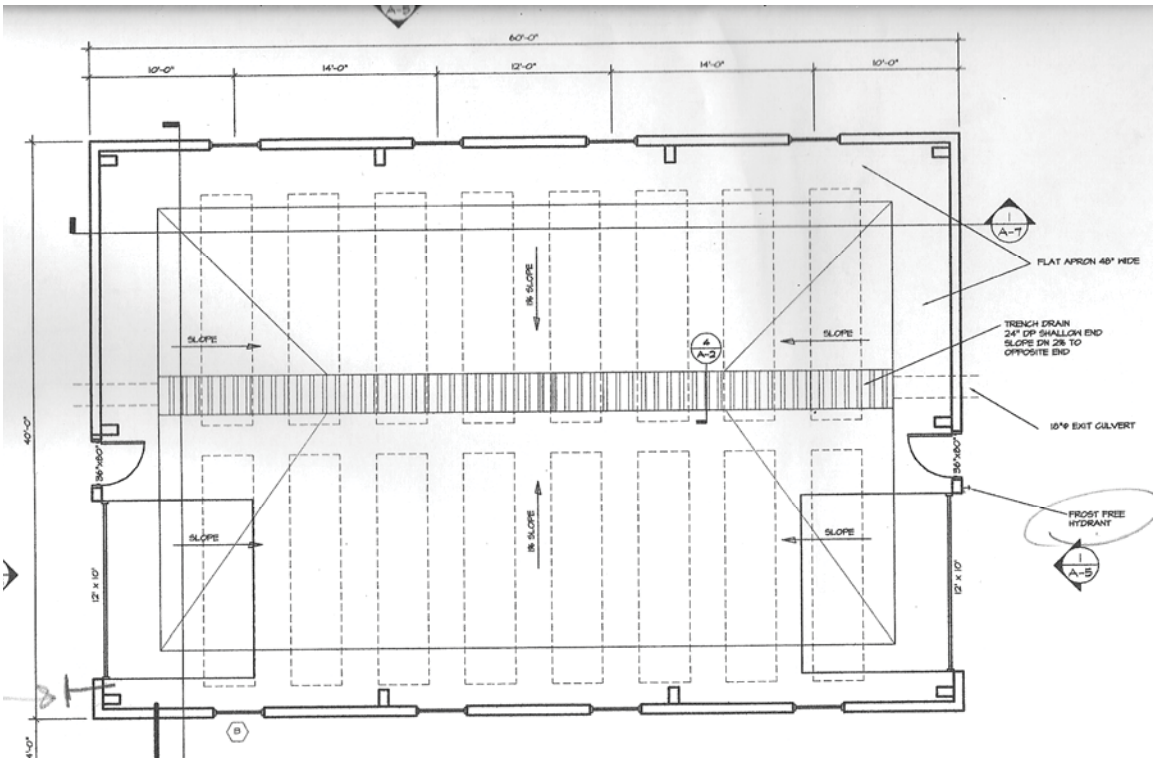
Draft
Environmental Assessment

Rose Creek Hatchery Building Project

Montana Fish, Wildlife & Parks Project #70533118



August 2010

Montana Fish, Wildlife & Parks

Draft Environmental Assessment
MEPA, NEPA, MCA 23-1-110 CHECKLIST

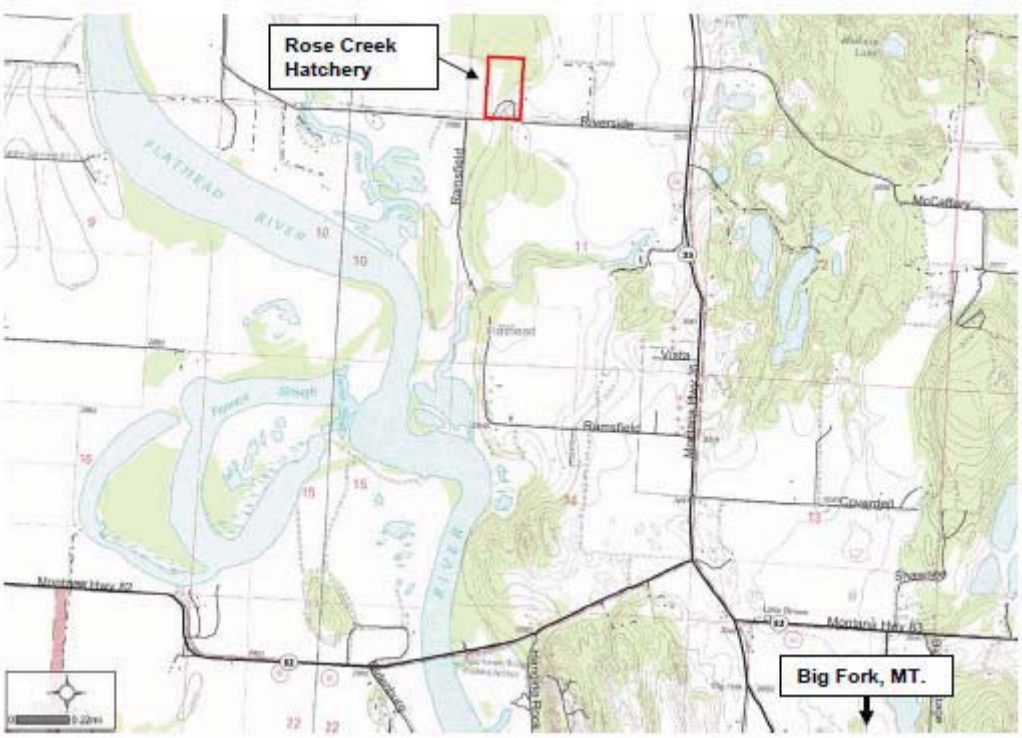
PART I. PROPOSED ACTION DESCRIPTION

1. **Type of proposed state action:** Montana Fish, Wildlife & Parks (FWP) proposes to construct a new 40' x 60' steel building at the Rose Creek Hatchery in order to expand the fish culturing capacity of the site. In addition to the proposed building, FWP plans to gravel forty feet of driveway from existing on-property road and trench 200 feet of underground power to building.

2. **Agency authority for the proposed action:** Per State Statute 87-3-201, Montana Code Annotated (MCA), FWP has full control of all state fish hatcheries and is responsible for their construction, maintenance, and operation. Furthermore, FWP may use fish and game funds necessary for the construction, maintenance, operation, upkeep, and repair of fish hatcheries or other property or means and appliances for the protection and propagation of fish, game, and fur-bearing animals, or game or nongame birds (87-1-222 (3), MCA).

3. **Anticipated Schedule:**
   Estimated construction commencement date: November 1, 2010
   Estimated completion date: January 1, 2011
   Current status of project design (% complete): 95%

4. **Location affected by proposed action:**
   The Rose Creek Hatchery is 5 miles north of Bigfork, Montana. The 20.197-acre tract of FWP property is located at Section 2, Township 27N, Range 20W, P.P.M. within Flathead County.



5. Project size:

	Acres		Acres
(a) Developed:		(d) Floodplain	0
Residential	0		
Industrial	0	(e) Productive:	
		Irrigated cropland	0
(b) Open Space/ Woodlands/Recreation	>1 ac.	Dry cropland	0
		Forestry	0
(c) Wetlands/Riparian Areas	0	Rangeland	0
		Other	0

6. Permits, funding, and overlapping or additional jurisdiction:

(a) Permits: Eventual operation of hatchery requires Montana Dept. of Environmental Quality (MTDEQ) MPDES permit for discharge of hatchery water.

(b) Funding: State license dollars - $142,000
Federal Sport Fish Restoration dollars - $6,000

(c) Other overlapping or additional jurisdictional responsibilities:
State Historic Preservation Office - cultural & historic resources

7. Narrative summary of the proposed action:

Montana's cool and cold water hatchery system is currently at or in excess of reasonable rearing capacity. The Rose Creek property was purchased over 35 years ago with the objective of developing the site for a hatchery to supplement existing statewide hatchery production, primarily kokanee, westslope cutthroat trout, and Arctic grayling.

The limited rearing facilities that exist at Rose Creek have seen minor improvements in the past 4 years under the direction of Flathead Lake Salmon Hatchery (FLSH), which is located near Somers on Flathead Lake. The Rose Creek facility is rudimentary and experimental in nature, with limited utility. The proposed project would double the rearing capacity of FLSH, reducing fish densities substantially to a less precarious level. This would improve fish health and increase survival upon release. When operational, the Rose Creek Hatchery will have the capacity of 1.5 million 2-inch kokanee or 750,000 2-inch westslope cutthroat trout.

Existing FWP hatcheries can no longer accommodate the growing demands for stocking programs. Additional rearing space is required to meet the growing demand for more native fish, larger fish that can escape predation of nonnative warm water species, and to meet increasing public demand to maintain our popular sport fisheries. These issues necessitate the development of a hatchery at Rose Creek.

Benefits from this project will include:

- Rearing space necessary to propagate native species for restoration efforts in their native ranges across Montana.
- Rearing space for cool and cold water sport fishes to maintain recreational fisheries.
- Providing propagation and fish stocking to local waters instead of having to bring fish from distant hatcheries.

9. Description and analysis of reasonable alternatives:

Alternative A: Proposed Action
FWP proposes to construct a 40' x 60' steel building to augment and replace some of the diminishing fish production capability at the Flathead Lake Salmon Hatchery due to a decreasing water quantity and quality. Additionally, the new facility will better utilize FWP existing water rights at the site.

The proposed new building is designed to accommodate sixteen 3' x 16' raceways, with a trench drain through the length of the space for spillage and maintenance needs.

Anticipated cost of the project is $148,000, which will be funded by 96% state license dollars and 4% Federal Sport Fish Restoration dollars.

The Rose Creek Hatchery will be maintained with funding through a U.S. Fish and Wildlife Service sportfish restoration grant and statewide Fish Hatchery Operation and Maintenance funds, and will be managed by the staff at Flathead Lake Salmon Hatchery.

Alternative B: No Action
The hatchery is not built, and the site remains in a minimally developed state. Montana's needs for fish hatchery fish for sport fishing and restoration programs may be unmet, particularly for native fish. Another issue to consider under this alternative is that if FWP does not fully utilize water rights at this site for beneficial use by 2011, FWP will lose said rights. This site is proposed in adjunct with the Flathead Lake Salmon Hatchery, which is not meeting fisheries demands for hatchery fish due to diminishing water quantity and increasing requests for hatchery fish.

PART II. ENVIRONMENTAL REVIEW CHECKLIST

Evaluation of the impacts of the Proposed Action.

A. PHYSICAL ENVIRONMENT

1. LAND RESOURCES 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				1a.
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?			X		Yes	1b.
c. Destruction, covering, or modification of any unique geologic or physical features?		X				1c.
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				

1a/c. No changes to the geologic substructure or modification to unique geologic features are expected because the conduit trenches are shallow in depth.

1b. Erosion control devices and measures would be used to prevent sediments from reaching Fox Spring Creek during and after the construction period. Temporary or permanent seeding and mulching would be used to control erosion and speed revegetation of disturbed areas.

2. AIR 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 13c.)			X		Yes	
b. Creation of objectionable odors?			X		Yes	
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.)		X				

The construction of the proposed new building is expected to generate a limited amount of dust in the local area, and some exhaust fumes would be emitted by heavy equipment at the site. After construction, the construction period air quality is expected to return to preconstruction levels. The contractor would follow state and local regulations requiring the use of mufflers on all equipment to reduce noise and will implement dust control measures.

3. WATER 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			3a.
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			3g.
h. Increase in risk of contamination of surface or groundwater?			X			3h.
i. Effects on any existing water right or reservation?			X			3i.
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.)		X				
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.)		X				3h.

The hatchery does lie within the 100-year floodplain (per Flathead County); however, the proposed project would have no effect on surface water, drainage patterns, or floodwater routes. As previously noted, disturbed soils will be reseeded with native vegetation, which will decrease the likelihood of new drainage patterns becoming established.

3a The hatchery will operate under MTDEQ guidelines as required under condition of the Concentrated Aquatic Animal/Fish Farm General Permit.

3g. A maximum 500 gallons per minute of groundwater would be discharged into Fox Spring Creek from the new hatchery building. Water table levels will be monitored by FWP to ensure no effect to downstream properties during the hatchery's operation.

3h. A Waste Management Plan for hatchery effluent and fish waste and Best Management Practices for hatchery operations will be exercised as required by MTDEQ.

3i. Currently, the Rose Creek Hatchery is underutilizing its water right resources. If FWP does not use their full allocation, FWP would lose the water rights.

4. VEGETATION 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		No	4a.
b. Alteration of a plant community?			X		No	4b.
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		Yes	4e.
f. For P-R/D-J, will the project affect wetlands, or prime and unique farmland?		X				4f.

4a/b. The proposed construction and improvements would disturb less than one acre of the hatchery property and would require the removal of some grass areas for the installation of the concrete pad and the underground electrical conduit and plumbing trenches. FWP's proposed project does not anticipate the need for the removal of any trees. Areas that are disturbed by construction efforts and not covered by the new building would be reseeded with a native seed mix. The effects of these changes would constitute negligible changes to the diversity or abundance of the plant species in the area.

4e. Reseeding disrupted soils after construction will limit the potential for additional weeds by providing competition from a mix of local native vegetation. Noxious weed control efforts will follow the guidelines presented in FWP's 2008 Integrated Noxious Weed Management Plan, which includes the use of herbicides and mechanical efforts.

4f There are no wetlands or unique farmland at the location of the proposed new building.

5. FISH/WILDLIFE 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		No	5c.
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				5f.
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		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.)		X				5f.
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.)		X				

5c. Some transient game and nongame species, such as mule deer, white-tailed deer, ground squirrels, game and nongame birds, and chipmunks will be affected by the noise generated by the proposed project for a limited time. These species will likely avoid the construction areas, but will return to the area when the proposed project in the area is completed and noise levels return to normal.

5f. The area is infrequently visited by bald eagles that mainly congregate along the Flathead River, which is approximately 1 mile west of the hatchery. The hatchery is within the year-round range of grizzly bears. Bull trout inhabit the nearby Flathead River. No T&E species are expected to be directly or indirectly affected by the construction of the new hatchery building.

B. HUMAN ENVIRONMENT

6. NOISE/ELECTRICAL EFFECTS 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 severe 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				

The initiation of the proposed action would generate a temporary increase in noise level during the construction period. Noise levels are expected to return to preconstruction levels after the building is completed since there would be no change in the level of activity on FWP-owned property.

7. LAND USE 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. Conflict with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use, the presence of which would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				

The installation of a new building on the hatchery property would not change existing land uses at the site.

8. RISK/HEALTH HAZARDS 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		Yes	8a.
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.)		N/A				

8a. Chemical spraying is part of FWP's weed management plan to limit the infestation of noxious weeds on its properties per the guidance of the 2008 Integrated Weed Management Plan. Weed treatment and storage and mixing of the chemicals would be in accordance with standard operating procedures.

The contractor would be required to have a plan for implementing appropriate measures in the event of an accidental spill.

9. COMMUNITY IMPACT 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		Yes	9e.

The proposed action will have no effect on local communities or alter the distribution of population in the area.

9e. The movement of heavy equipment merging onto the Riverside Road (a county road) may cause some additional traffic congestion during the construction period. The FWP contractors would be required to install appropriate signage along the county road and at the hatchery entrance advising the public of potential traffic hazards. After the construction is completed, traffic patterns are expected to return to normal patterns and levels.

10. PUBLIC SERVICES/TAXES/UTILITIES 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				
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			10c.
d. Will the proposed action result in increased use of any energy source?			X			10d.
e. Define projected revenue sources		X				
f. Define projected maintenance costs.						10f.

10c/d. The proposed new building will be electrified and will be an additional user of energy at the hatchery.

10f. Maintenance costs will be minimal with metal construction, but will include snow removal, weed abatement, etc. Maintenance costs estimated at under $500 per year would be part of FLSH's existing budget.

11. AESTHETICS/RECREATION 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		Yes	11b.
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report.)		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.)		N/A				

11b. In the short term, existing aesthetics at the site would be adversely affected due to temporary ground disturbance and the presence of heavy equipment during construction. Site would be landscaped after construction is completed. Building color(s) would be earth tones to blend into the rural setting of the hatchery.

12. CULTURAL/HISTORICAL RESOURCES 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 12a.)		N/A				

The State Historic Preservation Office (SHPO) was contacted to complete a search of their file for previously identified cultural or historic sites with the hatchery property. SHPO reported (dated 10/4/02) that there are no sensitive resources present where the proposed action would take place.

13. SUMMARY EVALUATION OF SIGNIFICANCE Will the proposed action, considered as a whole:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
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.)		N/A				
g. For P-R/D-J, list any federal or state permits required.		N/A				

The proposed addition of a new hatchery building at the Rose Creek Hatchery is not expected to generate substantial debate within the community. Cumulative impacts to existing physical and human resources are minimal since the footprint of the new building and associated utility connection would be less than 1 acre and contained within the FWP property and for the reasoning previously described.

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

The project will be supervised by FWP's Design and Construction Bureau (D&C) and administered by the state Architect and Engineer Bureau of the State Department of Administration.

The FWP D&C engineering staff have designed the proposed site plan following Best Management Practices. A private contractor, required to meet all state standards and specifications, will complete construction of the project. The D&C will oversee the project and will be responsible for final inspection. All state and federal permits will be the responsibility of FWP or the contractor through FWP.

PART III. NARRATIVE EVALUATION AND COMMENT

The Rose Creek site owned by FWP contains an artesian well drilled in 1984 for the purpose of a hatchery water supply. The Flathead Lake Salmon Hatchery (FLSH) in Somers at that time and since has seen water quantity and quality deteriorate to the point of inadequacy in meeting demand for hatchery-reared fish. At the same time, increased demand for hatchery fish and increased focus on native species has furthered the need for additional hatchery space. This project will double the rearing capacity of FLSH, substantially reducing fish densities to a less precarious level. This will improve fish health and increase survival upon release. The hatchery will have the capacity of 1.5 million 2-inch kokanee or 750,000 2-inch westslope cutthroat trout. The hatchery will operate under a discharge permit from Montana Department of Environmental Quality using Best Management Practices ensuring minimal organic release into Fox Spring Creek. The building placement shall be 300 feet from Riverside Road and of neutral color.

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: *Big Fork Eagle* and Kalispell *Daily Inter Lake.*
- One statewide press release.
- Public notice on the Fish, Wildlife & Parks web page: *http://fwp.mt.gov* .

Copies of this environmental assessment 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 in a very localized area, of which most can be mitigated.

2. Duration of comment period:

The public comment period will extend for 14 days. Written comments will be accepted until 5:00 p.m., Tuesday, August 24, 2010, and can be mailed to Rose Creek Hatchery Building Project, Flathead Lake Salmon Hatchery,100 Spring Creek Road,Somers, MT 59932, or email to kokanee@centurytel.net .

PART V. EA PREPARATION

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

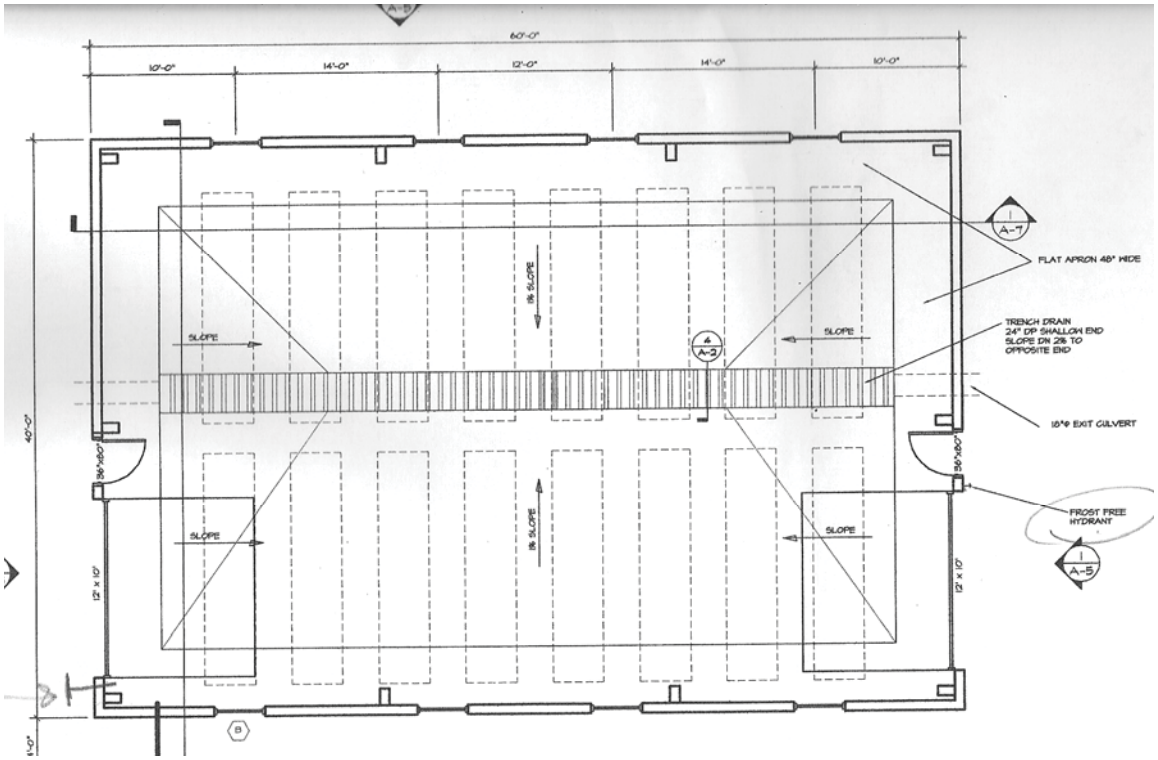
   If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action.

   Based upon the above assessment (Part II), which identified a very limited number of minor impacts from the proposed action, of which most can mitigated below significance, an EIS in not required and an environmental assessment is the appropriate level of review.

2. **Person responsible for preparing the EA:**
   Mark Kornick, Rose Creek Hatchery Manager
   100 Spring Creek Road
   Somers, MT 59932
   406-857-3744

3. **List of agencies or offices consulted during preparation of the EA:**
   Flathead County
   Montana Fish, Wildlife & Parks
   Fisheries Bureau
   Montana Historic Preservation Office
   Montana Dept of Environmental Quality

APPENDIX

A. Preliminary Design Plan

Appendix A – Preliminary Design Plan