Montana Fish, Wildlife & Parks

1400 South 19th Avenue
Bozeman, MT 59718

October 28, 2009

TO: Governor's Office, Mike Volesky, State Capitol, Room 204, P.O. Box 200801, Helena, MT 59620-0801
Environmental Quality Council, State Capitol, Room 106, P.O. Box 201704, Helena, MT 59620-1704
Dept. of Environmental Quality, Metcalf Building, P.O. Box 200901, Helena, MT 59620-0901
Dept. of Natural Resources & Conservation, P.O. Box 201601, Helena, MT 59620-1601
Montana Fish, Wildlife & Parks:

Director's Office	Parks Division	Lands Section	FWP Commissioners
Fisheries Division	Legal Unit	Wildlife Division	Design & Construction

MT Historical Society, State Historic Preservation Office, P.O. Box 201202, Helena, MT 59620-1202
MT State Parks Association, P.O. Box 699, Billings, MT 59103
MT State Library, 1515 E. Sixth Ave., P.O. Box 201800, Helena, MT 59620
James Jensen, Montana Environmental Information Center, P.O. Box 1184, Helena, MT 59624
Janet Ellis, Montana Audubon Council, P.O. Box 595, Helena, MT 59624
George Ochenski, P.O. Box 689, Helena, MT 59624
Jerry DiMarco, P.O. Box 1571, Bozeman, MT 59771
Montana Wildlife Federation, P.O. Box 1175, Helena, MT 59624
Wayne Hurst, P.O. Box 728, Libby, MT 59923
Jack Jones, 3014 Irene St., Butte, MT 59701
Big Hole Watershed Committee, P.O. Box 931, Butte, MT 59703
Montana Trout Unlimited, P.O. Box 7186, Missoula, MT 59807
Dooling Livestock Company, P.O. Box 842, Jackson, MT 59736

Ladies and Gentlemen:

The enclosed Environmental Assessment (EA) has been prepared for the proposed Dooling Ranch Irrigation Improvement Projects.

This EA is available for review in Helena at FWP's Headquarters, the State Library, and the Environmental Quality Council. It also may be obtained from FWP at the address provided above, or viewed on FWP's Internet website: http://www.fwp.mt.gov .

Montana Fish, Wildlife & Parks invites you to comment on the attached proposal. The public comment period will be accepted until November 20, 2009 @ 5:00 pm. Comments should be sent to the following:

Montana Fish, Wildlife & Parks
c/o Dooling Ranch Irrigation Improvement Projects
730 N. Montana St.
Dillon, MT 59725

Or e-mailed to: plamothe@mt.gov

Sincerely,

Patrick J. Flowers
Region Three Supervisor

Environmental Assessment

Dooling Ranch Irrigation Improvement Projects

October 2009

Montana Fish, Wildlife & Parks

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) is proposing to provide funding for and implement a project to install the following structures (3 headgates and 3 irrigation water measuring devices):
   - One pin and plank type headgate (3 feet wide and 3.5 feet high) and a two-foot wide irrigation water measuring device at one point of diversion on Berry Creek, and
   - One pin and plank type headgate (3 feet wide and 3 feet high) and a two-foot wide irrigation water measuring device at two points of diversion on Little Swamp Creek.

   There currently are no headgates or measuring devices at either of these locations. The locations of the proposed projects are shown in Appendix 1.

2. **Agency authority for the proposed action:**

   The FWP is required by law to implement programs that manage sensitive fish species in a manner that assists in the maintenance or recovery of those species, and that prevents the need to list species under 87-5-107 or the federal Endangered Species Act. Section 87-1-201(9)(a), M.C.A.

3. **Anticipated Schedule:**
   Estimated Construction Commencement Date: November 2009
   Estimated Completion Date: November 2009
   Current Status of Project Design (% complete): 100% complete

4. **Location affected by proposed action (county, range and township):**
   This project sites are located on Berry Creek and Little Swamp Creek located approximately 5.5 miles southwest of the community of Jackson, MT, within Township 6 South, Range 15 West, and Sections 19, 20 and 32 in Beaverhead County (see Appendix 1).

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

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

6. **Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction.**

(a) Permits: The following permits have been secured for the project:

Montana Fish, Wildlife & Parks and Beaverhead County Conservation District	124 Permit
Department of Environmental Quality	318 Authorization

(b) Funding:

Montana Fish, Wildlife & Parks	$11,740.00

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

Montana Department of Natural Resources and Conservation	Water Rights
US Forest Service	Cultural and Historic Resources

7. Narrative summary of the proposed action or project including the benefits and purpose of the proposed action:

Montana Fish, Wildlife & Parks (FWP) is proposing to provide funding for and implement a project to install the following structures:

- One pin and plank type headgate (3 feet wide and 3.5 feet high) and a two-foot wide irrigation water measuring device at one point of diversion on Berry Creek, and
- One pin and plank type headgate (3 feet wide and 3 feet high) and a two-foot wide irrigation water-measuring device at two points of diversion on Little Swamp Creek.

There currently are no headgates or measuring devices at either of these locations. The locations of the proposed projects are shown in Appendix 1.

The project will lead to improved irrigation water management and will allow for the landowner to remain in compliance with existing water rights and the site-specific plan developing in partnership with the landowner as part of the Candidate Conservation Agreement with Assurances for Fluvial Arctic Grayling in the Upper Big Hole River (Big Hole Grayling CCAA).

The Big Hole Grayling CCAA site-specific plan requires that the landowner limit total irrigation diversions for the property to 2.5 cubic feet per second (cfs) when streamflows in the Big Hole River at Miner Lakes Road drops below 20 cfs at any time during the year. In order to meet this requirement, the landowner must have functioning headgates and measuring devices at each point of diversion for the property. The Big Hole Grayling CCAA allows landowners a time period of five years to meet this requirement. The Big Hole Grayling CCAA also states that the agencies involved in the program will assist with funding of projects when available. The funding for these projects comes from the State Wildlife Grant Program.

Berry Creek and Little Swamp Creek are relatively small tributaries to the Big Hole River. Fish population surveys on these creeks in 2009 show that the creeks are dominated by brook trout (*Salvelinus fontinalis*). No westslope cutthroat trout (*Oncorhynchus clarki lewisi*) or Arctic grayling (*Thymallus arcticus*) were captured during these surveys. While

these tributary creeks are relatively small, it is hoped that the wide-scale water conservation efforts associated with the Big Hole Grayling CCAA will lead to significantly improved streamflow conditions throughout the upper Big Hole watershed.

The points of diversion associated with the projects are located on the Beaverhead-Deer Lodge National Forest (BDNF). Personnel from the BDNF have been contacted and informed of the project. A BDNF archeologist will conduct a cultural inventory of the project locations prior to the project being built and will be contacted immediately should anything of cultural significance be discovered during construction.

8. Alternatives:

<u>Alternative A:</u> No Action

If no action is taken, the irrigation systems at these three points of diversion will continue to lack the necessary infrastructure to control and measure water being diverted for the purpose of irrigation. Water from Berry Creek and Little Swamp Creek will enter the irrigation system throughout the year with no ability to manage the water for irrigation due to the lack of headgates. The ability to measure the amount of water being diverted will also be lacking and this will negatively affect the landowners' ability to remain in compliance with the site-specific plan developed as part of the Big Hole Grayling CCAA and the water rights associated with these points of diversion. The conservation measures designed to improve streamflows as part of the Big Hole Grayling CCAA will not be implemented and the grayling population and overall fishery of the upper Big Hole Watershed will likely not improve from their current status.

<u>Alternative B:</u> Alternative Action, Installation of only the headgates

Under this alternative, the existing irrigation ditches would be cleaned and headgates would be installed at the three points of diversions, but no measuring devices would be installed to reduce the cost of the project. While the ability to control water being diverted for the purpose of irrigation would be improved, the ability to measure the amount of water being diverted would not exist. This inability to measure the amount of water being diverted from Berry Creek and Swamp Creek would diminish the ability to remain in compliance with the site-specific plan and the associated water rights at these points of diversion.

<u>Alternative C:</u> Proposed Action, Installation of the headgates and irrigation water measuring devices

Under the proposed action, headgates and measuring devices would be installed at the three points of diversion. The ability to control and measure water diverted from Berry Creek and Little Swamp Creek will be greatly improved by the projects. The landowner will be in compliance with the site-specific plan developed as part of the Big Hole Grayling CCAA, and the conservation measures designed to improve streamflows in the Big Hole River and its tributaries will be implemented by the landowner and monitored by FWP. The cumulative effects of the conservation measures associated with the Big Hole Grayling CCAA should lead to improved streamflows in the Big Hole River, fewer closures to fishing due to low streamflows and high water temperatures, and an enhanced grayling population and overall fish abundance.

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. 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		Yes	1a.
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		Yes	1d.
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				
f. Other:						

Comment 1a. Soils along the irrigation ditches would be disturbed during the installation of the irrigation structures. However, the impact will be limited and localized and have only temporary minor impact that will cease after installation. The area will be reseeded with a native grass mix and revegetated with local native willow species.

Comment 1d. Short-term increases in turbidity will occur during project construction. To minimize this dynamic, construction will occur at low flows and the operation of equipment in the stream channel will be minimized to the extent practical. A 124 permit (Stream Protection Act) will been obtained from FWP, and a 318 Permit will be issued by FWP in compliance with DEQ standards.

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 13 (c).)			X		Yes	2a.
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 regs? (Also see 2a.)		X				
f. Other:						

Comment 2a. The proposed action includes the use of heavy equipment that may temporarily effect the ambient air quality in the immediate area. Once the installation of the structures is completed, air quality is expected to return to pre-construction levels.

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		Yes	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				
h. Increase in risk of contamination of surface or groundwater?		X				
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				
n. Other:						

Comment 3a. Short-term increases in turbidity will occur during project construction. To minimize this dynamic, construction will occur at low flows and the operation of equipment in the stream channel will be minimized to the extent practical. A 124 permit (Stream Protection Act) will been obtained from FWP and a 318 Permit will be issued by FWP in compliance with DEQ standards.

Comment 3i. The ability of downstream water users to have access to water for irrigation will be improved through improvements to irrigation management at the project sites.

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				
b. Alteration of a plant community?		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		Yes	4e.
f. ****For P-R/D-J, will the project affect wetlands, or prime and unique farmland?		X				
g. Other:						

Comment 4e. The project will include ground disturbing activities that may result in the establishment of noxious weeds. The potential for this dynamic to occur will be recognized and reduced by cleaning vehicles and equipment entering and leaving the project site. Also, only certified weed-free mixes will be used for reseeding of disturbed areas. A management plan is also being developed for the project site to control and eliminate noxious weeds after construction of the project.

** 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				
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				
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				
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				
j. Other:						

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		Yes	6a.
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				
e. Other:						

Comment 6a. The proposed action includes the use of heavy equipment that may temporarily increase existing noise levels. All equipment will have properly functioning noise reduction equipment to limit the level of increase in noise.

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. 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				
e. Other:						

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				
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)		X				
e. Other:						

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				
f. Other:						

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				
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				
g. Other:						

** 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.)		X				
e. Other:						

Comment 11b. The proposed action would negatively affect aesthetics during project construction because of ground disturbance and the presence of heavy equipment. These negative effects would be relatively short term since the project is expected to be completed over approximate two day period.

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 12.a.)	X					12d.
e. Other:						

Comment 12d. A cultural inventory of the sites by a BDNF archeologist will be conducted prior to any ground breaking activities. If any cultural artifacts are identified or disturbed during the construction of this project, all ground breaking activities will be halted and the BDNF archeologist and the State Historic Preservation Office will be contacted immediately for guidance on how to proceed with the project.

SIGNIFICANCE CRITERIA

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.)		X				
g. ****For P-R/D-J, list any federal or state permits required.						13g.

Comment 13g. Federal or State Permits Required: 124 Permit issued by FWP; Department of Environmental Quality - 318 Authorization issued by FWP.

2. **Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:** None

PART III. NARRATIVE EVALUATION AND COMMENT

Addressed in Part I and Part II.

PART IV. PUBLIC PARTICIPATION

1. **Describe the level of public involvement for this project if any, and, given the complexity and the seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances?**

   The public will be notified through publication in The Dillon Tribune and The Montana Standard and through contact with the local watershed and sports groups. This EA will also be published on the Montana Fish, Wildlife & Parks web page (**http://fwp.mt.gov/default.html**). Public comments can be given at the FWP web page, or in writing to: Peter Lamothe, Montana Fish, Wildlife & Parks, 730 N. Montana St., Dillon, MT 59725, or email: **plamothe@mt.gov**. Comments on the EA will be accepted until 5:00 pm, November 20, 2009. This level of public involvement is believed adequate for the proposed project.

2. **Duration of comment period, if any.**

   The public comment period for this proposed action is from October 28, 2009 to 5:00 pm on November 20, 2009. Written comment can be mailed to:

   Peter Lamothe
   Montana Fish, Wildlife & Parks
   730 N. Montana St.
   Dillon, MT 59725
   E-mail: plamothe@mt.gov

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. We conclude from this review that the proposed activities will have no significant impacts based upon the criteria at ARM 12.2.431 to determine the significance of an impact. Therefore, an EIS is not warranted.

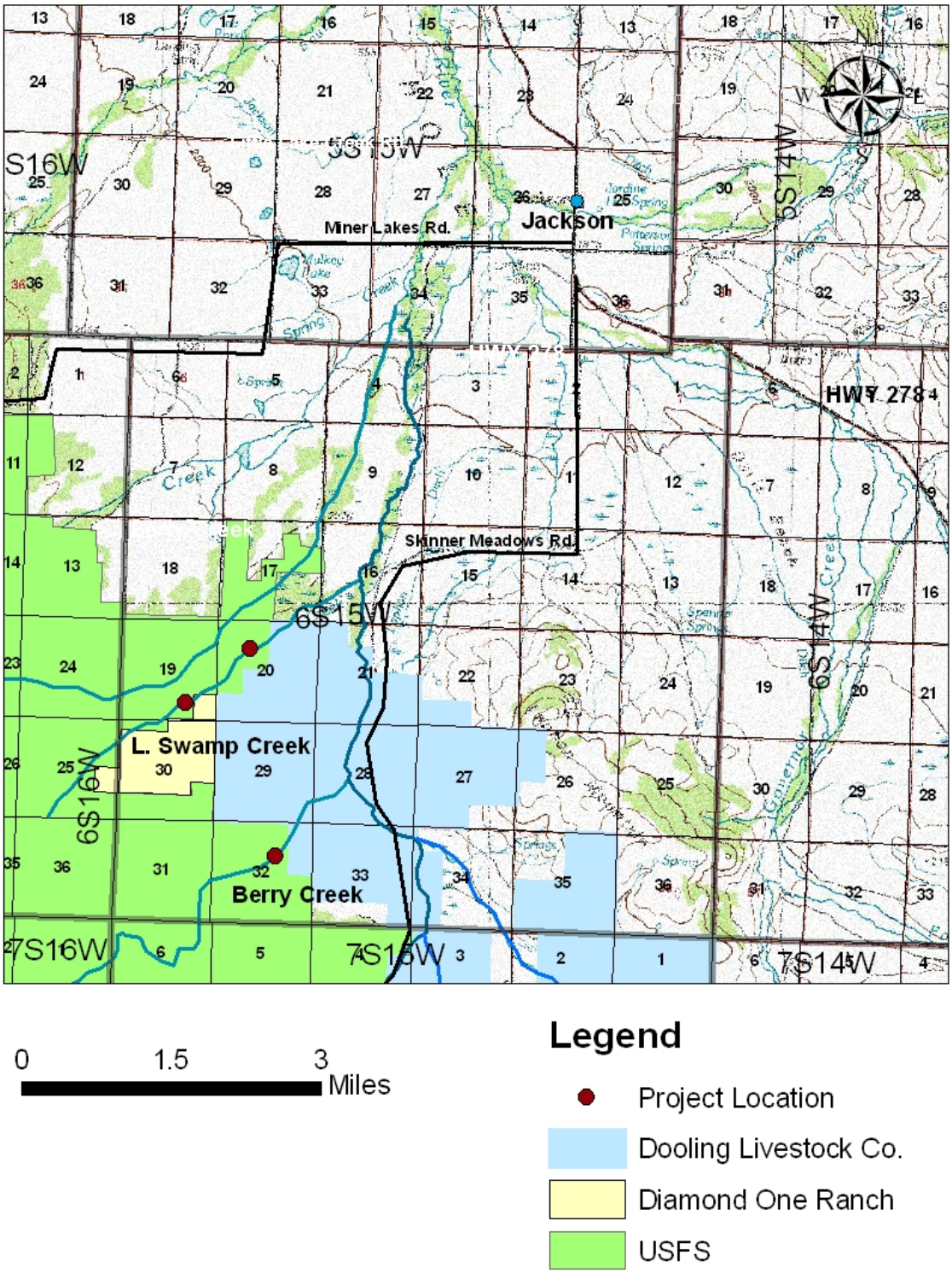
2. **Name, title, address and phone number of the person(s) responsible for preparing the EA:**

Peter Lamothe – Fisheries Biologist	730 N. Montana St., Dillon, MT 59725 406-683-2287

3. List of agencies consulted during preparation of the EA:

Montana Fish, Wildlife & Parks – Fisheries Division
Montana Department of Natural Resources and Conservation
US Forest Service, Beaverhead-Deer Lodge National Forest

APPENDICES

1. Location map of the proposed action.

Appendix 1. Location map of the proposed action.