

RECEIVED**AUG 05 2014**DEPT. OF WATER RESOURCES
SOUTHERN REGIONSTATE OF IDAHO
DEPARTMENT OF WATER RESOURCESTransfer No. 79491**MINIMUM REQUIREMENTS CHECKLIST**
TO BE SUBMITTED WITH APPLICATION FOR TRANSFER

An application for transfer must be prepared in accordance with the minimum requirements listed below to be acceptable for processing by the Department. Incomplete applications will be returned. The instructions, fee schedule, Part 2A reports and additional Part 2B forms are available from any Department office or on the Department's website at www.idwr.idaho.gov.

Name of Applicant(s) Salmon Falls Land and Livestock Co. Inc.**Check whether each item below is *attached* (Yes) or *not applicable* (N/A) for the proposed transfer.**Yes N/A * Means the item is always required and must be included with the application.

- ☒ * Completed Application for Transfer of Water Right form, Part 1.
- ☒ * Signature of applicant(s) or applicant's authorized representative on Application for Transfer Part 1. Include evidence of authority labeled Attachment #3 (see below) if signed by representative.
- ☒ * Application for Transfer Part 2A. Attach a Part 2A report describing each water right in the transfer as currently recorded.
- ☐ ☒ Complete and attach an Application for Transfer Part 2B for each water right for which only a portion is proposed to be changed through this transfer application.
- ☒ * Application for Transfer Part 3A is always required (see Attachment #7a below); Parts 3B and 3C must be completed for transfer applications proposing to change the nature of use of the water right(s) or proposing changes to supplemental right(s).
- ☒ * Correct fee submitted with transfer application form. (Fee schedule is on website and instructions for application for transfer.)

Attachments to Application - Label each attachment with the corresponding number shown below as Attachment #1-9.

- ☐ ☒ #1 If the applicant is a business, partnership, organization, or association, and not currently registered in the State of Idaho as a business entity, attach documentation identifying officers authorized to sign or act on behalf of right holder. (See Part 1.)
- ☐ ☒ #2a Water Right ownership documentation if Dept. records do not show the applicant as the current water right owner. **
- ☐ ☒ #2b If the ownership of the water right will change as a result of the proposed transfer to a new place of use, attach documentation showing land and water right ownership at the new place of use. Include documentation for all affected land and owner(s). **
** Additional fee(s) required for water right ownership changes; see fee schedule.
- ☐ ☒ #3 Documentation of authority to make the change if the applicant is not the water right owner.
- ☐ ☒ #4 Power of Attorney or documentation providing authority to sign or act on the applicant's behalf. (See Part 1.)
- ☐ ☒ #5 If the transfer application proposes to change the point of diversion for a water right affecting the Eastern Snake Plain Aquifer (ESPA), attach the results of an ESPA analysis and a detailed mitigation plan to offset any depletions to hydraulically connected reaches of the Snake River. ESPA transfer spreadsheet and model grid labeled cells are available on the Department's website at www.idwr.idaho.gov/WaterManagement/WaterRights/WaterRightTransfers/resources.htm.
- ☐ ☒ #6 Notarized statement of agreement or a statement on official letterhead signed by an authorized representative from each lien holder or other entity with financial interest in the water right(s) or land affected by the proposed transfer. (See Part 1.5.c.)
- ☒ * #7a Attach a map identifying the proposed point(s) of diversion, place(s) of use, and water diversion and distribution system details as described on the application. Include legal description labels. If only a portion of the right is proposed to be changed, identify the current location of the part of the existing right(s) proposed to be changed. (See Part 3A.)
- ☒ ☐ #7b If the transfer application proposes to change the place or purpose of use of an irrigation right attach a Geographic Information System (GIS) shape file, or an aerial photo or other image clearly delineating the location and extent of existing acres and changes to the place of use.
- ☐ ☒ #8a If the transfer application proposes to change the nature of use or period of use for one or more rights, provide documentation describing the extent of historic beneficial use for the water rights proposed to be transferred and document how enlargement will be avoided. (See Part 3B.) Additional fee required for proposed changes to nature of use; see fee schedule.
- ☐ ☒ #8b If the transfer application proposes to change the place of use of a supplemental irrigation right, provide documentation regarding the historic use of the supplemental right(s) and availability or reliability of the primary right(s) being supplemented, both before and after the proposed change. (See Part 3C.)
- ☐ ☐ #9 Other. Please describe: _____

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR TRANSFER OF WATER RIGHT PART 1

RECEIVED
AUG 05 2014
DEPT OF WATER RESOURCES
SOUTHERN REGION

Name of Applicant(s) Salmon Falls Land and Livestock Co. Inc. Phone 208.837.6053

Mailing address 95 A Bell Rapids Rd, Hagerman, ID 83332 Email mjhenslee@gmail.com

- ☐ If applicant is not an individual and not registered to do business in the State of Idaho, attach documentation identifying officers authorized to sign or act on behalf of the applicant. Label it **Attachment #1**.
- ☒ Attach water right ownership documentation if Department records do not show the transfer applicant as the current water right owner. Label it **Attachment #2a**.
- ☒ If the ownership of the water right will change as a result of the proposed transfer to a new place of use, attach documentation showing land and water right ownership at the new place of use. Include documentation for all affected land and owner(s). Label it **Attachment #2b**.
- ☐ Attach documentation of authority to make the proposed change if the applicant is not the water right owner. Label it **Attachment #3**.

Provide contact information below if a consultant, attorney, or any other person is representing the applicant in this transfer process.

☒ No Representative

Name of Representative _____ Phone _____

Mailing address _____ Email _____

- ☐ Send all correspondence for this application to the representative and not to the applicant.
OR
- ☐ Send original correspondence to the applicant and copies to the representative.
- ☐ The representative may submit information for the applicant but is not authorized to sign for the applicant.
OR
- ☐ The representative is authorized to sign for the applicant. Attach a Power of Attorney or other documentation providing authority to sign for the applicant and label it **Attachment #4**.

I hereby assert that no one will be injured by the proposed changes and that the proposed changes do not constitute an enlargement in use of the original right(s). The information contained in this application is true to the best of my knowledge. I understand that any willful misrepresentations made in this application may result in rejection of the application or cancellation of an approval.

Salmon Falls Land & Livestock Co.
Michael J. Henslee V.P.
Signature of Applicant or Authorized Representative

Michael J Henslee Vice President Aug 4, 2014
Print Name and Title if applicable Date

Signature of Applicant or Authorized Representative

Print Name and Title if applicable

Date

A. PURPOSE OF TRANSFER

- ☒ Change point of diversion
☐ Change nature of use

☐ Add diversion point(s)
☐ Change period of use

☒ Change place of use
☐ Other _____
- Describe your proposal in narrative form, including a detailed description of non-irrigation uses to justify amounts transferred (i.e. number of stock, etc.), and provide additional explanation of any other items on the application. Attach additional pages if necessary and label it **Part 1A.2**.

See Part 1A.2

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR TRANSFER OF WATER RIGHT

PART 1 Continued

B. DESCRIPTION OF RIGHTS AFTER THE REQUESTED CHANGES. IF THE RIGHTS ARE BEING SPLIT, DESCRIBE PORTIONS TO BE CHANGED AS THEY WOULD APPEAR AFTER THE REQUESTED CHANGES.

1.	Right Number	Amount (cfs/ac-ft)	Nature of Use	Period of Use	Source & Tributary
All or Part ☒ ☐	71-10882	22 cfs	Irrigation	5/1 to 10/31	Pole Creek, Salmon River
☒ ☐	71-10882	0.4 cfs	Stockwater	5/1 to 10/31	Pole Creek, Salmon River
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	
☐ ☐				to	

Total authorized under rights 22 cfs and/or _____ acre-feet.

2. Total amount of water proposed to be transferred or changed 22.0 cubic feet per second and/or _____ acre-feet per annum.

3. Point(s) of Diversion:

- ☐ No changes to point(s) of diversion are proposed - the following chart is therefore not completed. (Proceed to #4.)
- ☐ Attach Eastern Snake Plain Aquifer analysis if this transfer proposes to change a point of diversion affecting the ESPA.
Label it **Attachment #5**.

New ?	Lot	¼	¼	¼	Sec	Twp	Rge	County	Source	Local name or tag #
x		SE	NE	NE	25	07N	14E	Blaine	Pole Creek	PC
										* See Part 1A.2

4. Place of use: (If irrigation, identify with number of acres irrigated per ¼ ¼ tract.)

- ☐ No changes to place of use are proposed - the following chart is therefore not completed. (Proceed to #5.)

Twp	Rge	Sec	NE ¼				NW ¼				SW ¼				SE ¼				Acre Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
07N	14E	10															2.1		2.1
07N	14E	14					31.2	32.2	39.5	29.6	37.9	39.5	40	38.9			.1		288.9
07N	14E	15	36.1	32	39.5	38.1	7.7			34.7	29.6	1.0	12.8	40	38.6	39.5	39	40	428.6
07N	14E	22	30.0	23.6	39.6	34.9	27.8	1.9		16.3					3.7	1.3			179.1
07N	14E	23		1.1			31.4	39.2	25.9	18.8		2.9							119.3
Total Acres (for irrigation use)																			1018

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

APPLICATION FOR TRANSFER OF WATER RIGHT PART 1 Continued

5. General Information:

- a. Describe the complete diversion system, including how you will accommodate a measuring device and lockable controlling works should they be required now or in the future:
The new POD will be installed with a headgate, fish screen, and measuring device. The diversion will be piped to the existing ditch system, which will feed an NRCS-designed pivot irrigation system.
- b. Who owns the property at the point(s) of diversion? USFS
If other than the applicant, describe the arrangement enabling the applicant to access the property for the diversion system:
The applicant will receive a special use permit for diversion from the USFS for implementing these changes to the irrigation system and committing to abide by bypass flow objectives.
- c. Are the lands from which you propose to transfer the water right subject to any liens, deeds of trust, mortgages, or contracts?
If yes, ☐ Attach a notarized statement from the holder of the lien, deed of trust, mortgage or contract agreeing to the proposed changes on official letterhead signed by an authorized representative. Label it **Attachment #6**. List the name of the entity and type of lien: _____
It is the applicant's responsibility to provide notice to lien holder, trustee, mortgagor, or contract holder of the proposed changes that may impact or change the value of the water rights or affected real property. Any misrepresentation of legal encumbrance on this application may result in rejection of the application or cancellation of an approval.
- d. Describe the effect on the land now irrigated if the place or purpose of use is changed pursuant to this transfer:
NRCS believes the areas are expected to naturally return to near-native, non-irrigated, pasture lands.
- e. Describe the use of any other water right(s) for the same purpose or land, or the same diversion system as right(s) proposed to be transferred at both the existing and proposed point(s) of diversion and place(s) use:
Salmon Falls Land and Livestock has filed an application for permit to divert groundwater to serve the proposed POU. If approved, the groundwater right will be used only when necessary to maintain a minimum flow of 12-18 cfs in Pole Creek, as a condition of the special use permit.
- f. To your knowledge, has/is any portion of the water right(s) proposed to be changed:
Yes No
☐ ☒ undergone a period of five or more consecutive years of non-use,
☐ ☒ currently leased to the Water Supply Bank,
☐ ☒ currently used in a mitigation plan limiting the use of water under the right, or
☐ ☒ currently enrolled in a Federal set-aside program limiting the use of water under the rights?

If yes, describe:

A. PLAT MAP (See Part 3A of Instructions for application for transfer for complete requirements.)

- ### B. CHANGES IN NATURE OF USE (Water Balance)

- ### C. PLACE OF USE CHANGES TO SUPPLEMENTAL IRRIGATION RIGHTS

- [illegible]

Transfer contains _____ pages and _____ attachments.

Page 6

Part 1A.2

The proposed transfer is intended to authorize a new point of diversion upstream of the current active diversion (PC7) and align the place of use with a new irrigation system. The current diversion structure forms a barrier to fish passage, blocking the movement of ESA-listed Chinook salmon, steelhead, and bull trout, as well as resident westslope cutthroat trout. The new POD structure has been designed to allow fish passage at a range of stream flows. It will be installed with a headgate, measuring device, and fish screen. It will tie into the existing ditch and serve a newly designed and installed irrigation system. The new system has been designed by NRCS to maximize efficiencies and minimize impacts to Pole Creek (removal of stream crossings and irrigation of riparian areas). The new design will irrigate approximately 968 acres of the original 1018 acres authorized under Water Right No. 71-10882. The remaining 50 acres will be donated to the Idaho Water Resource Board and leased into the Water Supply Bank. The 50 acres to be placed into the bank are identified on the map and included in a separate shapefile.

Except for the active PC7 POD proposed here for transfer, all other PODs currently assigned to the water right should remain post transfer (no room to include on the application). These PODs are intended as fall back sources in the advent that the POD on National Forest loses authorization. A condition that recognizes this purpose, and restricts their use accordingly, is welcomed. Perhaps the following: The point of diversion authorized for the SE quarter of the NE quarter of the NE quarter of Section 25, Township 07N, Range 14E shall be the sole active diversion while the owner holds a special use permit from the USFS. Upon cancellation or expiration of the special use permit, the remaining authorized points of diversion may be reactivated.

The applicant believes that this new water right is in the local public interest and will not jeopardize current recovery efforts (related Biological Opinions: NOAA Fisheries, June 9, 2014; USFWS June 13, 2014). The applicant has worked closely with the Sawtooth National Recreation Area, US Forest Service, Custer County Soil and Water Conservation District, Idaho Water Resource Board, Idaho Department of Fish and Game, National Resource Conservation Service, and the Shoshone-Bannock Tribes to develop a comprehensive restoration plan to address the factors limiting Chinook salmon, steelhead, bull trout, and westslope trout in Pole Creek. The plan is intended to meet the following objectives in Pole Creek and the connected segment of the upper Salmon River (from USDA – Forest Service 2011 Instream Flow Needs of Pole Creek and Other Related Ecological Functions and 2012 Instream Flow Needs of the Main Salmon River SR3 Segment and Other Related Ecological Functions)

- Provide Snake River spring/summer Chinook salmon, Snake River basin steelhead, Columbia River bull trout, and westslope cutthroat migration passage.
- Provide Chinook salmon, steelhead and westslope cutthroat trout spawning and incubation habitat, and Chinook salmon, steelhead and westslope cutthroat trout rearing habitat.
- Provide a naturally shaped hydrograph to support and sustain the elements of complex aquatic habitats such as wood recruitment and movement, micro-habitat scour, bank vegetation and water storage, and floodplain connectivity.
- Provide long term maintenance of aquatic habitat flows to ensure that the volume and size classes of sediment supplied to the reach are transported. These flows typically occur during the peak of the hydrograph and are integral to maintaining fish habitat, channel processes, capacity and complexity, and riparian vegetation.

The applicant believes that this transfer is in the local public interest and will not adversely affect current recovery efforts.

IDAHO DEPARTMENT OF WATER RESOURCES
Proof Report

6/19/2014

Water Right 71-10882

<u>Owner Type</u>	<u>Name and Address</u>
Current Owner	SALMON FALLS LAND & LIVESTOCK CO INC 95A BELL RAPIDS RD HAGERMAN, ID 83332 (208)837-6053

Priority Date: 5/1/1918**Basis:** Decreed**Status:** Active

<u>Source</u>	<u>Tributary</u>
POLE CREEK	SALMON RIVER

<u>Beneficial Use</u>	<u>From</u>	<u>To</u>	<u>Diversion Rate</u>	<u>Volume</u>
IRRIGATION	05/01	10/31	22.000 CFS	
STOCKWATER	05/01	10/31	0.400 CFS	
	<u>Total Diversion</u>		22.000 CFS	

Source and Point(s) of Diversion

POLE CREEK	NWNE	Sec. 22, Twp 07N, Rge 14E,	BLAINE County
POLE CREEK	SENE	Sec. 23, Twp 07N, Rge 14E,	BLAINE County
POLE CREEK	SENE	Sec. 22, Twp 07N, Rge 14E,	BLAINE County
POLE CREEK	NENW	Sec. 22, Twp 07N, Rge 14E,	BLAINE County
POLE CREEK	NWNE	Sec. 22, Twp 07N, Rge 14E,	BLAINE County
POLE CREEK	SENE	Sec. 25, Twp 07N, Rge 14E,	BLAINE County
POLE CREEK	SWNE	Sec. 25, Twp 07N, Rge 14E,	BLAINE County
POLE CREEK	SESE	Sec. 23, Twp 07N, Rge 14E,	BLAINE County
POLE CREEK	NENE	Sec. 22, Twp 07N, Rge 14E,	BLAINE County
POLE CREEK	SWNW	Sec. 23, Twp 07N, Rge 14E,	BLAINE County

Place Of Use**IRRIGATION within CUSTER, BLAINE Counties**

T07N R14E S10	SESW	0.1
T07N R14E S10	SWSE	5.9
T07N R14E S10	SESE	1.1
T07N R14E S14	SWNE	0.3
T07N R14E S14	NENW	14.4
T07N R14E S14	NWNW	12.1
T07N R14E S14	SWNW	38.5
T07N R14E S14	SENE	38.7
T07N R14E S14	NESW	37.9
T07N R14E S14	NWSW	35.4
T07N R14E S14	SWSW	40.0
T07N R14E S14	SESW	38.7
T07N R14E S14	NWSE	1.1
T07N R14E S14	SWSE	0.1
T07N R14E S15	NENE	33.8
T07N R14E S15	NWNE	39.9
T07N R14E S15	SWNE	39.9

IDAHO DEPARTMENT OF WATER RESOURCES
Proof Report

6/19/2014

T07N R14E S15	SENE	39.9
T07N R14E S15	NENW	25.4
T07N R14E S15	SENW	38.4
T07N R14E S15	NESW	20.8
T07N R14E S15	SWSW	1.6
T07N R14E S15	SESW	32.8
T07N R14E S15	NESE	38.4
T07N R14E S15	NWSE	39.7
T07N R14E S15	SWSE	37.8
T07N R14E S15	SESE	34.9
T07N R14E S22	NENE	36.4
T07N R14E S22	NWNE	39.9
T07N R14E S22	SWNE	21.5
T07N R14E S22	SENE	37.9
T07N R14E S22	NENW	39.9
T07N R14E S22	NWNW	6.3
T07N R14E S22	SENW	17.0
T07N R14E S22	NESE	7.1
T07N R14E S23	NWNE	0.9
T07N R14E S23	NENW	32.2
T07N R14E S23	NWNW	39.9
T07N R14E S23	SWNW	30.5
T07N R14E S23	SENW	18.8
T07N R14E S23	NWSW	3.0

POU Total Acres: 1,018.9

STOCKWATER within CUSTER, BLAINE Counties

T07N R14E S10	SESW
T07N R14E S10	SWSE
T07N R14E S10	SESE
T07N R14E S14	SWNE
T07N R14E S14	NENW
T07N R14E S14	NWNW
T07N R14E S14	SWNW
T07N R14E S14	SENW
T07N R14E S14	NESW
T07N R14E S14	NWSW
T07N R14E S14	SWSW
T07N R14E S14	SESW
T07N R14E S14	NWSE
T07N R14E S14	SWSE
T07N R14E S15	NENE
T07N R14E S15	NWNE
T07N R14E S15	SWNE
T07N R14E S15	SENE
T07N R14E S15	NENW
T07N R14E S15	NWNW

IDAHO DEPARTMENT OF WATER RESOURCES
Proof Report

6/19/2014

T07N R14E S15	NESW
T07N R14E S15	SWSW
T07N R14E S15	SESW
T07N R14E S15	NESE
T07N R14E S15	NWSE
T07N R14E S15	SWSE
T07N R14E S15	SESE
T07N R14E S22	NENE
T07N R14E S22	NWNE
T07N R14E S22	SWNE
T07N R14E S22	SENE
T07N R14E S22	NENW
T07N R14E S22	NWNW
T07N R14E S22	SENW
T07N R14E S22	NESE
T07N R14E S23	NWNE
T07N R14E S23	NENW
T07N R14E S23	NWNW
T07N R14E S23	SWNW
T07N R14E S23	SENW
T07N R14E S23	NWSW

Conditions of Approval:

1. TWO POINTS OF DIVERSION LOCATED IN T7N, R14E, S22, NWNE.
2. C13 THE FOLLOWING WATER RIGHTS FROM THE FOLLOWING SOURCES OF WATER IN BASIN 71 SHALL BE ADMINISTERED SEPARATELY FROM ALL OTHER WATER RIGHTS IN BASIN 71: WATER RIGHT NO. SOURCE NONE NONE
 THE FOLLOWING WATER RIGHTS FROM THE FOLLOWING SOURCES OF WATER IN BASIN 71 SHALL BE ADMINISTERED SEPARATELY FROM ALL OTHER WATER RIGHTS IN THE SNAKE RIVER BASIN: WATER RIGHT NO. SOURCE NONE NONE
 ALL WATER RIGHTS WITHIN BASIN 71 ARE FROM CONNECTED SOURCES OF WATER IN THE SNAKE RIVER BASIN AND SHALL BE ADMINISTERED CONJUNCTIVELY.
3. C18 THIS PARTIAL DECREE IS SUBJECT TO SUCH GENERAL PROVISIONS NECESSARY FOR THE DEFINITION OF THE RIGHTS OR FOR THE EFFICIENT ADMINISTRATION OF THE WATER RIGHTS AS MAY BE ULTIMATELY DETERMINED BY THE COURT AT A POINT IN TIME NO LATER THAN THE ENTRY OF A FINAL UNIFIED DECREE. SECTION 42-1412(6), IDAHO CODE.
4. STOCKWATER FOR 1800 RANGE CATTLE. RIGHTS 71-00060A, 71-00060B, 71-00062A, 71-00062B AND 71-00062D AT TIMES PROVIDE WATER TO SAME CATTLE; WHEN RIGHTS COMBINED THE LIMIT IS 1800 CATTLE.

Comments:

1. scurtis 1/6/2003 Change of Ownership
 Rights 71-10882 and 71-10883 are the resulting numbers from a split of right 71-60A by change of ownership.

IDAHO DEPARTMENT OF WATER RESOURCES
Proof Report

6/19/2014

2. Shelley Keen 10/6/2003 Points of Diversion
Today I digitized the ten points of diversion.
3. mciscell 5/26/2009 POD
PODID 599107 correlated from SpatialDataID 298244 to SpatialDataID 137646
4. mciscell 5/26/2009 POD
PODID 583271 correlated from SpatialDataID 298244 to SpatialDataID 137646
5. mciscell 5/26/2009 POD
PODID 583268 correlated from SpatialDataID 298255 to SpatialDataID 138699
6. mciscell 5/26/2009 POD
PODID 583269 correlated from SpatialDataID 138010 to SpatialDataID 298245
7. nmiller 11/30/2009 POD
PODID 583271 correlated from SpatialDataID 137646 to SpatialDataID 403408

Combined Use Limits

N/A

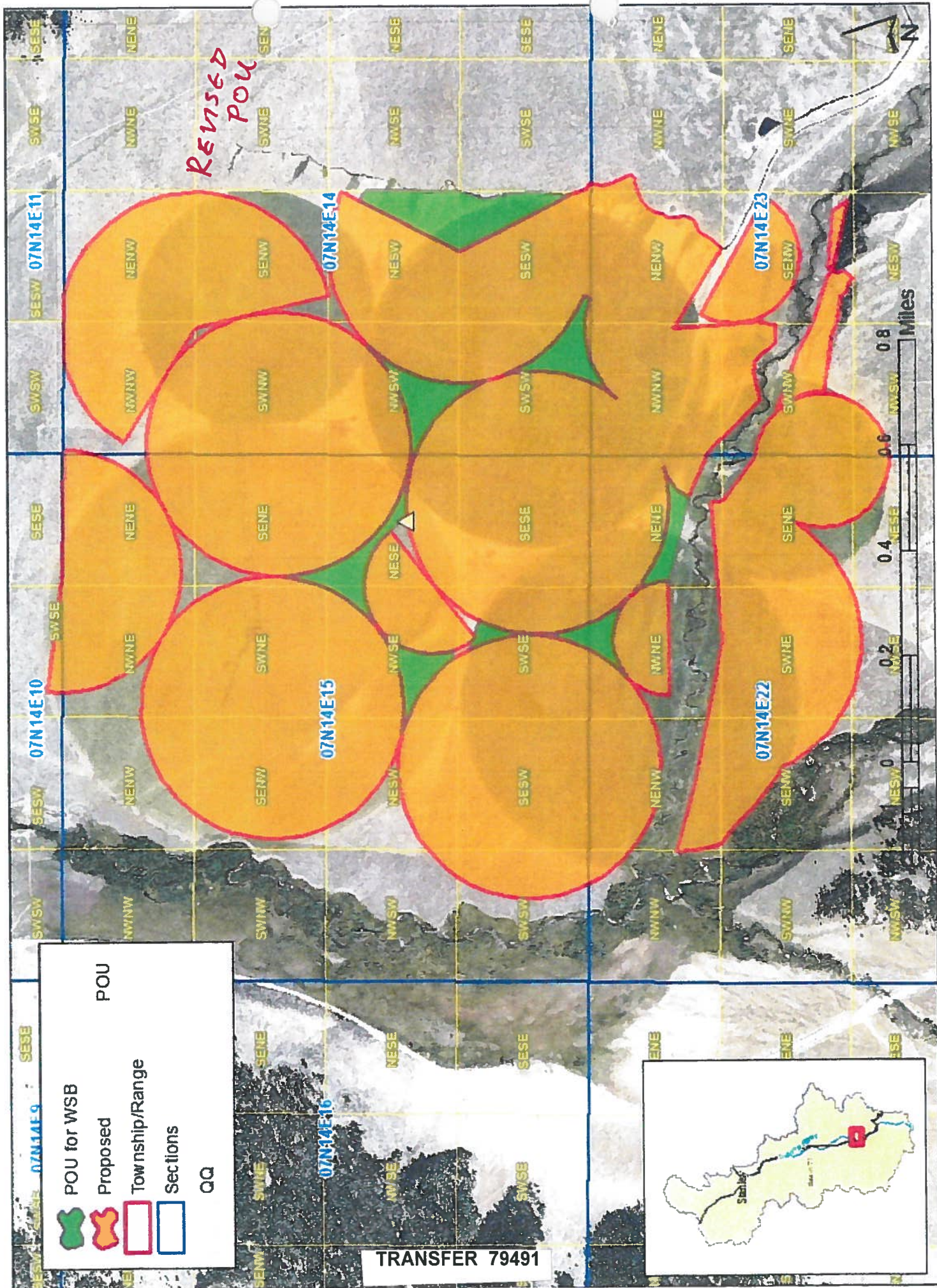
SubCase:

N/A

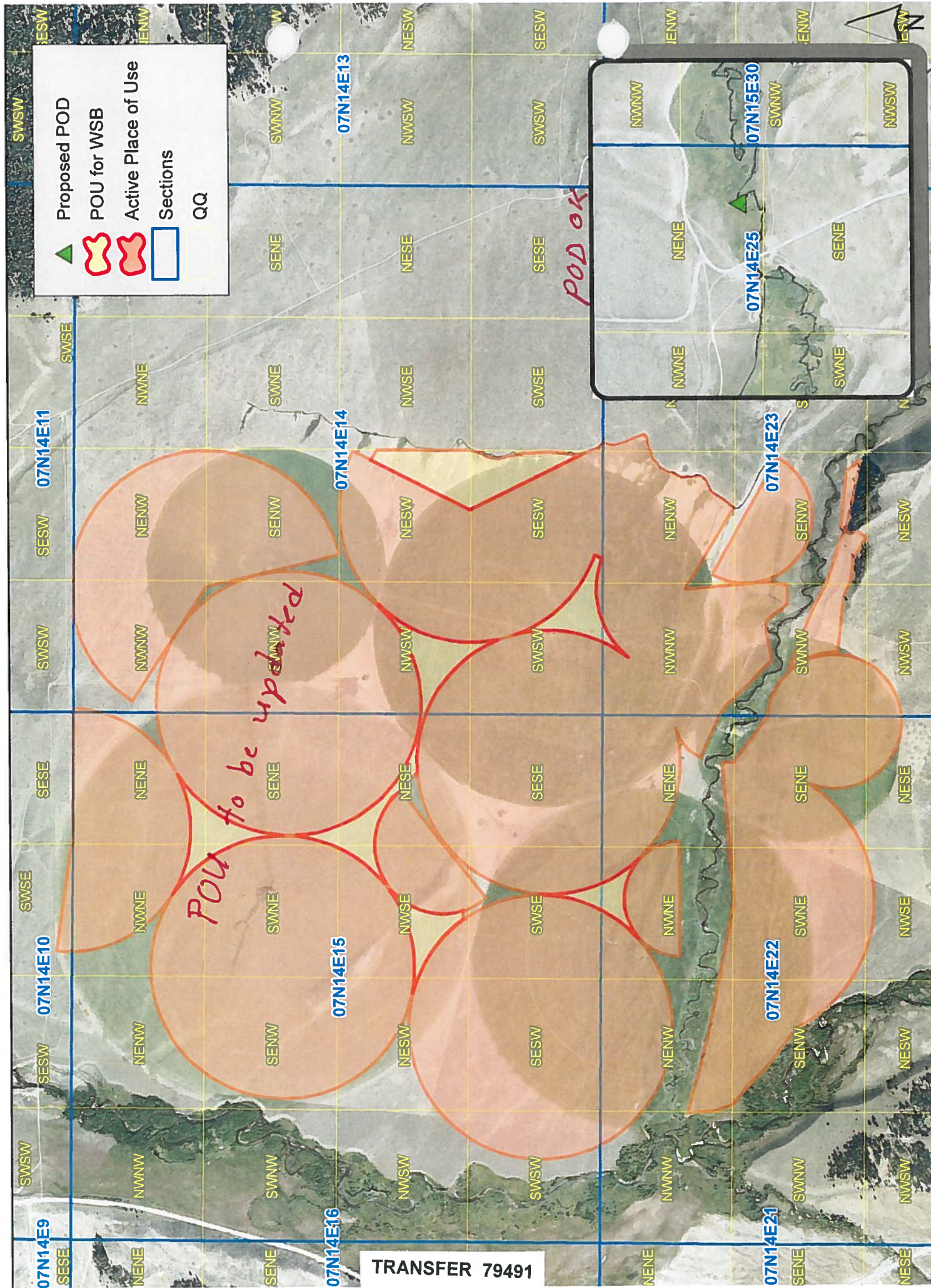
Water Supply Bank:

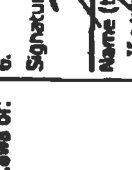
N/A

71-10882 Place of Use Transfer



71-10882 Place of Use and Point of Diversion Transfer



No. C 30678 Return to: SECRETARY OF STATE 450 N 4th STREET PO BOX 83720 BOISE, ID 83720-0080 NO FILING FEE IF RECEIVED BY DUE DATE	Due no later than Mar 31, 2014 Annual Report Form 1. Mailing Address: Correct in this box if needed. SALMON FALLS LAND & LIVESTOCK COMPANY KATHERINE A. HENSLEE 95A BELL RAPIDS RD HAGERMAN ID 83332-6039	2. Registered Agent and Office (NOT A P.O. BOX) TIMOTHY J STOVER 905 SHOSHONE ST N TWIN FALLS ID 83301 3. <u>New</u> Registered Agent Signature.																												
4. Corporations: Enter Names and Business Addresses of President, Secretary, Directors, Treasurer, Vice Pres. <table border="1"> <thead> <tr> <th>Office Held</th> <th>Name</th> <th>Street or PO Address</th> <th>City</th> <th>State</th> <th>Country</th> <th>Postal Code</th> </tr> </thead> <tbody> <tr> <td>Secretary</td> <td>Katherine A. Henslee</td> <td>123 Bell Rapids Rd.</td> <td>Hagerman,</td> <td>ID</td> <td></td> <td>83332</td> </tr> <tr> <td>Dir/Vice Pres</td> <td>Michael J. Henslee</td> <td>23 Saylor Cr. Rd.</td> <td>Hagerman,</td> <td>ID</td> <td></td> <td>83332</td> </tr> <tr> <td>Dir/Vice Pres.</td> <td>Mark W. Henslee</td> <td>3016 S. 1000 E.</td> <td>Hagerman,</td> <td>ID</td> <td></td> <td>83332</td> </tr> </tbody> </table>			Office Held	Name	Street or PO Address	City	State	Country	Postal Code	Secretary	Katherine A. Henslee	123 Bell Rapids Rd.	Hagerman,	ID		83332	Dir/Vice Pres	Michael J. Henslee	23 Saylor Cr. Rd.	Hagerman,	ID		83332	Dir/Vice Pres.	Mark W. Henslee	3016 S. 1000 E.	Hagerman,	ID		83332
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Dir/Vice Pres.	Mark W. Henslee	3016 S. 1000 E.	Hagerman,	ID		83332																								
5. Organized Under the Laws of: IDAHO C 30678	6. Signature:  Name (type or print): Katherine A. Henslee Date: <u>2-15-14</u> Title: Secretary																													
Issued 01/29/2014 by SLD 112934																														



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, Idaho 83301-5858

Phone: (208) 736-3033 • Fax: (208) 736-3037 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

August 29, 2014

JAN SKRUKRUD
WATER DISTRICT #71
PO BOX 203
STANLEY, ID 83278

RE: Transfer No. 79491
Water Right No(s): 71-10882

Dear Ms. Skrukrud:

A copy of the above referenced application is enclosed. Please review the application, then complete the enclosed recommendation form as necessary, and return it to this office within 21 days of the date of this letter.

If the application is approved, IDWR will include appropriate standard conditions of approval for a water right located within a water district, such as regulation by the watermaster, lockable controlling works, and/or measuring devices. Any special conditions or other concerns you have related to this application should be specifically addressed in your recommendation.

IDWR's regional offices can finish reviewing an unprotested application as soon as the protest period has past. Your prompt response to this request will ensure that your recommendation can be considered. If IDWR has not received your written recommendation within 21 days from the date of this letter, IDWR will presume that you do not oppose approval of the application and that you have no comments for IDWR to consider.

Sincerely,

Denise Maline
Administrative Assistant

Enclosure(s)



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, Idaho 83301-5858

Phone: (208) 736-3033 • Fax: (208) 736-3037 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

August 29, 2014

IDAHO DEPT OF FISH & GAME
PO BOX 1336
SALMON, ID 83467

RE: Transfer No. 79491
Water Right No(s). 71-10882

Dear Fish & Game:

The Department of Water Resources is seeking written comment and/or recommendations from your agency regarding the above referenced water right application. A copy of the application is enclosed for your reference. Please review the application, complete the enclosed recommendation form, and submit it to this office within 21 days.

The Department can publish notice of the application as soon as the initial review is completed. Therefore, your prompt response to this request is appreciated. If your agency desires to formally protest the approval of this application, you may do so after the notice is published by filing a written protest along with a \$25.00 filing fee within 10 days after final publication.

Please contact this office if you have any questions regarding the application, or you may visit our website at www.idwr.idaho.gov .

Sincerely,

Denise Maline
Southern Region

Enclosure(s)

cc: Tom Bassista, IDFG Idaho Falls



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, Idaho 83301-5858

Phone: (208) 736-3033 • Fax: (208) 736-3037 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

August 28, 2014

SALMON FALLS LAND & LIVESTOCK CO INC
MICHAEL J HENSLEE, V.P.
95-A BELL RAPIDS RD
HAGERMAN, ID 83332

RE: Transfer No. 79491
Water Right No(s). 71-10882

Dear Applicant(s):

The Department of Water Resources has received your water right transfer application. Please refer to the transfer number referenced above in all future correspondence regarding this transfer.

A legal notice of the application has been prepared and is scheduled for publication in the **IDAHO MOUNTAIN EXPRESS** on **9/3/2014** and **9/10/2014**; and **CHALLIS MESSENGER, IDAHO STATESMAN, LEWISTON TRIBUNE, POST REGISTER, TIMES NEWS** on **9/4/2014** and **9/11/2014**. Protests to this application may be submitted for a period ending ten (10) days after the second publication (**September 22, 2014**).

If the application is protested, you will be sent a copy of each protest. All protests must be resolved before the application can be considered for approval. If the protest(s) cannot be resolved voluntarily, the Department will conduct a conference and/or hearing on the matter.

If the application is not protested, the Department will process your application and notify you of any action taken on the application. If your application is approved, the Department will send you a copy of the approval document.

Please contact this office if you have any questions regarding the application.

Sincerely,

Denise Maline
Administrative Assistant

Maline, Denise

From: Maline, Denise
Sent: Thursday, August 28, 2014 10:34 AM
To: Idaho Mountain Express
Subject: LEGAL NOTICE
Attachments: Idaho Mountain Express Cover Letter.docx; 79491 Ad.doc

Attached please find (1) legal notice being submitted for publication on September 3rd & 10th, 2014. Please feel free to contact me if you have any questions, or if you are not able to run the ad on the dates requested.

Thank you in advance,

Denise Maline
Administrative Assistant
Idaho Dept of Water Resources, Southern Region
650 Addison Ave W, Ste 500
Twin Falls, ID 83301
(208) 736-3033
denise.maline@idwr.idaho.gov



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, Idaho 83301-5858

Phone: (208) 736-3033 • Fax: (208) 736-3037 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

August 28, 2014

LEGAL NOTICE DEPARTMENT
IDAHO MOUNTAIN EXPRESS
PO BOX 1013
KETCHUM, ID 83340

RE: Transfer No. 79491
Water Right No(s): 71-10882

Dear Legal Notice Department:

Please publish the enclosed legal notice on the dates indicated (once a week for two consecutive weekly issues). If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Please send the affidavit and bill to this office before September 22, 2014. Your cooperation is appreciated.

Sincerely,

Denise Maline
Administrative Assistant

Enclosure(s)

**NOTICE OF PROPOSED CHANGE OF WATER RIGHT
TRANSFER NO. 79491**

SALMON FALLS LAND & LIVESTOCK CO INC, MICHAEL J HENSLEE, V.P., 95-A BELL RAPIDS RD, HAGERMAN, ID 83332; has filed Application No. 79491 for changes to the following water rights within BLAINE, CUSTER County(s): Right No(s). 71-10882; to see a full description of these rights and the proposed transfer, please visit our website at www.idwr.idaho.gov and search under New Water Right Applications. The purpose of the transfer is to change a portion of the above rights as follows: Application proposes to change a point of diversion (POD) for the stockwater and irrigation portions of water right 71-10882 (Pole Creek, 22.0 cfs), and change the place of use (POU) for the irrigation portion. The current POD is located approximately 8.6 miles east and 21.2 miles south of the intersection of state highways 21 and 75 in Stanley. The proposed POD is located approximately 800 feet upstream and will more easily facilitate the passage of native fish. The POU is located approximately 5.6 to 6.8 miles east and 18.9 to 20.6 miles south of Stanley and is being modified to reduce irrigation impacts on native fish populations.

For additional information concerning the property location, contact Southern Region office at (208) 736-3033. Protests may be submitted based on the criteria of Idaho Code Sec. 42-222. Any protest against the proposed change must be filed with the Department of Water Resources, Southern Region, 650 Addison Ave W Ste 500, Twin Falls ID 83301 together with a protest fee of \$25.00 for each application on or before September 22, 2014. The protestant must also send a copy of the protest to the applicant.

GARY SPACKMAN, Director

Published in Idaho Mountain Express on September 3rd & 10th, 2014 and Challis Messenger, Times News, Idaho Statesman, Post Register, Lewiston Tribune on September 4th & 11th, 2014

Maline, Denise

From: Maline, Denise
Sent: Thursday, August 28, 2014 10:28 AM
To: Challis Messenger
Subject: LEGAL NOTICE
Attachments: Challis Messenger Cover Letter.docx; 79491 Ad.doc

Attached please find (1) legal notice being submitted for publication on September 4th & 11th, 2014. Please feel free to contact me if you have any questions, or if you are not able to run the ad on the dates requested.

Thank you in advance,

Denise Maline
Administrative Assistant
Idaho Dept of Water Resources, Southern Region
650 Addison Ave W, Ste 500
Twin Falls, ID 83301
(208) 736-3033
denise.maline@idwr.idaho.gov



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, Idaho 83301-5858

Phone: (208) 736-3033 • Fax: (208) 736-3037 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

August 28, 2014

LEGAL NOTICE DEPARTMENT
CHALLIS MESSENGER
PO BOX 405
CHALLIS, ID 83226

RE: Transfer No. 79491
Water Right No(s): 71-10882

Dear Legal Notice Department:

Please publish the enclosed legal notice on the dates indicated (once a week for two consecutive weekly issues). If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Please send the affidavit and bill to this office before September 22, 2014. Your cooperation is appreciated.

Sincerely,

Denise Maline
Administrative Assistant

Enclosure(s)

**NOTICE OF PROPOSED CHANGE OF WATER RIGHT
TRANSFER NO. 79491**

SALMON FALLS LAND & LIVESTOCK CO INC, MICHAEL J HENSLEE, V.P., 95-A BELL RAPIDS RD, HAGERMAN, ID 83332; has filed Application No. 79491 for changes to the following water rights within BLAINE, CUSTER County(s): Right No(s). 71-10882; to see a full description of these rights and the proposed transfer, please visit our website at www.idwr.idaho.gov and search under New Water Right Applications. The purpose of the transfer is to change a portion of the above rights as follows: Application proposes to change a point of diversion (POD) for the stockwater and irrigation portions of water right 71-10882 (Pole Creek, 22.0 cfs), and change the place of use (POU) for the irrigation portion. The current POD is located approximately 8.6 miles east and 21.2 miles south of the intersection of state highways 21 and 75 in Stanley. The proposed POD is located approximately 800 feet upstream and will more easily facilitate the passage of native fish. The POU is located approximately 5.6 to 6.8 miles east and 18.9 to 20.6 miles south of Stanley and is being modified to reduce irrigation impacts on native fish populations.

For additional information concerning the property location, contact Southern Region office at (208) 736-3033. Protests may be submitted based on the criteria of Idaho Code Sec. 42-222. Any protest against the proposed change must be filed with the Department of Water Resources, Southern Region, 650 Addison Ave W Ste 500, Twin Falls ID 83301 together with a protest fee of \$25.00 for each application on or before September 22, 2014. The protestant must also send a copy of the protest to the applicant.

GARY SPACKMAN, Director

Published in Idaho Mountain Express on September 3rd & 10th, 2014 and Challis Messenger, Times News, Idaho Statesman, Post Register, Lewiston Tribune on September 4th & 11th, 2014

Maline, Denise

From: Maline, Denise
Sent: Thursday, August 28, 2014 10:26 AM
To: Times News
Subject: LEGAL NOTICE
Attachments: Times News Cover Letter.docx; Times News Ad.doc

Attached please find (1) legal notice being submitted for publication on September 4th & 11th, 2014. Please feel free to contact me if you have any questions, or if you are not able to run the ad on the dates requested.

Thank you in advance,

Denise Maline
Administrative Assistant
Idaho Dept of Water Resources, Southern Region
650 Addison Ave W, Ste 500
Twin Falls, ID 83301
(208) 736-3033
denise.maline@idwr.idaho.gov



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, Idaho 83301-5858

Phone: (208) 736-3033 • Fax: (208) 736-3037 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

August 28, 2014

LEGAL NOTICE DEPARTMENT

TIMES NEWS

PO BOX 548

TWIN FALLS, ID 83303-0548

RE: Transfer No. 79458

Water Right No(s): 43-2328, 43-2369, 43-2427, 43-2544, 43-4207, 43-4229

RE: Transfer No. 79491

Water Right No(s): 71-10882

RE: Application For Permit No.(s): 47-17628

Dear Legal Notice Department:

Please publish the enclosed legal notice on the dates indicated (once a week for two consecutive weekly issues). If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Please send the affidavit and bill to this office before September 22, 2014. Your cooperation is appreciated.

Sincerely,

Denise Maline
Administrative Assistant

Enclosure(s)

The following application(s) have been filed to appropriate the public waters of the State of Idaho:

47-17628

BANBURY HOT SPRINGS LLC

1158A BANBURY RD

BUHL, ID 83316

Point of Diversion L6(NENWSW) S33 T08S R14E TWIN FALLS County Source SPRING Tributary SNAKE RIVER

Use: HEATING 01/01 to 12/31 2 CFS

Total Diversion: 2 CFS

Date Filed: 7/24/2014

Place Of Use: HEATING

T08S R14E S33 L3(SWNW)

Application seeks to appropriate 2.0 cfs of water from a spring for heating use on property owned by Banbury Hot Springs LLC, located approximately 6.0 miles north and 3.3 miles west of the center of Buhl.

NOTICE OF PROPOSED CHANGE OF WATER RIGHT

TRANSFER NO. 79458

ROGER L CRANE and MARCIA L CRANE, 2046 E 600 S, DECLO, ID 83323; has filed Application No. 79458 for changes to the following water rights within CASSIA County(s): Right No(s). 43-2328, 43-2369, 43-2427, 43-2544, 43-4207, 43-4229. The purpose of the transfer is to change a portion of the above rights as follows: Transfer proposes to add an existing well and a new well to be drilled as authorized points of diversion to a group of groundwater rights that allow for the total diversion of 11.22 cfs for the irrigation of 698 acres on a farm located along the west side of Interstate 84 approximately 9.5 – 11.0 miles north of Malta. The new well to be drilled will be located approximately 10.5 miles north and 1 mile west of the City of Malta. The place of use will be adjusted to reflect the current location of irrigated acres on the farm.

NOTICE OF PROPOSED CHANGE OF WATER RIGHT

TRANSFER NO. 79491

SALMON FALLS LAND & LIVESTOCK CO INC, MICHAEL J HENSLEE, V.P., 95-A BELL RAPIDS RD, HAGERMAN, ID 83332; has filed Application No. 79491 for changes to the following water rights within BLAINE, CUSTER County(s): Right No(s). 71-10882. The purpose of the transfer is to change a portion of the above rights as follows: Application proposes to change a point of diversion (POD) for the stockwater and irrigation portions of water right 71-10882 (Pole Creek, 22.0 cfs), and change the place of use (POU) for the irrigation portion. The current POD is located approximately 8.6 miles east and 21.2 miles south of the intersection of state highways 21 and 75 in Stanley. The proposed POD is located approximately 800 feet upstream and will more easily facilitate the passage of native fish. The POU is located approximately 5.6 to 6.8 miles east and 18.9 to 20.6 miles south of Stanley and is being modified to reduce irrigation impacts on native fish populations.

Permits will be subject to all prior water rights. For additional information concerning the property location, contact Southern Region office at (208) 736-3033; or for a full description of the rights &/or proposed transfer, please visit our website at www.idwr.idaho.gov and search under New Water Right Applications. Protests may be submitted based on the criteria of Sec 42-222 and 42-203A, Idaho Code. Any protest against the approval of this application(s) must be filed with the Director, Dept. of Water Resources, Southern Region, 650 Addison Ave W, Ste 500, Twin Falls, ID 83301 together with a protest fee of \$25.00 for each application on or before September 22, 2014. The protestant must also send a copy of the protest to the applicant.

GARY SPACKMAN, Director

Published on September 4th & 11th, 2014

Maline, Denise

From: Maline, Denise
Sent: Thursday, August 28, 2014 10:29 AM
To: Idaho Statesman
Subject: LEGAL NOTICE
Attachments: Idaho Statesman Cover Letter.docx; 79491 Ad.doc

Attached please find (1) legal notice being submitted for publication on September 4th & 11th, 2014. Please feel free to contact me if you have any questions, or if you are not able to run the ad on the dates requested.

Thank you in advance,

Denise Maline
Administrative Assistant
Idaho Dept of Water Resources, Southern Region
650 Addison Ave W, Ste 500
Twin Falls, ID 83301
(208) 736-3033
denise.maline@idwr.idaho.gov



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, Idaho 83301-5858

Phone: (208) 736-3033 • Fax: (208) 736-3037 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

August 28, 2014

LEGAL NOTICE DEPARTMENT
IDAHO STATESMAN
PO BOX 40
BOISE, ID 83707

RE: Transfer No. 79491
Water Right No(s): 71-10882

Dear Legal Notice Department:

Please publish the enclosed legal notice on the dates indicated (once a week for two consecutive weekly issues). If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Please send the affidavit and bill to this office before September 22, 2014. Your cooperation is appreciated.

Sincerely,

Denise Maline
Administrative Assistant

Enclosure(s)

**NOTICE OF PROPOSED CHANGE OF WATER RIGHT
TRANSFER NO. 79491**

SALMON FALLS LAND & LIVESTOCK CO INC, MICHAEL J HENSLEE, V.P., 95-A BELL RAPIDS RD, HAGERMAN, ID 83332; has filed Application No. 79491 for changes to the following water rights within BLAINE, CUSTER County(s): Right No(s). 71-10882; to see a full description of these rights and the proposed transfer, please visit our website at www.idwr.idaho.gov and search under New Water Right Applications. The purpose of the transfer is to change a portion of the above rights as follows: Application proposes to change a point of diversion (POD) for the stockwater and irrigation portions of water right 71-10882 (Pole Creek, 22.0 cfs), and change the place of use (POU) for the irrigation portion. The current POD is located approximately 8.6 miles east and 21.2 miles south of the intersection of state highways 21 and 75 in Stanley. The proposed POD is located approximately 800 feet upstream and will more easily facilitate the passage of native fish. The POU is located approximately 5.6 to 6.8 miles east and 18.9 to 20.6 miles south of Stanley and is being modified to reduce irrigation impacts on native fish populations.

For additional information concerning the property location, contact Southern Region office at (208) 736-3033. Protests may be submitted based on the criteria of Idaho Code Sec. 42-222. Any protest against the proposed change must be filed with the Department of Water Resources, Southern Region, 650 Addison Ave W Ste 500, Twin Falls ID 83301 together with a protest fee of \$25.00 for each application on or before September 22, 2014. The protestant must also send a copy of the protest to the applicant.

GARY SPACKMAN, Director

Published in Idaho Mountain Express on September 3rd & 10th, 2014 and Challis Messenger, Times News, Idaho Statesman, Post Register, Lewiston Tribune on September 4th & 11th, 2014

Maline, Denise

From: Maline, Denise
Sent: Thursday, August 28, 2014 10:32 AM
To: Post Register
Subject: LEGAL NOTICE
Attachments: Post Register Cover Letter.docx; 79491 Ad.doc

Attached please find (1) legal notice being submitted for publication on September 4th & 11th, 2014. Please feel free to contact me if you have any questions, or if you are not able to run the ad on the dates requested.

Thank you in advance,

Denise Maline
Administrative Assistant
Idaho Dept of Water Resources, Southern Region
650 Addison Ave W, Ste 500
Twin Falls, ID 83301
(208) 736-3033
denise.maline@idwr.idaho.gov



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, Idaho 83301-5858

Phone: (208) 736-3033 • Fax: (208) 736-3037 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

August 28, 2014

LEGAL NOTICE DEPARTMENT
POST REGISTER
PO BOX 1800
IDAHO FALLS, ID 83402

RE: Transfer No. 79491
Water Right No(s): 71-10882

Dear Legal Notice Department:

Please publish the enclosed legal notice on the dates indicated (once a week for two consecutive weekly issues). If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Please send the affidavit and bill to this office before September 22, 2014. Your cooperation is appreciated.

Sincerely,

Denise Maline
Administrative Assistant

Enclosure(s)

**NOTICE OF PROPOSED CHANGE OF WATER RIGHT
TRANSFER NO. 79491**

SALMON FALLS LAND & LIVESTOCK CO INC, MICHAEL J HENSLEE, V.P., 95-A BELL RAPIDS RD, HAGERMAN, ID 83332; has filed Application No. 79491 for changes to the following water rights within BLAINE, CUSTER County(s): Right No(s). 71-10882; to see a full description of these rights and the proposed transfer, please visit our website at www.idwr.idaho.gov and search under New Water Right Applications. The purpose of the transfer is to change a portion of the above rights as follows: Application proposes to change a point of diversion (POD) for the stockwater and irrigation portions of water right 71-10882 (Pole Creek, 22.0 cfs), and change the place of use (POU) for the irrigation portion. The current POD is located approximately 8.6 miles east and 21.2 miles south of the intersection of state highways 21 and 75 in Stanley. The proposed POD is located approximately 800 feet upstream and will more easily facilitate the passage of native fish. The POU is located approximately 5.6 to 6.8 miles east and 18.9 to 20.6 miles south of Stanley and is being modified to reduce irrigation impacts on native fish populations.

For additional information concerning the property location, contact Southern Region office at (208) 736-3033. Protests may be submitted based on the criteria of Idaho Code Sec. 42-222. Any protest against the proposed change must be filed with the Department of Water Resources, Southern Region, 650 Addison Ave W Ste 500, Twin Falls ID 83301 together with a protest fee of \$25.00 for each application on or before September 22, 2014. The protestant must also send a copy of the protest to the applicant.

GARY SPACKMAN, Director

Published in Idaho Mountain Express on September 3rd & 10th, 2014 and Challis Messenger, Times News, Idaho Statesman, Post Register, Lewiston Tribune on September 4th & 11th, 2014

Maline, Denise

From: Maline, Denise
Sent: Thursday, August 28, 2014 10:32 AM
To: Lewiston Tribune (legals@lmtribune.com)
Subject: LEGAL NOTICE
Attachments: Lewiston Tribune Cover Letter.docx; 79491 Ad.doc

Attached please find (1) legal notice being submitted for publication on September 4th & 11th, 2014. Please feel free to contact me if you have any questions, or if you are not able to run the ad on the dates requested.

Thank you in advance,

Denise Maline
Administrative Assistant
Idaho Dept of Water Resources, Southern Region
650 Addison Ave W, Ste 500
Twin Falls, ID 83301
(208) 736-3033
denise.maline@idwr.idaho.gov



State of Idaho

DEPARTMENT OF WATER RESOURCES

Southern Region • 650 Addison Ave W, Suite 500 • Twin Falls, Idaho 83301-5858

Phone: (208) 736-3033 • Fax: (208) 736-3037 • Website: www.idwr.idaho.gov

C.L. "BUTCH" OTTER
Governor

GARY SPACKMAN
Director

August 28, 2014

LEGAL NOTICE DEPARTMENT
LEWISTON TRIBUNE
505 C ST
PO BOX 957
LEWISTON, ID 83501

RE: Transfer No. 79491
Water Right No(s): 71-10882

Dear Legal Notice Department:

Please publish the enclosed legal notice on the dates indicated (once a week for two consecutive weekly issues). If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Please send the affidavit and bill to this office before September 22, 2014. Your cooperation is appreciated.

Sincerely,

Denise Maline
Administrative Assistant

Enclosure(s)

**NOTICE OF PROPOSED CHANGE OF WATER RIGHT
TRANSFER NO. 79491**

SALMON FALLS LAND & LIVESTOCK CO INC, MICHAEL J HENSLEE, V.P., 95-A BELL RAPIDS RD, HAGERMAN, ID 83332; has filed Application No. 79491 for changes to the following water rights within BLAINE, CUSTER County(s): Right No(s). 71-10882; to see a full description of these rights and the proposed transfer, please visit our website at www.idwr.idaho.gov and search under New Water Right Applications. The purpose of the transfer is to change a portion of the above rights as follows: Application proposes to change a point of diversion (POD) for the stockwater and irrigation portions of water right 71-10882 (Pole Creek, 22.0 cfs), and change the place of use (POU) for the irrigation portion. The current POD is located approximately 8.6 miles east and 21.2 miles south of the intersection of state highways 21 and 75 in Stanley. The proposed POD is located approximately 800 feet upstream and will more easily facilitate the passage of native fish. The POU is located approximately 5.6 to 6.8 miles east and 18.9 to 20.6 miles south of Stanley and is being modified to reduce irrigation impacts on native fish populations.

For additional information concerning the property location, contact Southern Region office at (208) 736-3033. Protests may be submitted based on the criteria of Idaho Code Sec. 42-222. Any protest against the proposed change must be filed with the Department of Water Resources, Southern Region, 650 Addison Ave W Ste 500, Twin Falls ID 83301 together with a protest fee of \$25.00 for each application on or before September 22, 2014. The protestant must also send a copy of the protest to the applicant.

GARY SPACKMAN, Director

Published in Idaho Mountain Express on September 3rd & 10th, 2014 and Challis Messenger, Times News, Idaho Statesman, Post Register, Lewiston Tribune on September 4th & 11th, 2014

Bitzenburg, James

From: Moulton, Mark -FS [mmoulton@fs.fed.us]
Sent: Tuesday, August 26, 2014 3:24 PM
To: Bitzenburg, James
Cc: Timm, Joby -FS; Mike Henslee; Case, Morgan; Karma Bragg
Subject: USFS lands at Pole Cr

Mr. Bitzenburg,

I understand your office desires a statement of intent from the US Forest Service regarding irrigation facilities and uses on National Forest System (NFS) lands, associated with adjacent private lands, near Pole Creek. As you may be aware, in order to minimize effects to fish protected under the Endangered Species Act and their designated critical habitat, the Salmon Falls Land and Livestock Co. has been collaborating with a number of interested State, Federal, and Tribal agencies on comprehensive changes to their irrigation facilities and operation on both NFS and private lands. The Sawtooth National Forest is a party in these collaborations and supports these efforts. The changes are intended to address the core limiting stream and riparian habitat conditions within the Pole Creek drainage, building substantially on the earlier efforts. Since some of their facilities and uses occur on NFS lands, the Sawtooth National Forest received and accepted an *application for special use permit* for these lands in 2013 from the Salmon Falls Land and Livestock Co. We have since analyzed the possible effects associated with these uses and have prepared a draft decision that intends to issue the permit. That is, though the decision is not yet final, it is our stated intention to authorize these private irrigation facilities on NFS lands. By extension then, we are also supportive of the revised and new water rights you are considering related to these progressive changes. The Proposed Action contained within our environmental assessment (EA) provides a comprehensive description of the facilities, uses, and the affected NFS lands. The EA and draft decision can be found on the [Sawtooth National Forest project planning website](#).

But also please note that an objection to our draft decision has been received, and, per our planning regulations, we are currently seeking resolution with the objector while also reviewing our analysis relative to the objection. Regardless of the outcome, this step of our planning process will conclude in by late September. Should we finalize and proceed with the decision at that time, the permit would be prepared and issued.

Please contact myself or Area Ranger Joby Timm if you have further questions. - Mark

Mark Moulton
Project Leader
Sawtooth National Recreation Area
5 North Fork Canyon Road
Ketchum, ID 83340
e-mail mmoulton@fs.fed.us
ph. 208.727.5000

This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

MEMORANDUM

Date: August 13, 2014
To: Transfer 79491, Salmon Falls Land and Livestock Co., Inc File
From: Jim Bitzenburg
Re: Evaluation of Sufficiency of Information Submitted

Application proposes to change a point of diversion (POD) for the stockwater and irrigation portions of water right 71-10882 (Pole Creek, 22.0 cfs), and change the place of use (POU) for the irrigation portion. The current POD is located approximately 8.6 miles east and 21.2 miles south of the intersection of state highways 21 and 75 in Stanley. The proposed POD is located approximately 800 feet upstream and will more easily facilitate the passage of native fish. The POU is located approximately 5.6 to 6.8 miles east and 18.9 to 20.6 miles south of Stanley and is being modified to reduce irrigation impacts on native fish populations.

- **Authority to File:**
The Department's database indicates that water right 71-10882 is owned by the applicant, Salmon Falls Land and Livestock Co., Inc. Application was signed by the vice-president of the corporation, Michael Henslee.
- **Water Right Validity:**
Right 71-10882 was partially decreed in the SRBA in March of 1999. Based on aerial photography, it appears that forfeiture is not an issue.
- **Injury to Other Water Rights:**
None anticipated or foreseen.
- **Enlargement of Use:**
None anticipated.
- **Local Public Interest:**
No issues anticipated.
- **Beneficial Use/Conservation of Water Resources:**
Proposed use is recognized as a beneficial use of water.
- **Effect on the Economy of the Local Area:**
None Anticipated
- **Effect of the Agricultural Base of the Area:**
None Anticipated

Review of the application finds there is no clear inconsistency with criteria set forth in Section 42-222 Idaho Code preventing processing of this application.

JUN 26 2014

DEPT. OF WATER RESOURCES
SOUTHERN REGION

Draft Decision Notice Draft & Finding of No Significant Impact

Pole Creek Diversion Authorization

**USDA Forest Service
Sawtooth National Recreation Area - Sawtooth National Forest
Blaine & Custer Counties, Idaho
T 7 N, R 14 E, Sections 14, 15, 23, 24, 25, B.M**

Prepared for review during the 36 CFR 218 Objection Period

Decision and Rationale

Background

An application for a special use permit (SUP) for the occupancy and use of National Forest System (NFS) lands was received by the Sawtooth National Forest. The applicant requested reauthorization of an existing permit for operation and maintenance of a water diversion structure and associated ditches on NFS lands in the Pole Creek drainage. Current operation of this diversion diminishes the quantity and quality of available stream habitats within Pole Creek, and the condition of the diversion structure itself has deteriorated and is in need of repair or replacement. In order to minimize effects to water dependent resources, the Salmon Falls Land and Livestock Co. is collaborating with a number of interested State, Federal, and Tribal agencies on comprehensive changes to facilities and their operation on both NFS and private lands. The Sawtooth National Forest is a party in these collaborations and supports these efforts.

Historically, water withdrawal from multiple diversions from Pole Creek resulted in lengthy segments of stream that were completely dry during the irrigation season. At their initiative, and with the support of the Forest Service, the Salmon Falls Land and Livestock Co. consolidated these diversions to a single point in 1982 and converted to a modern and efficient irrigation system that required diversion of less than half as much water. As a result, Pole Creek has since sustained some flow throughout its lower reaches in all but the most severe drought seasons. Nevertheless, these minimal summer flows have generally been insufficient in quantity or quality for resident and anadromous salmonids. Since these initial changes in 1982, Chinook salmon, steelhead, and bull trout have been listed as threatened under the Endangered Species Act. Pole Creek was likely historically important for these three species and has been designated as "critical habitat" for all three. The requirement to seek reauthorization of the existing facilities on NFS land provided the opportunity to explore the means to operate the diversion in a way that meets the habitat needs of these imperiled fishes.

The resulting collaborations among the land owners; Forest Service; and several other State, Federal, and Tribal partners extended these efforts and identified the comprehensive list of

known limiting habitat conditions, as well as the objectives necessary to address them. Concepts for the physical and/or operational changes necessary to achieve these objectives, on both public and private lands, were then explored, including the means to increase summer stream flows. Planning and design for these concepts has been ongoing. The changes are intended to address the limiting stream and riparian habitat conditions within the Pole Creek drainage, building substantially on the earlier efforts.

The potential effects of the operation and maintenance of those irrigation facilities and uses that would be authorized to remain on NFS lands were specifically considered within the *Pole Creek Diversions Authorization* Environmental Assessment (EA). The analysis considered the effects of the individual elements that would occur on NFS lands, as well as in combination with the connected irrigation related objectives and changes that would occur on private lands. The cumulative effects of these changes to the irrigation systems were then also considered with those of the similar recent and anticipated changes within the area – many of which have been conceived within the same collaborations. The analysis also considered a number of other possible alternatives to that which was proposed.

Decision

Based on the analysis within the *Pole Creek Diversions Authorization* Environmental Assessment, it is my decision to implement Alternative 2, the proposed action. Alternative 2 will authorize the use of NFS land for operation and maintenance of water facilities, and contribute towards attainment of Forest Plan goals and objectives for streams, fish, and riparian areas. As such, it will be consistent with the Forest Plan Management Prescription Category 3.2, as well as with the goals and objectives, including the Aquatics Conservation Strategy and the Watershed Aquatics Restoration Strategy priority emphasis. It will also be consistent with the affirmative obligations of federal agencies to promote the recovery of species listed for protection under the Endangered Species Act (ESA). Under the proposed action, a water diversion structure and ditch from Pole Creek on NFS lands (NW¼, Sec 25, T7N, R14E, B.M.) will be authorized, as will related facilities and uses occurring elsewhere on NFS lands. A detailed description of the proposed action is provided in Chapter 2 of the EA.

Other Alternatives Considered

The EA analyzed in detail Alternative 1 (No Action) where irrigation facilities and uses on the NFS lands would not be authorized, and the existing facilities removed. A comparison of these alternatives can be found in Chapter 2 of the EA. Seven other alternatives were considered but dismissed from detailed analysis, having been found not to meet Purpose & Need; or redundant with elements of the proposed action; or beyond the authorities of the National Forest. These alternatives and their rationale for dismissal can also be found in Chapter 2 of the EA.

Rationale for the Decision

In making my decision, I relied upon an interdisciplinary team to analyze the Proposed Action and alternatives as documented in the EA. My decision is based on a review of the project record in its entirety, which includes a thorough analysis of relevant scientific information, and our past experience with similar objectives. Careful examination of applicable laws, regulations, policy, and the Sawtooth Forest Plan have all informed my decision. I have also considered the comments submitted regarding the proposal. Selection of Alternative 2 is based on

responsiveness to the issues and the Purpose and Need. I believe Alternative 2 meets the purpose and need for action, is responsive to the key issues, and facilitates a responsible expenditure of public funds.

1. The Decision addresses the Purpose and Need for Action.

The purpose of the proposed Pole Creek Diversion Authorization is to authorize occupancy and use of private facilities on NFS lands associated with an irrigation system originating from Pole Creek in a manner that complies with law, regulation, and Forest Plan direction. My decision will provide continued access to this important public resource while adequately protecting water dependent resources. My decision to implement the Proposed Action provides the key element upon which the connected objectives on private land can proceed with assurance. Together the Proposed Action on NFS lands, the connected irrigation actions on private lands, and the similar actions occurring on both, will fundamentally address the key limiting stream and streamside conditions within the Pole Creek drainage, building substantially on the earlier efforts. As such, these efforts would address both general and specific goals and objectives outlined in the Sawtooth National Forest Land and Resource Management Plan, as amended (Forest Plan, 2012), and help move the Management Area toward the desired conditions described within the Plan.

While my decision directly pertains only to those private irrigation facilities and uses that will be authorized to occur on NFS lands, its influence will extend many miles upstream and downstream from the authorized diversion (POD). My decision will fundamentally facilitate a restored hydrologic cycle within Pole Creek, with near natural peak and base flows. Most notably, during the late summer irrigation period, the current situation will be reversed from ~75% of flows being removed from Pole Creek, to ~75% remaining within. These considerable flows will extend down the length of Pole Creek (~4.5 miles) through the private lands, and add substantially to another 8 miles of the headwater of the Salmon River, building on the many previous investments and efforts towards the same objectives. These flows, when combined with the other ongoing or anticipated objectives on both public and private lands within Pole Creek, will also provide access to an additional ~7 miles of critical habitat upstream of the POD.

These combined actions will address the core limiting factors within Pole Creek of: connectivity, as influenced by physical and flow impediments; habitat quality, as reflected in riparian and stream bank conditions, and; fish spawning and incubation security. While some improvement would have been possible without approval of the Proposed Action elements (assuming the parties would have remained willing), our analysis made clear that the core dysfunctional conditions within Pole Creek would likely have persisted or become worse if irrigation related uses and infrastructure were simply excluded from NFS lands and moved and compressed onto the private lands.

With the Decision, some temporary and localized effects to habitats are likely to occur as associated with the construction of new POD and removal of the former POD on NFS lands. However, the proven practices prescribed with the action are expected to keep any temporary effects within acceptable levels and promote quick recovery.

The needs of imperiled native salmonids protected under ESA framed the initial dialogues and the eventual comprehensive objectives. To realize the streamflow goals and benefits, the conceived and intended strategy will rely on water gained by a conversion from hydropower to commercial power, and with the integration of some new groundwater into the system when natural streamflows within Pole Creek are insufficient to supply both irrigation demands and instream objectives. The changes require new infrastructure, as do all the related objectives, such as replacing barrier culverts and constructing riparian fences. Most are also integrated with the whole, such that they must be implemented in concurrent fashion. In total, the anticipated changes are expensive.

Yet agencies, Tribes, and conservation organizations find value and incentive to see actions implemented that promote the recovery of ESA protected fish. Many of these groups had already been engaged in projects previously at Pole Creek, and quickly expressed interest in these deliberations. These groups each operate within their own organizational cultures, policies, priorities, and funding streams. With the strategy defined that would comprehensively address the limiting factors for a key headwater drainage, each evaluated the various elements against their group's priorities, authorities, and expertise. If the principles of any particular group identified an "opportunity" consistent with their own goals, they typically stepped forward to carry an objective forward. Currently all the core elements of the comprehensive strategy have partners assigned with funding secured or anticipated for implementation. I believe this collective participation towards a comprehensive solution is key to such outcomes, and will remain so in the foreseeable future. For our part we have facilitated the partnerships, conducted this core analysis, and pursued our own independent elements of the strategy (i.e. replacing barrier culverts on NFS lands and revising road and trail systems).

Nevertheless, comments received from one conservation organization questioned the cost associated with implementation of the comprehensive strategy. Their comments suggested in essence that it may be more cost effective to buy the ranch, and discontinue irrigation, than to implement the comprehensive strategy. While this potential option, and the associated values, was considered by some organizations that make such acquisitions, none stepped forward to pursue such negotiations, including the organization providing the comment. Most believe the costs associated with a potential acquisition would be much higher.

Instead, I have decided to authorize private irrigation facilities and uses on NFS lands for a private landowner who has offered to construct and operate the facilities in such a way that all water dependent resources on National Forest will be protected. To do so, the land owner is working with a number of willing partners who are assisting to build the system that will make these substantial benefits possible. Our analysis has strengthened my expectation and confidence in these outcomes. Failure to act would neglect the stewardship responsibilities and objectives prescribed within the Forest Plan, and maintain the chronic effects recognized in the purpose and need for the action. The Proposed Action, with the connected and similar objectives, will substantially contribute to previous restorative actions within the headwaters of the Salmon River, and fundamentally advance the core emphasis of the Forest Plan within the management area.

2. Decision is Responsive to Key Issues

Through review of the feedback received regarding the proposal, key issues considered central to the analysis were identified. Below is a summary of the issues followed by a brief explanation of how I've used this information in my decision-making.

Issue 1: Fish, Water, and Aquatic Habitat

Operational flow objectives, as described in the Decision, for Pole Creek could affect aquatic habitat and fish, including the quantity and quality of downstream habitats, and the accessibility of upstream habitats.

For Chinook salmon, suitable habitat within 8 miles of the Salmon River will be further improved over existing conditions. The potential for occupancy and use by Pole Creek by native salmonids will be fundamentally improved. All of lower Pole Creek (4.5 miles) will also be made available and suitable for use by all native fish species and life stages, including by spawning adult salmon. Roughly 7 miles of designated critical habitat within upper Pole Creek will also be made accessible for use.

Water temperature in lower Pole Creek will be substantially improved from the existing marginal condition. With typically 3 times the flow passing the POD as currently occurring during the heat of summer, water temperatures will be expected to approximate natural conditions.

Issue 2: Scenery Resources

The Decision includes authorizing pressurized overhead pivot irrigation systems to cross and incorporate small areas of isolated NFS lands located within the private lands. These systems may affect the assigned Visual Quality Objectives (VQO) classification for the area. Overhead pivots can be very visible from Scenic Byway State Highway 75, depending upon their configuration.

This project, while a special use application, is focused on improvement of core limiting factors within Pole Creek including habitat connectivity; habitat quality, and; fish spawning and incubation security. The benefits of this project, no matter how important cannot substantially impair the scenery resources. We cannot trade off one key value of the Sawtooth NRA in order to improve another. Both values must be maintained. As stated in Public Law 92-400, we are required to administer the Recreation Area in such a manner as to best provide:

“...the conservation and development of scenic, natural, historic, pastoral, wildlife, and other values, contributing to and available for public recreation and enjoyment, including the preservation of sites associated with and typifying the economic and social history of the American West...”.

With this project, the scenery qualities are maintained. Mitigation has been incorporated into the Decision specifically to protect the scenic qualities. The Forest Plan direction for scenery resources would continue to be met under either the No Action or the Proposed Action.

3. Decision is Superior to No Action

The premise of the No Action Alternative was straight forward – facilities and uses on National NFS lands associated with the irrigation system would no longer be authorized and removed. While NFS lands would have been free of the use, the actual outcome of this action was equally apparent – the relocation and compression of all irrigation facilities and uses onto the adjacent private lands. Therefore our analysis of the No Action Alternative also required the use of informed assumptions to frame the likely connected actions that could occur on private lands. Two core assumptions were considered: that the full existing water rights would continue to be utilized and maintained, and; that approximately 1,000 acres would continue to be irrigated.

The potential temporary effects associated with the anticipated relocation of the irrigation facilities would have been expected to be roughly similar in scope and duration to those anticipated with the Proposed Action. Beneficial outcomes associated with the similar actions of the partners (e.g. culvert replacement) may still have also resulted, assuming the parties remained willing. However, it was the stark contrast in the potential chronic effects associated with the ongoing use and operation of the irrigation facilities under the No Action Alternative that made my decision clear.

Our analysis demonstrated that the core dysfunctional conditions within Pole Creek would likely have persisted or become even worse if irrigation related uses and infrastructure were simply excluded from NFS lands and moved and compressed onto the private lands. Connectivity to upstream habitats would have remained compromised annually during much of irrigation season. Similarly, segments downstream of the diversion(s), with substantially reduced flows, would not have provided suitable spawning or rearing habitat for salmonids in terms of both water quality and quantity. Instream and streamside habitat conditions would also have generally declined as a result of the anticipated flow regimes. The continued passage of pivot towers through Pole Creek would also have chronically damaged habitats and compromised fish spawning and incubation security.

Our analysis estimated that under the No Action Alternative, less than 18 cfs would have passed the POD during roughly 75% of all irrigation days, and that dry channel conditions would have occurred during 18% of all irrigation days. For Chinook salmon, suitable habitat within 8 miles of the Salmon River would have been diminished from existing conditions; 4.5 miles of lower Pole Creek would remain unsuitable and unavailable, and; 7 miles of upper Pole Creek would remain inaccessible. As such, the No Action would not have contributed towards attainment of Forest Plan goals, objectives, or desired conditions, and would have failed to promote the recovery of species protected under the Endangered Species Act.

Public Involvement

The proposed action has been continually listed in the quarterly Sawtooth National Forest Schedule of Proposed Actions (SOPA) since April, 2013. The SOPA provides the public a list of proposals that are undergoing environmental analysis. The SOPA is posted on the world wide web (<http://www.fs.fed.us/sopa/forest-level.php?110414>).

In March, 2013, information letters were mailed to individuals, organizations, agencies, and area landowners and permittees, describing the action under consideration, and requesting comments. Feedback from staff and the public (13 individuals or organizations) was received and is included in the project record. Specific dialogs with groups or individuals occurred through the summer of 2013 as opportunities occurred. The feedback received from all these efforts was reviewed and considered by the interdisciplinary team and the deciding officer. As a result, the proposed action was further refined and clarified, alternatives to the proposed action were considered, and issues for the analysis were identified.

The feedback we received to this initial concept helped us further refine and clarify the Proposed Action, develop key Issues, and also identified several alternatives to the proposed action. In August, 2013, the *Pole Creek Special Use Permit Review Environmental Assessment* (Review EA) was made available to the public for a 30-day comment period. The Review EA was an abbreviated version of this full EA, containing Chapters 1 and 2. The purpose of the Review EA was to provide a detailed description of the Proposed Action, alternatives to the proposed action, and identified issues for analysis to the public for the 30-day opportunity to comment. However, no additional comments were received during this comment period.

Finding of No Significant Impact (FONSI)

I have reviewed the environmental effects described in the EA and evaluated whether the Decision constitutes a significant effect on the quality of the human environment or whether the environmental impacts will be significant based on their context and intensity as defined by the National Environmental Policy Act (NEPA), using the criteria in the implementing regulations (40 CFR 1508.27).

I have determined that the implementation of the Decision will not result in any anticipated effects that exceed the level at which a significant effect on the human, biological, or physical environment, in terms of context or intensity, will occur. The effects are not highly uncertain and do not involve unique and unknown risks. The action will not, in relation with other actions, cause cumulatively significant impacts. This determination is based on the environmental assessment process completed for this project and was made considering the following factors:

Context

The setting of this project is in the Pole Creek area with implications for only that immediate area. Project implementation will affect the immediate area surrounding the permitted point of diversion on Pole Creek over a one-to-two year period. The public utilizing these areas will be affected temporarily during the brief periods of project construction. The short-or-long-term effects from this project are restricted to a local area and have no widespread importance.

Intensity

Intensity is a measure of the severity, extent, or quantity of effects, and is based on information from the effects analysis of this EA and the references in the project record. The effects of this project have been appropriately and thoroughly considered with an analysis that is responsive to concerns and issues raised by the public. The agency has taken a hard look at the environmental effects using relevant scientific information and knowledge of site-specific conditions gained from field visits. My finding of no significant impact is based on the context of the project and intensity of effects using the ten factors identified in 40 CFR 1508.27(b).

1. Beneficial and Adverse Impacts

The EA demonstrates the beneficial effects of the project have not overshadowed our hard look for potential significant adverse effects. Although there are short-term negative impacts from the implementation of the project, they do not cross the threshold for significance. For example, additional sediment would be expected with the reconstruction of the POD and installation of electrical and water utilities. The substantial separation and gentle topography associated with these disturbances and the design and prescribed practices intended will minimize these effects and risks, and promptly revegetate disturbed areas. Local monitoring of similar treatments has shown that vegetated resiliency typically returns within 3 to 5 years.

The intensity of effects taken in the context of the project will not have a significant impact on the quality of the human environment. I have considered the mitigation measures as part of this finding and they are found in Chapter Two – Proposed Action description as well as in Chapter 3 – Effects analysis.

2. Public Health and Safety

This action will not significantly affect public health and safety. The project activities will comply with all state and federal regulations protecting public health and safety.

3. Unique Characteristics of the Area

My decision will not create significant effects on unique characteristics of the Sawtooth National Recreation Area such as historic or cultural resources, parklands, prime farmlands, wetlands, floodplains, wild and scenic rivers, wilderness areas or ecologically critical areas. No loss of significant scientific, cultural, or historical resources is foreseen.

The action is not located within the Sawtooth Wilderness nor within Roadless Areas, thus there are no effect to those areas. The eligibility of the Salmon River for consideration as a Wild & Scenic River will also not be impacted. A single segment is defined within the Forest Plan from Headwaters to Sawtooth Forest boundary. The outstanding remarkable values to be protected include: scenic, recreation, geologic, hydrologic, fish, and heritage. These values will be fully protected with the action. Direct effects to area wetlands and floodplains from implementation of the Decision were also determined to be limited in both extent and duration.

4. Controversy

All comments were considered in refinement of the project, and are documented in the project record. The comments and environmental analysis did not identify any substantiated scientific controversy over the effects as described.

5. Uncertainty

The action described in my decision will not involve effects that are highly uncertain or involve unique or unknown risks (40 CFR 1580.27). Pertinent scientific literature has been reviewed and incorporated into the analysis process. The technical analyses conducted for the determination of impacts to the resources are supportable with use of accepted techniques, reliable data and professional judgment. Issues of public concern and possible environmental effects of the selected alternative have been adequately addressed in the analysis of this decision. Therefore, I conclude that there are no highly uncertain, unique or unknown risks.

6. Precedent

I find the implementation of the selected alternative does not establish a precedent for future actions with significant effects. These actions do not represent a decision in principle about a future consideration. Any future proposals to the designated routes on the Sawtooth Forest will be evaluated through the National Environmental Policy Act process, consistent with current laws and regulations.

7. Cumulative Impacts

The Decision was evaluated in the context of other past, present, and reasonably foreseeable actions. When considering other activities within the area affected, the cumulative effects of implementing the selected alternative are anticipated to be minor. This action does not result in cumulatively significant effects.

8. Properties On or Eligible for the National Register of Historic Places

A review of the project area was conducted by the Forest Archeologist and he concluded the Decision will have no adverse effect on districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic places.

9. Endangered or Threatened Species or Their Critical Habitat

The Endangered Species Act requires that federal activities not jeopardize the continued existence of any species federally listed or proposed as threatened or endangered, or result in adverse modification to such species' designated critical habitat. The potential effects of the Decision on species currently protected under ESA, or their designated critical habitat, have been considered separately within biological assessments within the project record. The analyses concluded the action will have *no effect* on ESA listed plant species: Ute ladies'-tresses orchid, whitebark pine, Canada lynx, wolverine, or yellow-billed cuckoo. The action will also have *no effect* to Snake River sockeye salmon, but *may affect, but is not likely to adversely affect*, their designated critical habitat. The action *may affect, and is likely to adversely affect* Snake River Chinook salmon, steelhead, and Columbia River bull trout individuals, and their designated critical habitat.

These *may affect* conclusions are primarily associated with temporary risks (short-term) to individuals and impacts to habitat associated with the relocation of the POD facilities, as well as ongoing influences from water withdrawal. Overall the analysis concludes that the federal action, with the connected and similar actions, would address nearly all the principle limiting factors for

fish within Pole Creek. Based on this analysis, formal consultation with NOAA Fisheries and the USFWS was conducted for the action.

10. Legal Requirements for Environmental Protection

The action will not violate Federal, or applicable State and local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the EA. The action is consistent with the Sawtooth National Forest Land and Resource Management Plan.

Findings Required by Other Laws and Regulations

2012 amended Sawtooth National Forest Land Management Plan

This decision is consistent with the 2012 amended Sawtooth National Forest Land Management Plan. The project was designed in conformance with the plan, and to implement plan objectives.

Public Law 92-400

The Sawtooth NRA is directed by law to consider the impacts of agency actions on several key values that were intrinsic to the creation of the Recreation Area. Guidelines for evaluating impacts to each key area are contained in the Forest Plan, Appendix I. I agree with the resource specialist recommendations prepared for the project on substantial impairment. I find that the Decision will not substantially impair key Sawtooth NRA values, and is in compliance with Public Law 92-400.

Special Use Permit Terms and Conditions (36 CFR 251.56)

Regulations require that each special use authorization contain such terms and conditions as the authorized officer deems necessary to minimize damage to the environment and otherwise protect the public interest. My decision specifically intends to substantially reduce damage to the environment and protect public resources. The decision is consistent with 36 CFR 251.56.

Travel Management 36 CFR, Chapter 212 (2005)

Changes to the Motor Vehicle Use Map (MVUM) must consider general and specific criteria, and include an appropriate amount of public involvement. There are no travel management changes to the MVUM as a result of this project. Thus this decision is consistent with 36 CFR 212.

Migratory Bird Treaty Act (Executive Order 13186)

This Order requires federal agencies to avoid or minimize adverse impacts on migratory bird resources, and ensure that environmental analyses of federal actions required by the National Environmental Policy Act evaluate the effects of actions and agency plans on migratory birds. The project impacts were evaluated in a 2014 wildlife report included in the Project Record. The Decision was found to be in compliance with direction to protect migratory birds.

Clean Water Act

The purpose of this act is to restore and maintain the integrity of waters. The Forest Service complies with this Act through the use of Best Management Practices. This decision incorporates Best Management Practices to ensure protection of soil and water resources as derived from the

National Best Management Practices Technical Guide. Other permits (such as Section 404) may be required for some project objectives and would be obtained prior to their implementation.

Wetlands Executive Order 11990

This order requires the Forest Service to take action to minimize destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. In compliance with this order, Forest Service direction requires that an analysis be completed to determine whether adverse impacts would result. Based on the analysis contained within the project record, implementing the Decision complies with EO 11990 by maintaining and restoring wetland conditions.

Floodplains Executive Order 11998

This order requires the Forest Service to provide leadership and to take action to (1) minimize adverse impacts associated with occupancy and modification of floodplains and reduce risks of flood loss, (2) minimize impacts of floods on human safety, health, and welfare, and (3) restore and preserve the natural and beneficial values served by floodplains. The Decision complies with EO 11998 by maintaining and improving floodplain integrity.

Environmental Justice

The selected alternative will not disproportionately impact any minority or low income population in the immediate area or surrounding counties, nor will implementation negatively impact Americans with disabilities. These effects are expected to be similar for all human populations regardless of nationality, gender, race, or income level. None of the alternatives entails any known inequitable distribution of social or environmental consequences to a particular group or segment of society.

Implementation Date

Per §218.12 the responsible official may not sign a DN subject until the reviewing officer has responded in writing to all pending objections. Once the DN has been signed, it may be implemented immediately. Implementation would begin no earlier than August 2014.

Contact

For additional information concerning this Decision, contact myself, or Mark Moulton, project leader, Sawtooth National Recreation Area, 5 North Fork Canyon Road, Ketchum, Idaho 83340 or by phone at (208) 727-5000.

Monte L. Williams
Acting Sawtooth Forest Supervisor

Date

RECEIVED

JUN 26 2014

DEPT. OF WATER RESOURCES
SOUTHERN REGION



United States
Department of
Agriculture

Forest
Service

June 2014



Environmental Assessment

Pole Creek Diversion Authorization

Prepared for review during the 36 CFR 218 Objection Period

**Sawtooth National Recreation Area
Sawtooth National Forest
Blaine and Custer Counties, Idaho**

T 7 N, R 14 E, Sections 14, 15, 23, 24, 25, B.M.

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Abbreviations and Acronyms

ESA	Endangered Species Act
IDFG	Idaho Department of Fish & Game
NEPA	National Environmental Policy Act
NFS	National Forest System
NFSR	National Forest System Road
NRA	National Recreation Area
MIS	Management Indicator Species
MPC	Management Prescription Category
PL	Public Law
POD	Point of Diversion
RCA	Riparian Conservation Area
ROS	Recreation Opportunity Spectrum
SOPA	Schedule of Proposed Actions
SUP	Special Use Permit
TEPC	Threatened, Endangered, Protected and Candidate (species)
TES	Threatened, Endangered, and Sensitive (species)

CHAPTER 1 – INTRODUCTION

The Sawtooth National Forest proposes to issue special use permits authorizing: operation and maintenance of an existing irrigation diversion on National Forest System (NFS) lands; operation and maintenance of associated ditches, pipes, and access routes, on NFS lands; continued irrigation of less than 75 acres of isolated NFS lands; maintenance and use of ranch roadways on NFS lands; and operation and maintenance of related utility lines on NFS lands. Operation and maintenance of the water diversion and associated utilities would include relocation of the point of diversion and access route slightly upstream to (NW¼, Sec 25, T7N, R14E, B.M.); reconstruction of the fish bypass system, headgate, and flow measuring devices; and installation and maintenance of associated underground power and water supply pipelines within the isolated NFS parcels. The uses to be permitted occur in Sections 14, 15, 23, 24, and 25, T7N, R14E, B.M.) and are associated existing privately held water rights originating from Pole Creek.

Additional documentation, including initial assessments of project-area resources, may be found in the project file located at the Sawtooth National Recreation Area, Ketchum, Idaho.

Background

An application for a special use permit (SUP) for the occupancy and use of National Forest System (NFS) lands has been received by the Sawtooth National Forest. The applicant requests reauthorization of an existing permit for operation and maintenance of a water diversion structure and associated ditches on NFS lands in the Pole Creek drainage. Current operation of this diversion diminishes the quantity and quality of available stream habitats within Pole Creek, and the condition of the diversion structure itself, including the fish bypass system, has deteriorated and is in need of repair or replacement. In order to minimize effects on aquatic resources, the Salmon Falls Land and Livestock Co. is collaborating with a number of interested State, Federal, and Tribal governments on a comprehensive management plan that includes operational changes on both NFS and private lands. The Sawtooth National Forest is a party in these collaborations and supports these efforts.

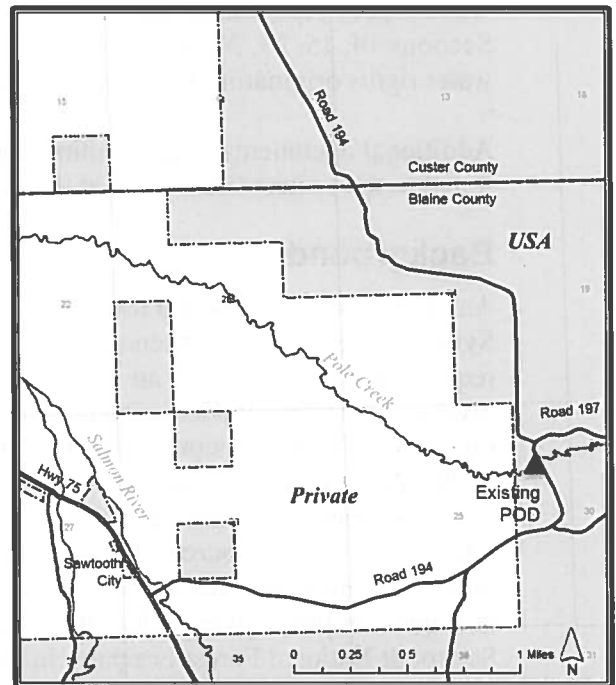
Historically, water withdrawal from multiple diversions from Pole Creek resulted in lengthy segments of stream that were completely dry during the irrigation season. At their initiative, and with the support of the Forest Service, the Salmon Falls Land and Livestock Co. consolidated these diversions to a single point in 1982 and converted to a modern and efficient irrigation system that required diversion of less than half as much water. As a result, Pole Creek has since sustained some flow throughout its lower reaches in all but the most severe drought seasons. Nevertheless, these minimal summer flows have generally been insufficient in quantity or quality (e.g. temperature) for resident and anadromous salmonids. Since these initial changes in 1982, Chinook salmon, steelhead, and bull trout have been listed as threatened under the Endangered Species Act. Pole Creek was likely historically important for these three species and has been designated as “critical habitat” for all three. The requirement to seek reauthorization of the existing facilities on NFS land provided the opportunity to explore the means to operate the diversion in a way that meets the habitat

needs of these imperiled fishes. The resulting collaborations among the land owners; Forest Service; and several other State, Federal, and Tribal partners identified the known limiting habitat conditions, as well as the objectives necessary to address them. Concepts for the physical and/or operational changes necessary to achieve these objectives, on both public and private lands, were then explored, including the means to increase summer stream flows. Planning and design for these concepts is now underway. The changes are intended to address the limiting stream and riparian habitat conditions within the Pole Creek drainage, building substantially on the earlier efforts. As such, the Sawtooth National Forest proposes to authorize those facilities and uses that would continue to reside on National Forest (Figures 1 and 2), as contained within the application received, and further described in the sections that follow.

Figure 1: Location Map



Figure 2: Project Vicinity Map



Purpose and Need for Action

The purpose of the proposed Pole Creek Diversion Authorization is to authorize occupancy and use of private facilities on National Forest System (NFS) lands associated with an irrigation system originating from Pole Creek in a manner that complies with law, regulation, and Forest Plan direction. These facilities are owned by the Salmon Falls Land and Livestock Co. and Mr. Rolf Engh. The former special use permit expired in 1996.

Among other applicable guidance (see Chapter 2, Table 1, below), the Forest Plan states: "Provide for continued use of existing special use authorizations as long as such uses are consistent with Sawtooth NRA values and in the public interest" (Objective #02169).

Further, we should, “cooperate with affected State, Tribal, and local governments, holders of water rights, and other interested parties. These flows should incorporate: (a) summer and winter base flows to maintain or restore habitat for resident and anadromous fish species and riparian vegetation, (b) a peak flow component to maintain fish habitat, channel capacity, and riparian vegetation, and (c) a gradual rising and falling hydrograph limb during spring runoff to protect bank stability, fish habitat, and trigger fish behavioral patterns, such as migration” (SWG06).

The Proposed Action and connected private actions are intended to fundamentally address the key limiting stream and streamside conditions within the Pole Creek drainage, building substantially on the earlier efforts. This would also address both general and specific goals and objectives outlined in the Sawtooth National Forest Land and Resource Management Plan, as amended (Forest Plan, 2012), and help move the Management Area toward the desired conditions described within the Plan.

Proposed Action

Under the proposed action, a water diversion structure and ditch from Pole Creek on National Forest (NW¼, Sec 25, T7N, R14E, B.M.) would be authorized, as would related facilities and uses occurring on NFS lands. A detailed description of the proposed action is provided in Chapter 2.

Decision Framework

We have prepared this document to describe the purpose and need for the action and to discuss and disclose the details of the proposed action. Given the purpose and need, the responsible official will review this assessment, and the project record, in order to make the following decisions:

- Whether the proposed activities would accomplish the Sawtooth National Forest Land and Resource Management Plan, as amended (USDA Forest Service 2012) objectives and meet the purpose and need for the project.
- Whether the proposed activities comply with Public Law 92-400.
- Whether or not to approve implementation of the proposed action, or an alternative to the proposed action.
- If implementation of an action is approved, what operating standards, design features, and monitoring activities should take place before, during, and after the activities occur.

The responsible official will also decide if further analysis in an Environmental Impact Statement will be required.

Management Framework

The Sawtooth National Recreation Area (Sawtooth NRA) was created in 1972 from National Forest System lands, and remains the largest NRA in the National Forest System. Enabling legislation (Public Law 92-400, 1972) states the special designation is given “*to assure the preservation and protection of the natural, scenic, historic, pastoral, and fish and wildlife*

values and to provide for the enhancement of the recreation values associated therewith.” These are key values to be considered for all Sawtooth NRA management activities.

The Sawtooth Forest Plan serves as the guiding direction for on-the-ground project planning and implementation. In addition to Forest-wide standards and guidelines, the Sawtooth Forest Plan also provides specific management direction within local management areas, as well as specific to the Sawtooth NRA which provides the land allocation and resource decisions for management directed by PL 92-400.

The proposed project falls within an area designated by the Sawtooth Forest Plan as *Management Area 2, Upper Salmon River Valley*. Within Management Area 2, the project falls under a specific management prescription (3.2) of: *Active Restoration and Maintenance of Aquatic, Terrestrial and Hydrologic Resources*. The objective of this prescription is to actively restore or maintain conditions for fish, wildlife, and botanical resources, through a combination of management activities and natural processes.

The applicant’s proposal (Proposed Action) has been designed, in part, to achieve the goals and objectives described in the Forest Plan.

Public Involvement

The proposed action has been continually listed in the quarterly Sawtooth National Forest Schedule of Proposed Actions (SOPA) since April, 2013. The SOPA provides the public a list of proposals that are undergoing environmental analysis. The SOPA is posted on the world wide web (<http://www.fs.fed.us/sopa/forest-level.php?110414>).

In March, 2013, information letters were mailed to individuals, organizations, agencies, and area landowners and permittees, describing the action under consideration, and requesting comments. Feedback from staff and the public (13 individuals or organizations) was received and is included in the project record. Specific dialogs with groups or individuals occurred through the summer of 2013 as opportunities occurred. The feedback received from all these efforts was reviewed and considered by the interdisciplinary team and the deciding officer. As a result, the proposed action was further refined and clarified, alternatives to the proposed action were considered, and issues for the analysis were identified.

The feedback we received to this initial concept helped us further refine and clarify the proposed action, develop key Issues, and also identified several alternatives to the proposed action. In August, 2013, the *Pole Creek Special Use Permit Review Environmental Assessment* (Review EA) was made available to the public for a 30-day comment period. The Review EA was an abbreviated version of this full EA, containing Chapters 1 and 2. The purpose of the Review EA was to provide a detailed description of the Proposed Action, alternatives to the proposed action, and identified issues for analysis to the public for the 30-day opportunity to comment. However, no additional comments were received during this period.

Issues

Through review of the internal and external feedback received regarding the proposal, key issues considered central to the analysis were identified.

Issue 1. Fish, Water, and Aquatic Habitat

Operational flow objectives, as described in the proposed action, for Pole Creek could affect aquatic habitat and fish, including the quantity and quality of downstream habitats, and the accessibility of upstream habitats.

Indicators:

- Estimates of available and accessible habitat
- Anticipated water temperature differences upstream of the diversion and at the mouth

Issue 2. Scenery Resources.

The proposed action includes authorizing pressurized overhead pivot irrigation systems to cross and incorporate small areas of isolated NFS lands located within the private lands. These systems may affect the assigned Visual Quality Objectives (VQO) classification for the area. Overhead pivots can be very visible from Scenic Byway State Highway 75, depending upon their configuration. The VQOs assigned to the Pole Creek Diversion Authorization project area are primarily Partial Retention. Per Forest Plan direction (SCST01), all projects on National Forest shall be designed to meet the adopted Visual Quality Objectives (VQOs) as displayed on the Forest VQO map. Development or uses on private lands should meet inventoried VQOs wherever feasible (Forest Plan - 02127, 02128). A Scenic Environment Technical Report has been prepared to evaluate the effect of the Proposed Action and Alternatives to the scenery resource.

Indicator: Changes to mapped VQO on Private Lands

Other Topics of Interest

Feedback to the initial proposal also identified other considerations that helped refine the action and frame the analysis, though not specifically *issues*. The following resource concerns are important and were considered when determining key issues. They were, however, determined to be requests for information or other process concerns, were already resolved through existing law, regulation, or policy, or are beyond the scope of this analysis. Some are already addressed through other processes such as the Forest Plan. In some cases, the concern was addressed through mitigation. As such, these concerns are beyond the scope of this project and will not be carried forward as a Key Issue in this analysis.

Private Lands: Access and Conservation Easements

Concurrent with the actions on the National Forest, changes are also anticipated on the related private lands. These lands are encumbered by conservation easements. A review has shown that the possible actions on private lands would be in compliance with their respective conservation easements (Project Record - Browder, 2013).

The Proposed Action would also authorize access between NFS lands and the adjacent private land near the POD specifically for the operation and maintenance of the irrigation facilities. No authorized access would exist in this location under the No Action Alternative. Nevertheless, the general access to the private properties that currently exists elsewhere would remain unchanged with either alternative, as would public access on NFS lands.

Terms for use of the short segment to be authorized under the Proposed Action would be specific to its operation and maintenance purpose, and would be conditioned and administered with routine practices. As such, this consideration will not be carried forth as a Key Issue in this analysis.

Permits & Transfers

The Proposed Action, if approved, would require permits or licenses from agencies other than the Forest Service, both temporary and permanent. These may include new or revised water rights from the Idaho Department of Water Resources. Though exemptions for irrigation facilities may apply, it is also possible a stream channel alteration permit from the Idaho Department of Water Resources and a similar 404 permit from the Army Corps of Engineers may be required for the relocation of the new diversion and ditch facilities. Additional activities are also anticipated on private lands that may require permits, such as the replacement of the ranch road culvert. In all cases for facilities or uses intended for NFS lands, the necessary permits would be obtained by the appropriate entity prior to any work commencing. As such, this consideration will not be carried forward as a Key Issue in this analysis.

Maintenance Responsibilities

Maintenance responsibility would be assigned to the Permittee. The anticipated permits include terms and conditions specifying general maintenance responsibilities, and typically include an operations and maintenance plan that provides specific expectations. These are effective and routine in their application and so will not be carried forward as a Key Issue in this analysis.

Economics (project costs)

The cost of the proposed action elements, including both implementation and operational costs, was raised by the public during scoping. This issue was not carried into detailed analysis for the following reasons:

- NEPA requires socioeconomic effects to be considered only if they are related to a “primary” effect on the physical or biological environment. Socioeconomic impacts in themselves do not trigger an EIS (40 CFR 1508.14). For this project, none of the economic issues are interrelated to an associated natural or physical impact.
- The decision whether or not to authorize the special use permits will not be made on the basis of economics (40 CFR 1508.23). The 2012 Forest Plan includes direction to provide for special use activities as does the Sawtooth NRA Organic Act as long as certain conditions are met. These conditions do not include economic considerations.
- The implementation costs associated with the Proposed Action and Alternatives on NFS lands is a minor component when included with the private land project activities and costs. As such, the expense of implementing the Proposed Action or Alternative on the National Forest is small in scope. The Proposed Action is to authorize irrigation facilities on the National Forest (via a special use permit) with

bypass streamflow objectives. The project costs associated with that authorization is minimal.

- The Bonneville Power Administration (BPA) has interest as a funding partner in the Proposed Action, and particularly in the related actions on private lands. BPA is a federal agency under the U.S. Department of Energy (DOE). BPA funds measures such as diversion improvements to mitigate for the effects on fish and wildlife of the development of the Federal Columbia River Power System. Although BPA is part of the DOE, it is self-funded and covers its expenses by selling its products and services at cost. BPA hosts multiple public processes in an effort to provide external stakeholders with clear, transparent information pertaining to financial results, forecasted spending levels and other finance-related issues. BPA abides by rules and regulations regarding expenditures of funds for habitat improvement.
- The effects of the Proposed Action of authorizing the operation and maintenance of irrigation facilities on NFS lands – including relocating the POD, and maintaining bypass streamflows, will be shown in the analysis. These effects are not contingent upon the funding of the actions on the private lands being implemented. However, effects on private lands will be considered as connected actions. The EA effects analysis will show the effects of the private land actions – while it is not certain they will happen, the effects can show which private lands components may be more important than others to the overall beneficial effects.
- Estimates of the project costs associated with the Proposed Action and Alternatives on the National Forest will be available in the Project Record, but will not drive the analysis. For all these reasons, Economics will not be carried forward as a Key Issue in this analysis.

Cultural Resources

The project area contains cultural resources. These resources may include known and unknown historic, architectural, and archeological sites, as well as traditional lifeway values and places of traditional cultural use. For the project area, field survey and site monitoring found that there are currently no known historic properties. Locations on the National Forest where new facilities are being proposed were surveyed and no cultural sites were discovered. If cultural resources are located during implementation, work would cease in that area and avoidance and/or mitigation of potential impacts would be developed in consultation with appropriate Tribes and the Idaho State Historic Preservation Office. Therefore Cultural Resources will not be carried forward as a Key Issue in this analysis.

Wildlife Habitat

Most Management Indicator Species (MIS), as well as Threatened, Endangered, and Region 4 Forest Service Sensitive (TES) species have either no habitat within the project area, or would see no effect as a result of any action alternative. Of those species that could be affected, those effects are anticipated to be minor and further reduced from even this potential with specific project design criteria and mitigations. Because these design criteria satisfactorily address these minor potential effects to these few wildlife species, an issue

regarding the effects to wildlife and their habitat will not be addressed further in this environmental analysis.

Off Road Vehicle Management / Roads

Travel Management is an important issue on the National Forest, thus in 2005 the 36 CFR 212 regulations were implemented to address travel management. The proposed activities in all alternatives are in compliance with the Travel Management Rule (36 CFR 212, Subpart B, Designation of Roads, Trails, and Areas for Motor Vehicle Use). The analyses will consider the existing motorized routes (system and non-system) in the cumulative effects, where appropriate. Therefore Travel Management will not be carried forward as a Key Issue in this analysis.

Vegetation – ESA and R-4 Sensitive Plants; Noxious & Invasive Species

The Sawtooth NRA provides habitat for one federally listed threatened and has known occurrences of one Candidate terrestrial plant species. Ute ladies'-tresses orchid are not known to occur within the project area and the riparian areas are not considered to be potential habitat based on field surveys for Ute ladies'-tresses orchid. Whitebark pine does occur in the Pole Creek Watershed project area, however would not incur disturbances due to activities associated with the Pole Creek Diversion Authorization. The Sawtooth NRA has known occurrences and/or provides habitat for 34 Sensitive and Watch plant species. Sensitive plant records do not indicate any known occurrences of Sensitive or Watch plant species and no occurrences were located during field surveys within the project area. Therefore it will not be carried forward as a Key Issue in this analysis.

CHAPTER 2 – ALTERNATIVES

Alternative 1 – No Action (Irrigation Facilities and Uses Not Authorized)

Facilities and uses on National Forest System (NFS) lands associated with the irrigation system would not be authorized and subsequently removed (Figure 3).

Diversion and Ditch on National Forest

The facilities associated with the former irrigation system on National Forest (primarily near the point of diversion), would be removed and natural conditions rehabilitated (Section 25, T7N, R14E). These include: diversion structure; measuring device; fish screen; ~0.6 miles of ditch; and ~0.8 miles of access roadways. Proven rehabilitation methods would be utilized to restore natural stream and upland conditions, as described with Alternative 2 – Proposed Action (subsection: *Removal of Former Diversion Facilities*).

Uses within Isolated National Forest Lands

Irrigation of the isolated parcels of National Forest System lands that reside within Salmon Falls Land and Livestock Company lands (Sections 15 and 23, T7N, R14E) would not be authorized and would be discontinued. Treatments necessary to restore natural dry land conditions may be implemented as necessary. The general ranch access roads, unrelated to the former irrigation system on NFS lands, would still be authorized (~0.75 mi).

Implementation Practices

The No Action Alternative would necessitate activities on NFS lands that would result in impacts to ecological and social conditions. Implementation practices are intended to reduce or minimize these potential resource impacts and risks. The majority of the practices prescribed with Alternative 2 – Proposed Action would also directly apply to the removal and restoration objectives of the No Action Alternative and are prescribed here by reference (see *Alternative 2 / Diversion and Ditch Relocation / Design and Implementation Features* subsection).

Connected Actions on Private Lands

With the existing irrigation facilities and uses no longer authorized on NFS lands, it is assumed that the No Action Alternative would trigger a number of changes to the formerly connected power and irrigation systems on private lands. That is, private actions on private lands similar to the following *could* result:

- New buried commercial power from an existing source (e.g. near Sawtooth City) to replace site generated hydropower.
- New diversion(s) in Pole Creek such as a pumping station and/or gravity diversion(s), with new connecting ditch lines and delivery infrastructure. A new headgate, measuring device, and fish screen would likely be associated with the new diversion(s).
- New access roads established to operate and maintain the new facilities.
- New configurations for the irrigation system (i.e. pivots and associated utilities) that would avoid NFS lands. Existing private dry lands would be converted to irrigation.

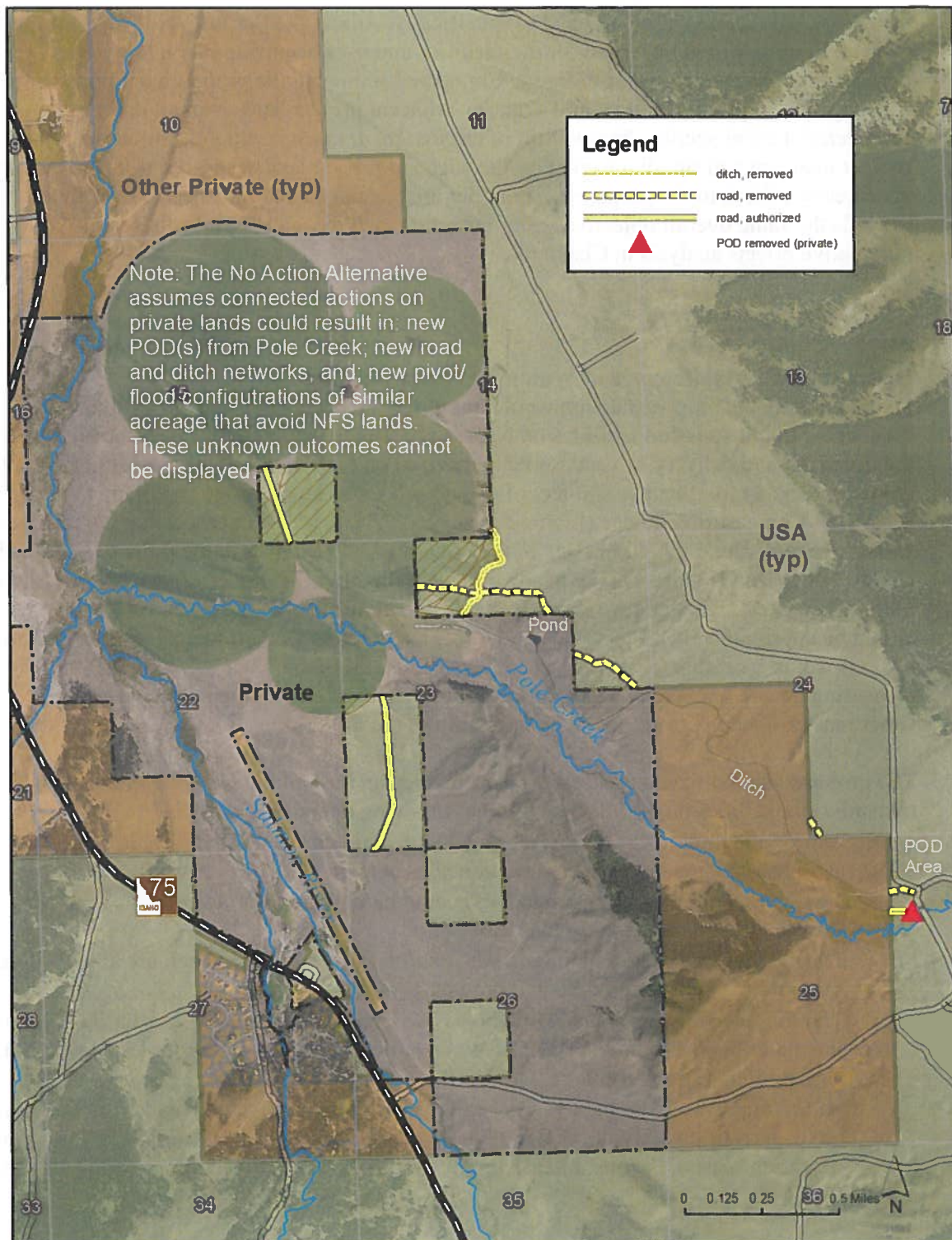
If the same irrigated acreage was intended to be maintained, while avoiding the National Forest parcels, the distribution of the pivots/irrigation would expand to occupy most of the suitable areas between the Smiley Creek Airport on the south, and the adjacent private land to the north. This would likely utilize a mix of large and small pivots to achieve the coverage, and/or flood irrigation. The pivot configuration would be expected to cross and incorporate Pole Creek within the irrigated acreage.

- 22 cubic feet per second of water could be withdrawn from Pole Creek throughout the irrigation season.

Similar Actions on Private Lands

Other actions have been conceived through the collaborations associated with the proposed action that would contribute to the same restorative goals, but are unrelated to the irrigation system. These are listed and described as *Similar Actions* with Alternative 2. Since they are unrelated to the irrigation system, it is assumed that some or all of these actions could occur even if the irrigation related actions on NFS lands were not authorized, should the parties involved remain willing. That is, the *Similar Actions* described with Alternative 2 could be anticipated with the No Action Alternative, except as regarding the construction of the permanent riparian fencing. With Alternative 1, only the replacement of the upper ~1.5 mile portion of this fence would likely occur, since the anticipated pivot configuration in the lower section would likely preclude any conversion since the pivots would continue to cross Pole Creek (and any protective fencing) in numerous places.

Figure 3: Elements of Alternative 1 - No Action (with connected private actions)



Alternative 2: Proposed Action – Authorize Facilities

The Proposed Action was developed to specifically address the Purpose and Need for the project. Permits would be issued for the facilities and uses occurring on NFS lands as described below and shown in Figure 4. Connected actions to the proposed action, such as the irrigation of private land, would occur on adjacent private lands and are described in the *Connected Actions* section, below. Still other *Similar Actions* are intended to improve and protect instream and riparian habitat on the adjacent private lands. These similar actions are not directly related to the proposed action, but are conceived and intended to contribute towards the same overall objectives. Similar actions will be addressed further in the cumulative effects analysis in Chapter 3.

Actions on National Forest

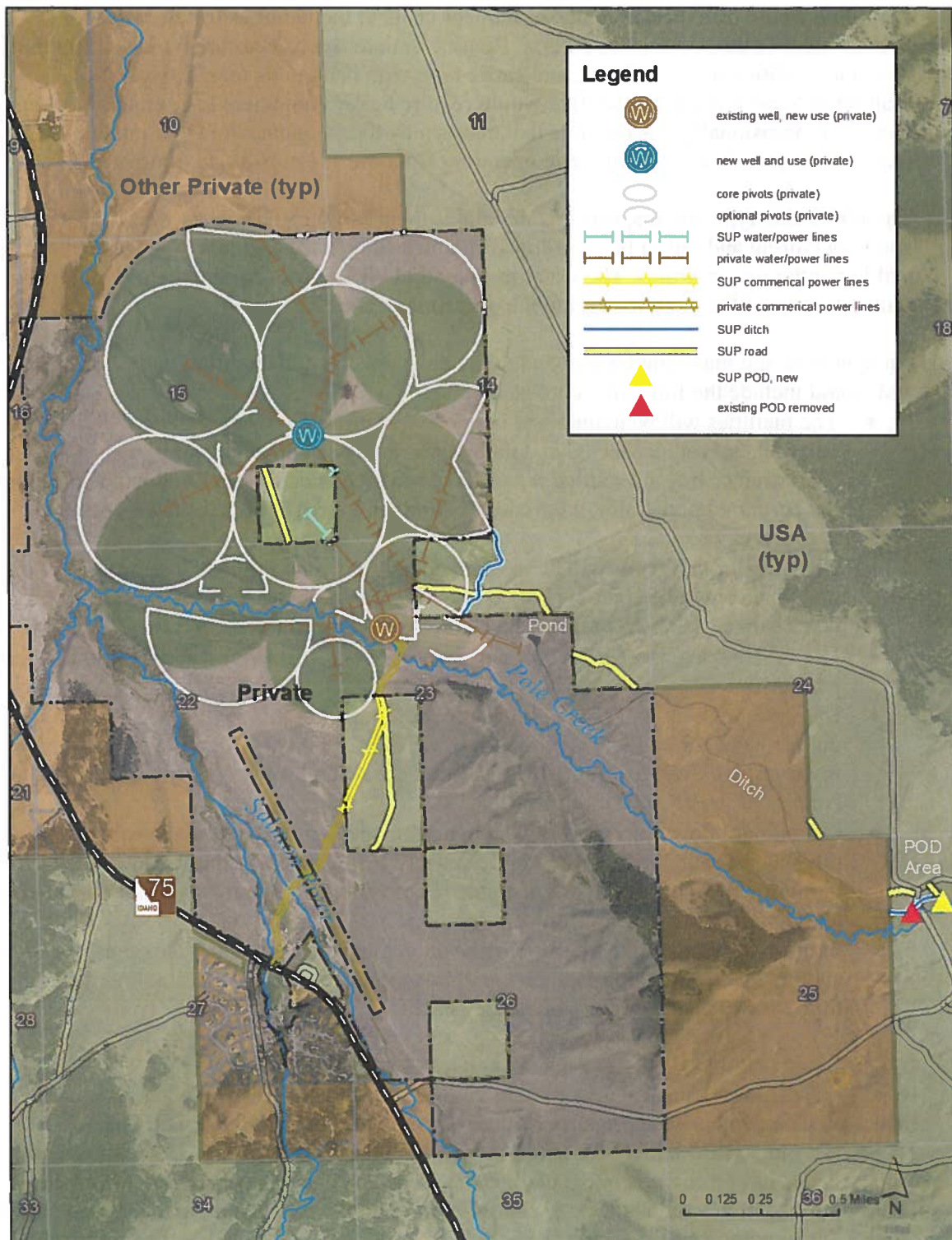
Operation and Maintenance of Water Diversion Facilities

Fundamentally the proposed action would authorize the occupancy and use of the water diversion and transmission facilities on NFS lands. The irrigation facilities associated with the diversion and delivery of water to be authorized on NFS lands include: a headgate control at Pole Creek; approximately 800 feet of open ditch; 300 feet of buried pipeline; a fish screen; and a measuring device (Figure 5; Sec. 25, T7N, R14E). An associated 0.6 miles of existing relief water ditch within one of the integrated NFS parcels at the point of use would also be authorized (Figure 4). The headworks would include a boulder grade control structure within Pole Creek. The gate would be lockable and controllable. The open ditch segments would be approximately 15 feet wide and 4 feet deep. Idaho Department of Fish and Game (IDFG) would be authorized to operate a fish screen within the ditch adjacent to Road 194. A measuring device (e.g. weir) would also be authorized within the ditch. The permittee or water master would perform the daily operation of the POD.

The proposed action would authorize the occupancy and use of the water diversion and transmission facilities on NFS lands with the following operational criteria:

- During the duration of the irrigation season, a maximum of 15 cfs could be withdrawn when not further conditioned as below;
- During the month of May, up to 5 cfs could be withdrawn so long as flows passing downstream remain greater than 18 cfs;
- During the brief periods annually when natural flows in Pole Creek are above 100 cfs, no more than 5 cfs would be withdrawn;
- A minimum flow of 18 cfs would be passed downstream from June 1 until the natural upstream flows diminish to 23 cfs. When natural upstream flows are less than 23 cfs, a maximum of 5 cfs could be withdrawn.
- At no time would less than 12 cfs be passed downstream when irrigation withdrawals are occurring. In addition, if flows passing downstream drop below 15 cfs during an irrigation season, the absolute minimum would increase from 12 cfs to 15 cfs for the following season.

Figure 4: Elements of Alternative 2 - Proposed Action (with connected private actions)



Maintenance and Administrative Features

If authorized, the facilities on NFS lands see routine on-site use and inspection. The Permittee would be expected to make frequent visits to the facilities (often daily) for management of the operational criteria. Routine maintenance needs are typically minimal once the facilities are established, and carried out with hand tools (e.g. shovel). No maintenance need is anticipated that would require heavy equipment to operate instream. However, occasionally it is possible that debris may lodge against the POD intake that requires the use of heavy equipment, operating from the streambank, to remove.

The IDFG also typically inspects and maintains their fish screens at least weekly. Twice annually (spring and fall) a flat-bed-truck-mounted lift is used adjacent to the screen to raise and lower the screen drums. The water master and USFS permit administrator would also routinely inspect the facilities during the operating season.

An operation and maintenance plan would be developed in collaboration with the Permittee, and would include the following core elements:

- The facilities will be maintained in good working order. They will be comprehensively inspected and maintained at least annually, prior to use. Maintenance beyond routine repairs will be discussed and approved in advance with the permit administrator, after coordination with the line officer or other staff as necessary.
- Channel or ditch scour will be minimized through conscientious maintenance. Soil disturbance will be contained to authorized ditchlines and travel ways. Temporary disturbances will be promptly revegetated and noxious weeds prevented.
- Use of heavy equipment will require the prior coordination and approval of the permit administrator.
- Heavy equipment will not enter the stream for any purpose. Where instream maintenance of the POD is required, it will be carried out within the recognized instream work window (currently between the second week of July through mid-August, USBWP 2005).
- Operational flow objectives will be managed and administered via stream and/or ditch measuring devices. The objectives will be managed by the Permittee and monitored by the permit administrator. The results will be reviewed and discussed at least annually with the Permittee.
- In order to characterize the anticipated outcomes, instream water temperatures, above and below the diversion facilities, will be monitored for no less than three years following issuance of the special use permit.

Irrigation of Isolated National Forest System Lands

Isolated parcels of National Forest System lands reside within Salmon Falls Land and Livestock Company private property (Figure 4) and are integrated into ranch operations. These are former BLM lands transferred to NFS lands in 1974. For practical purposes, some of these lands have also been integrated into the private irrigation system for several decades. The proposed action would authorize continued irrigation within these small isolated parcels of NFS lands, not to exceed 75 acres (Sec. 14, 15, and 23, T7N, R14E). All exposed metal

surfaces of the irrigation system would be designed or treated to minimize reflection, such as with use of weathering metals, or as painted or stained to medium matte brown or rust.

Access Routes and Utilities on National Forest System Lands

Segments on NFS lands of unimproved 2-track access routes associated with the irrigation facilities and/or ranch operations would be authorized. All but ~230 feet currently exist. All occur within native sage habitats, on gentle topography, with durable native treads.

An existing 2-track route parallels the ditch as it links Road 194 near the POD to the point of use 2 miles to the west (Figure 4; Sec. 23, 24, and 25, T7N, R14E). Approximately 0.4 miles of this route, in three segments, crosses NFS lands and would be authorized. Roughly 230 feet of new 2-track (i.e. driven in, no surfacing) would also be authorized that extends from Road 197 to the edge of the sage flat adjacent to the new POD (Figure 5). All segments on NFS lands are outside the Pole Creek RCA.

Approximately 1.3 miles of existing 2-track ranch routes also exist within the isolated parcels of NFS lands (Figure 4 Sec. 15 and 23, T7N, R14E), and would be authorized.

Salmon River Electric Cooperative would install and operate a buried 3-phase power line connecting Sawtooth City with the power hub of the irrigation facilities. Approximately 0.4 of the 1.2 miles would pass through NFS lands and be authorized (Figure 4; Sec. 23, T7N, R14E). No routine maintenance is required to the conduits once buried. The line would be constructed when site conditions are durable within this open sage setting (i.e. late spring through late fall). The cable conduit would be direct-buried using a tracked vehicle with narrow plow to split the surface and insert the cable. The plow trench is typically less than one foot wide, though some disturbance would extend to the width of the machinery utilized. The proposed segment on NFS lands presents routine conditions, and would be expected to require approximately 1 day to complete. The majority of the buried route would reside on private lands.

The new irrigation system would operate via buried underground power and water supply pipelines. Two segments, totaling 0.2 miles, would occur within the isolated parcels of NFS lands and be authorized (Figure 4; Sec. 15, T7N, R14E). One fixed pivot center point would also occur on NFS lands and be authorized. The power and water conduits would typically be buried in the same trench. Once installed, no maintenance would be anticipated during the term of the permit.

Where disturbance occurs on NFS lands along intended buried utilities, the applicable practices listed in the *Design and Implementation Features* section would be utilized.

Diversion and Ditch Relocation

Temporary construction permit(s) would authorize the relocation of the existing POD approximately 800 feet upstream on NFS lands (Figure 5; Photos 2 and 3; Sec. 25, T7N, R14E). The new diversion structure would be designed and operated to facilitate the withdrawal of irrigation water while allowing unencumbered upstream and downstream fish passage. A lockable, controllable, headgate would be located at the ditch inlet, and the IDFG would construct and operate a new fish screen and bypass system near the head of the ditch,

adjacent to Road 194. A water measuring device would also be installed within the new ditch in the same vicinity. The existing and new PODs lie within a sedge/shrub riparian area surrounded on either side by sage uplands on gentle topography. Standard heavy equipment (excavator, backhoe, etc) would be utilized for implementation. Staging would occur as shown on Figure 5, or at an approved equivalent location outside Riparian Conservation Areas (RCAs). The subsections that follow provide detailed descriptions of the specific elements and stages of the anticipated POD reconstruction.

Point of Diversion

The new point of diversion would be moved to a suitable and strategic location upstream that would allow natural stream bed conditions to be maintained throughout the irrigation season (i.e. forgo the need to check-up the water surface with boards as currently required). The POD facilities would consist of a metal headgate and boulder sill set at grade just downstream (Figure 4). The location is a small corner pool where the natural depth makes possible this strategy (Photo 2). The headworks consist of a slide gate attached to a metal box, and are fabricated and installed to meet the design objective. Less than one cubic yard of concrete is required for the structure (in the floor of the headworks).

The boulder sill would be installed just downstream of the headgate at the spill point of the pool (Figure 5). The purpose is to establish a firm bed elevation of protection against channel adjustments for the long-term operation of the diversion intake. Sedge plugs and willow cuttings would be applied as necessary where banks are disturbed with installation of the sill.

A temporary constructed stream bypass would be used to divert stream flow around the construction area. The bypass channel would be excavated in the dry just upstream as shown located in Figure 5. The short channel would then either be fully lined (e.g. with construction grade plastic) or a pipe of sufficient capacity would be installed. The outlet would also be protected to minimize scour. The diversion dam would be constructed of temporary barriers placed within the channel such as eco-blocks, gravel filled bulk bags, or water filled jersey barriers. Plastic would be placed on the face of this structure to make water tight, and held in place by static pressure and hand placed gravel bags or similar securing the margins. A small secondary berm of gravel bags and plastic may be incorporated if necessary to collect leakage for pumping. No material would be mined from the channel for this or any purpose. Fish avoidance/relocation methods would be utilized per NMFS guidelines (2000) to remove fish from the construction area prior to and during dewatering. Approximately 270 linear feet of stream ($4,400 \text{ feet}^2/400 \text{ m}^2$) would be dewatered for construction for a period less than 5 days. Water would be gradually returned to the construction area so as to avoid any unnecessary scour. The temporary bypass would then be plugged and rehabilitated using similar and proven methods (e.g. conifer rootwads, willow clumps and cuttings, and revetment, Figure 6). These methods have been used with success in many locations within the Sawtooth NRA (Photo 8).

Figure 5: Alternative 2 Proposed Actions anticipated at the POD

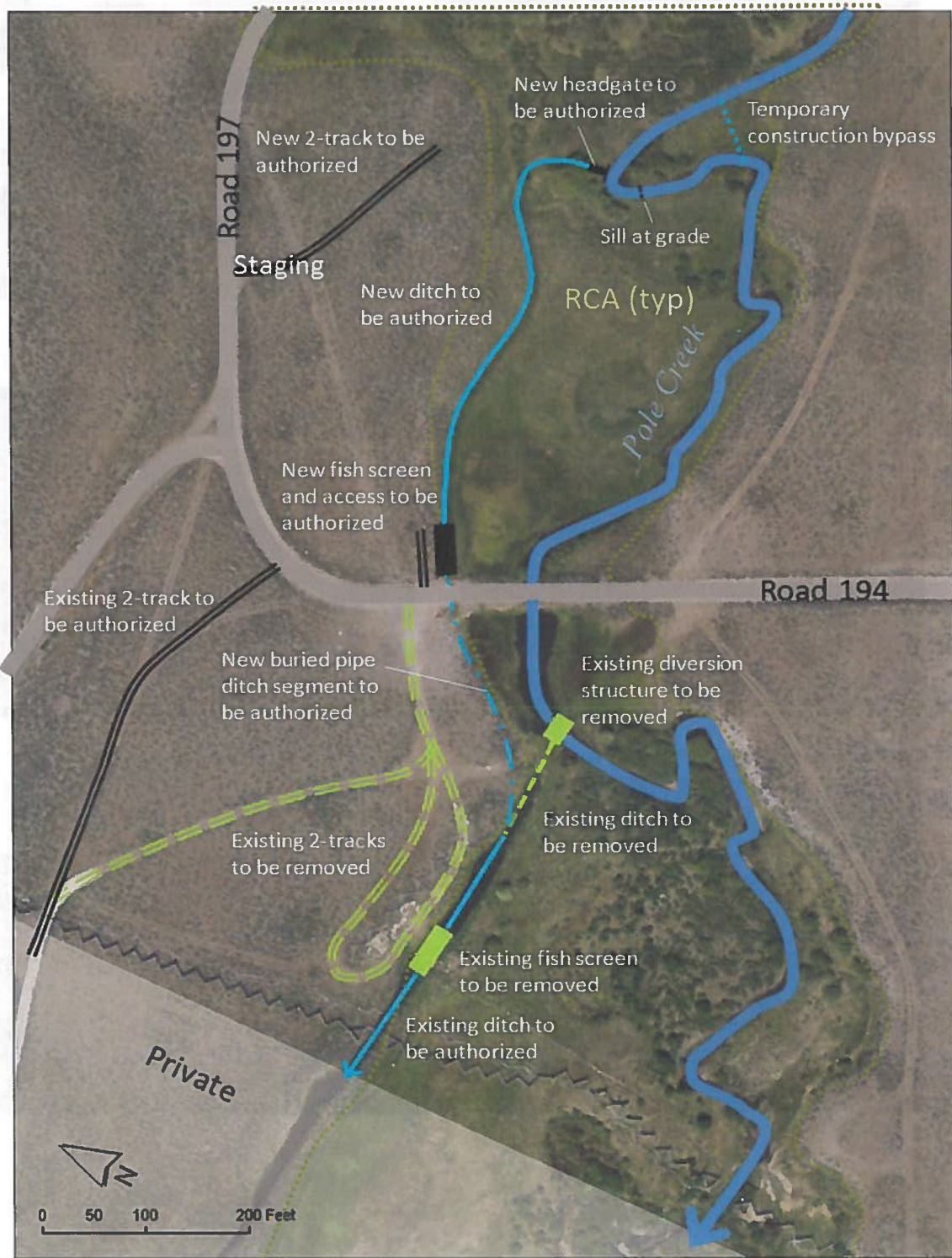


Photo 1: Existing diversion structure, August, 2004



Photo 2: Proposed point of diversion, August, 2007



Photo 3: Proposed ditch alignment, August, 2007



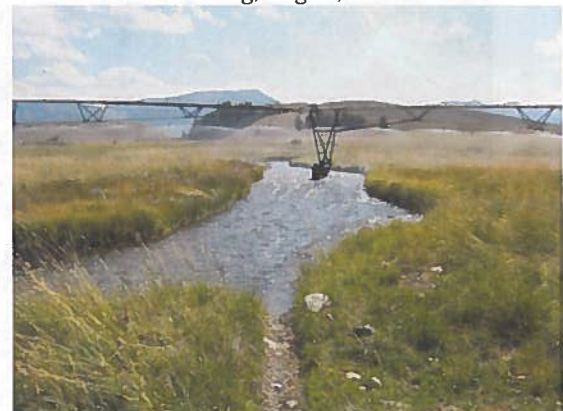
Photo 4: Private lands and Pole Creek, Sept, 2003



Photo 5: Livestock water gap, November, 2007



Photo 6: Pivot crossing, August, 2011



The short access route to the new POD from Road 197 would be established (i.e. driven in, no surfacing) by use during construction and remain for the permanent access to the new POD. Only equipment specifically required for construction would enter the riparian area at the POD, and all related disturbance would be restored to natural conditions. The permanent access to the new POD would stop at the edge of the upland terrace. Staging would occur near the junction of this route with Road 197, approximately 350 feet from Pole Creek (Figure 5).

Ditch/Pipeline, Fish Screen, and Measuring Device

From the headgate, the new ditch would be constructed following the gentle contour along the topographic and vegetative transition between riparian and upland habitats (Photo 3). The open ditch would extend approximately 520 feet to the fish screen. The new ditch segment would be approximately 15 feet wide and 4 feet deep.

The fish screen would be designed, installed, operated and maintained by IDFG consistent with current NOAA Fisheries criteria and their ESA obligations. The 2-bay screen would reside just east of Road 194. The bypass would pass under Road 194 and empty into Pole Creek just downstream of the bridge. A maintenance access pad, constructed of natural material, approximately 20'x40', would be established on the north side (i.e. far side) of the screen, approximately 100 feet from Pole Creek (Figure 5). Just after leaving the fish screen, water would enter a pipe as it crosses under Road 194 and continue within a pipe until it daylighted where it intersects the existing ditch, approximately 270 feet down-ditch from the fish screen. A water measuring device (e.g. small metal weir) would be installed in the ditch near the fish screen.

Construction of the new facilities would occur during summer or fall, with revegetation promptly initiated on all disturbed areas per Design and Implementation Features.

Removal of Former Diversion Facilities

The former diversion structure, approximately 120 feet of ditch, the former fish screen, and associated access routes would all be removed at the conclusion of the construction effort. These efforts would occur in the fall of the year when streamflow and site moisture is typically at a seasonal minimum.

Figure 6: Conifer revetment schematic

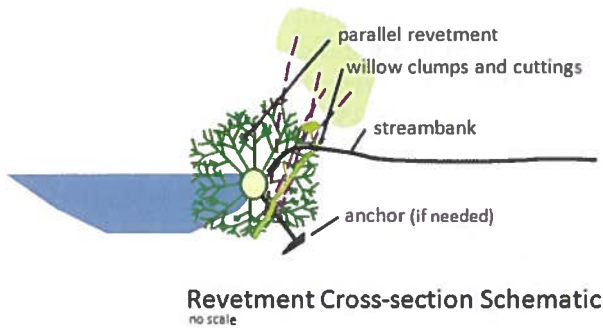
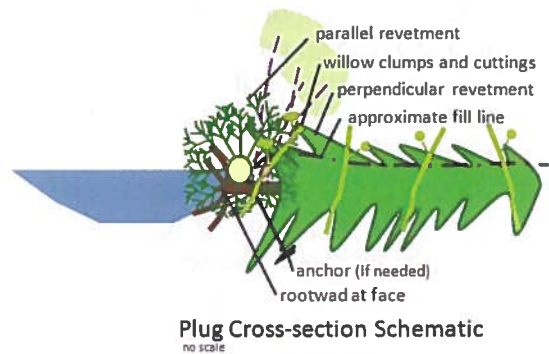


Figure 7: Conifer rootwad plug schematic



The former diversion structure would be removed in a strategic sequence intended to minimize effects to Pole Creek. The fill behind the abutments would be removed while the abutment walls remain standing. Existing soil and vegetation on the top of the fills would be collected and retained for re-application (Photo 7). Once the fills have been removed, the timber walls would be pulled. Banks would then be rebuilt with willow clumps and cuttings and the salvaged soil and vegetation, then faced with conifer revetment (Figure 6).

The concrete sill of the former diversion would then be lifted as one piece from the bed of Pole Creek using an excavator from streamside. If determined necessary, washed gravel may be placed within the cavity left by the sill. Throughout these sequences, water filled jersey barriers and/or gravel bags may be utilized within the channel as necessary to redirect stream energy away from active work areas. Though the bucket of the excavator would be used in Pole Creek for the specific purpose of extracting the sill, there would be no need at any time for the heavy equipment itself to enter or cross through Pole Creek. The instream/streamside efforts to remove the former POD would be accomplished in one or two workdays.

The former ditch intake would be plugged and rehabilitated with similar methods (e.g. conifer rootwads, willow clumps and cuttings, and revetment, Figure 7). The closed ditch segment would be regraded to natural topography and revegetated. Conifer revetment may also be extended upstream along the banks of the former backwater area as a means to collect and retain natural sediments and accelerate the natural channel narrowing that is likely to occur in this segment. The concrete from the sill as well as that associated with the former fish screen would be collected, removed, and disposed of appropriately off NFS lands. The ditch segment from which the fish screen is removed would be reconstructed and revegetated for continued ditch use.

Finally, the former access routes would be closed and rehabilitated to natural conditions using straight forward methods that have been applied and refined on many projects within the Sawtooth NRA with consistent success. The methods rely on an excavator, or similar equipment, to re-condition the soil beneath the compacted treads, while concurrently reestablishing natural drainage and incorporating adjacent organic material. These methods

accelerate the return of such areas to natural conditions while discouraging further use. Where necessary, barrier rocks or logs, and/or signage may also be used to discourage use.

Photo 7: Existing diversion with boards pulled, October, 2001



Photo 8: Diversion plug in Valley Creek at 5 years post-treat



Construction Schedule and Sequence

Two construction sequences are possible. Both would construct the new facilities before removing the former facilities. One would complete all new construction and removal activities in the fall. Less than 6 weeks would be expected to be sufficient for full completion of these objectives under this scenario. The more likely sequence would be to complete construction of the new facilities during the instream work window for the upper Salmon – between the second week of July through mid-August (USBWP 2005), and activate their use. Four weeks would likely be sufficient. Removal of the former facilities would then wait until the fall when the irrigation system shuts down and site conditions are optimum for rehabilitation. The removal and rehabilitation efforts would likely require less than 2 weeks to complete.

Design and Implementation Features

The objectives associated with the relocation of the diversion and ditch include elements that would result in impacts to ecological and social conditions. The following considerations and practices are intended to reduce or minimize the potential impacts, or the risk of such. In order to assure water quality protection, the *National Best Management Practices Technical Guide* (USFS 2012) was consulted. The locally adapted practices below are intended to focus efforts where the greatest benefits or risks to water quality may occur.

Construction and Staging

- The construction and/or restoration objectives of the action will be implemented under the direction and oversight of experienced specialists. Photo points will characterize pre-project conditions, and follow-up monitoring (typically in years 1 and 5) will assess the success of the project in achieving the objectives.
- Materials resulting from demolition will be removed to an appropriate disposal site.
- Staging will occur at an approved location outside Riparian Conservation Areas (RCAs) and topographic lows where water may concentrate during snowmelt.

- Heavy equipment will not enter Pole Creek.

In-stream and Riparian Provisions

- When actions are conducted instream or on streamside areas during potential spawning periods, fish avoidance surveys will be conducted over a minimum of 600 feet downstream and 400 feet upstream to confirm the absence of any spawning activity and/or redds. If redds of ESA protected salmonids are identified, the appropriate agencies would be contacted to determine if or how the project may proceed.
- Where construction occurs within RCAs, or in areas where water may concentrate during snowmelt periods, standard sediment and pollutant prevention and retention practices would be utilized (e.g. silt fence, wattles).
- Fuel storage would occur only within staging areas, and refueling will not occur within RCAs. Equipment will be monitored for fuel, lubrication oil, hydraulic fluid and coolant leaks.
- All equipment used for instream rehabilitation work will be cleaned of external oil, grease, dirt and mud, and leaks repaired, before being utilized at streamside or in areas that drain directly to streams or wetlands. Spill packs will also be on hand for minor leaks/spills.
- RCA vegetation will be protected to the extent possible and disturbed areas promptly rehabilitated.
- The diversion structures will utilize modern stream simulation techniques and will not constitute a passage barrier for any fish or life stages.
- Where construction or rehabilitation objectives will be carried out within Pole Creek, flow energies will either be redirected away from active work areas with portable instream deflectors (e.g. gravel bags or water-filled traffic barriers), or bypassed via a temporary lined channel or pipe.
- If any portion of the channel is dewatered for construction activities, avoidance/relocation methods will be utilized per NMFS guidelines (2000) to clear such areas of TES fish, as well as amphibians.
- No concrete pours will occur in-water. Should concrete pours be required within RCAs, methods will be utilized to assure no uncured concrete enters water or wetlands. Discharge of uncured excess concrete, and the washing of tools and equipment, will occur only within staging areas where there is no potential for effluent to reach surface waters.
- Care will be utilized to minimize the entry of construction or demolition debris into water or wetlands.
- Turbidity will be monitored: (a) prior to re-watering of the worksite; and (b) at 30 minute intervals after re-watering begins, at locations: (1) above the project work site; and (2) approximately 600 feet downstream of the project worksite. If levels exceed 50 NTU over background levels, project managers will make necessary adjustments to reduce turbidity, and continue monitoring until levels less than 50 NTU are achieved.

Vegetation and Wildlife Habitat Provisions

- An agency botanist will review the site and identify specific conditions to be noted, addressed, or avoided during or prior to implementation (e.g. noxious weeds, TES plant populations).
- If an agency botanist determines such actions are warranted, noxious weeds within and/or adjacent to the project sites will be avoided or treated for eradication prior to implementation.
- The project area would continue to be monitored and treated as necessary for 3 growing seasons following implementation for new areas of noxious weeds.
- When needed, noxious weed treatments will be by hand, or via Agency approved chemicals, practices, limitations, and terms existing at the time of intended use.
- All heavy equipment used will be high pressure washed to remove all visible plant parts, dirt, and material that may carry noxious weed seeds, and/or invasive life forms, prior to entry into the project area. The same equipment will be cleaned again prior to leaving, if warranted.
- Materials used for sediment retention, restoration, rehabilitation, and stabilization (e.g. sediment barriers) will be certified weed-free and comply with the 1996 "Weed Free Hay Order" (IDAPA 02.06.31) and the Final Supplementary Rules Requiring the Use of Certified Noxious-Weed-Free Forage and Straw (Federal Register Volume 76, Number 140, 8/21/2011).
- Where construction activities disturb soils, the disturbed areas will be reseeded with native species approved by the Forest Service if considered necessary to accelerate recovery and reduce the risk of invasive species. Otherwise, small areas of disturbance will be conditioned, but left to revegetate from adjacent natural seed sources.
- Where live conifer trees are utilized for project objectives, they will generally be between 7 and 12 inches diameter. Likewise, standing trees with cavities or with raptor or raven nests will not be used. Only sources outside RCAs will be utilized.
- Construction activities that require removal of vegetation will not occur until after August 15, or, be preceded by surveys to confirm the absence of nesting birds. If a nest is found during surveys, the nest would be moved to a similar but undisturbed nearby habitat. Implementation would be suspended until it can be determined how or when the project may proceed.

Scenic Provisions

- All exposed metal surfaces will be designed or treated to minimize reflection, such as with use of weathering metals, or as painted or stained to medium matte brown or rust.
- All concrete will be dyed or stained to a medium brown shade.
- Structures will be backfilled and graded to the maximum extent possible to minimize exposure.
- Live native shrub cuttings and/or transplants will be utilized around structures within riparian areas to promote and retain the natural setting, and add resiliency to stream energies.

Connected Actions on Private Lands

Connected Actions are defined as those that: automatically trigger other actions; cannot or will not proceed unless other actions are taken previously or simultaneously; are interdependent parts of a larger action and depend on the larger action for their justification (40 CFR 1508.25).

The proposed action authorizes a subset of land uses that are themselves made necessary due to the connected agricultural irrigation that occurs on the adjacent private lands (Photo 4). As such, the overall changes to the irrigation system and improvements to Pole Creek occur on both private and publicly owned lands. These integrated objectives have been conceived and prescribed via the collaboration among the private land owners, state and federal agencies, and tribes. Although the means and specific outcome of the elements on private lands are beyond the authorities of the Forest Service, this assessment attempts to anticipate and describe the effects of all connected actions associated with the proposed action. The anticipated connected actions on private lands are grouped accordingly and listed below.

- *Convert from site generated hydropower to commercial power for operation of the irrigation system.* This action will make available water that is currently removed from Pole Creek for power generation. It will require new buried 3-phase power line(s) extending from an existing Salmon River Electric source near Sawtooth City to the northern most well (see below). Approximately 0.8 miles of new buried power line could be installed on private lands, together with the 0.4 mile mid-segment on NFS lands. One crossing each of the Salmon River and Pole Creek by the line are expected, and would be attached to established bridges.
- *Utilize new wells for groundwater.* This action will allow offsetting a portion of the late summer irrigation demands from Pole Creek with groundwater, in part making the proposed operational criteria within the proposed action possible. Production from two wells is anticipated. An existing well is located near the existing power generator, ~250' from Pole Creek, in the NW¼ of Sec 23. A second well is anticipated to be drilled on the north side of the irrigation system, in the SE¼ of Sec 15 ~2,800' from Pole Creek and 3,800' from the Salmon River. Design production is anticipated at ~6.5 cfs.
- *Reconfigure/Replace the pivots.* In order to operate an irrigation system capable of integrating surface and groundwater sources, while frequently adapting to changing supply and instream objectives, a revision of the existing design was necessary. The change would modernize the system to state-of-the-art efficiencies while also facilitating an opportunity to configure the pivots to avoid the need for any to cross Pole Creek (Photos 5 and 6). This reconfiguration is also expected to result in a small reduction (<10%) in the total acres irrigated. Current designs anticipate the new system to have 10 primary pivots irrigating ~870 acres. Four additional short-swing pivots may be installed to irrigate some specific interstices between the larger pivots when water is available (~50 acres). All are expected to be standard agricultural models (e.g. tower height, span), except in color, which would be specified to reduce their visibility within the landscape. The new pivot configuration would also require

essentially all new supporting water and power supply networks (typically buried in the same trench). Approximately 4.7 miles of these new buried networks is anticipated (Figure 4). One line crossing of Pole Creek is anticipated via an already established sleeve under the creek intended for the purpose. The new pivot configuration will also require essentially all new supporting water and power supply networks (typically buried in the same trench). Approximately five miles of these new buried networks are anticipated.

- *Line/pipe the supply ditch.* This action will only be applied if necessary to achieve even greater system efficiencies to achieve stream and agricultural objectives. Segments of the existing supply ditch would be sealed, lined, or piped where ditch loss is elevated.

Similar Actions on Private Lands

Similar actions are those, which when viewed with the proposed action, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography. The extended objectives on private lands described below are generally beyond the discretionary authorities of the Forest Service. Yet they have been conceived and prescribed via the same collaborations with the private land owners, and are anticipated during the same period. They are not part of the Proposed Action, but are described here for information and will be considered as cumulative effects.

- *Replace the ranch culvert crossing of Pole Creek on private land.* This action would replace the existing culvert that constitutes a barrier to fish migration during some seasons and/or life stages, with a bridge. The new bridge is expected to be located in a more suitable crossing location ~0.4 miles upstream, span the active channel, and pass the 100 year flood flow. The existing culvert will be removed from the former crossing and the stream site rehabilitated, including the restoration of a meander that was cut-off when the culvert was initially installed many years ago. Implementation is anticipated in summer 2014.
- *Construct permanent riparian fencing.* This action would replace existing temporary electric riparian fencing with permanent fence. The permanent fencing would follow similar alignments to the existing, particularly in segments upstream of the irrigation system, where the current exclusion width for these ~2.7 stream miles averages roughly 350 feet. The conversion of the upper section was initiated in 2013. In the lower ~1.5 stream miles, currently within the pivot irrigation system, the new fence alignments would be established following the installation of the new pivots that themselves would avoid Pole Creek. The exclusion width currently averages roughly 200 feet within this lower segment, and is expected to increase slightly with the new pivot/fence configuration. The fence is intended and expected to be *passable* to wildlife per specifications. Six livestock water gaps will also no longer be necessary or provided within any of the riparian fencing (see below).
- *Provide off-site livestock water.* This action would avoid the current need for the heavily used water gaps on Pole Creek in the existing riparian fence lines by

providing an off-site well and trough system. The source is expected to be small domestic sized well(s) or similar, such as those available via test wells drilled in 2012 and 2013.

- *Replace barrier culverts on NFS Lands.* In 2013, two main transportation culverts intersecting Pole Creek, that had been determined to be barriers to fish migration during some seasons and/or life stages, were replaced with bridges.
- *Travel system changes on NFS lands.* In 2012 a travel management decision was made which has resulted in the closure and rehabilitation over 12 miles of unauthorized routes, including several (10+) damaging stream fords. A separate ongoing analysis is considering the relocation of 1.5 miles of the main Pole Creek Road (197) where it aligns immediately adjacent to Pole Creek. The action would simply realign the road to a much more suitable and sustainable setback from the creek. The realignment would also allow the replacement of two tributary culverts believed to be barriers to fish movements. If a decision confirms the objective, implementation may occur in the fall of 2014.

Management Direction

Management activities previously approved by other environmental analyses and decision documents would also continue to be implemented. Current management plans would continue to guide management of the project area, such as direction from the Forest Plan listed in Table 1.

Table 1: Specific Forest-wide and Management Area 2 direction

Number	Management Area Direction Description
0243	Remove human-caused migration barriers and resolve instream flow and habitat quality conflicts, primarily related to the numerous irrigation diversions to assist in the restoration of depressed populations and degraded fish habitat for listed species. Work cooperatively, or assert existing fee title interest, with landowners to help achieve this objective on private lands. Priorities are in the Beaver Creek, Fourth of July Creek, Champion, and Iron-Goat subwatersheds.
02157	Use landowner cooperation, easements, withdrawals, rights of way, purchases, or administrative action to restore or maintain natural and productive aquatic habitat conditions
02169	Provide for continued use of existing special use authorizations as long as such uses are consistent with Sawtooth NRA values and in the public interest. Process new special use requests in accordance with the Sawtooth NRA policy and the Special Use Proposal and Application Screening Process as referenced in CFR 251.54.
TEST07	In TEPC fish-bearing waters, do not authorize new surface diversions unless they provide upstream and downstream fish passage and, if needed, include either fish screens that meet NMFS and/or FWS criteria or other means to prevent fish entrapment or entrainment.
SWOB12	Design and implement management actions so they do not fragment habitat for native and desired non-native fish species. Restore connectivity in currently fragmented habitat where the risk of genetic contamination, predation, or competition from exotic fish species is not a concern.
SWST05	Management actions within RCAs that are associated with valid existing rights—such as mining, water diversions, and hydro-power—shall be coordinated with licensees, permittees, or claimants in an effort to maintain or restore beneficial uses and desired habitat conditions for native and desired non-native fish.
SWST06	In cooperation with affected state, tribal, and local governments, holders of water rights, and other interested parties, determine instream flows needed for protection of water-related resources when assessing permit or license actions such as mining claim development, hydropower development, snowmaking, or water transmission facilities. When determining the sufficient quality, quantity, and timing of flows, use the following four factors: (a) maintenance and restoration of habitat for fish, wildlife, and riparian plant communities; (b) maintenance of channel stability and capacity for passing floods; (c) maintenance of recreational opportunities such as fishing, swimming, boating, and aesthetic enjoyment; and (d) maintenance of water quality and natural temperature regimes. Make sufficient flows a condition of permit or license issuance.
SWST09	In fish-bearing waters, do not authorize new surface diversions unless they provide upstream and downstream fish passage and, if needed, include either fish screens or other means to prevent fish entrapment/entrainment.
SWG006	When assessing projects where there is a need to determine appropriate water management strategies to maintain instream flows, cooperate with affected State, Tribal, and local governments, holders of water rights, and other interested parties. These flows should incorporate: (a) summer and winter base flows to maintain or restore habitat for resident and anadromous fish species and riparian vegetation, (b) a peak flow component to maintain fish habitat, channel capacity, and riparian vegetation, and (c) a gradual rising and falling hydrograph limb during spring runoff to protect bank stability, fish habitat, and trigger fish behavioral patterns, such as migration
SCST01	All projects shall be designed to meet the adopted Visual Quality Objectives (VQOs) as displayed on the Forest VQO map.
LSST12	Where the authority to do so was retained, and in cooperation with affected state, tribal, and local governments, holders of water rights, and other interested parties, require that water diversion structures: a) Be monitored to limit water withdrawals to the amount of the water right and the time period of the water right; and b) Have either fish screens, or other means, to prevent fish entrapment/entrainment. Where the authority was not retained, negotiate changes to meet other Forest resource objectives wherever possible.

Consistency with other applicable Plan direction would also be assured, including: TEGO03, TEGO04, TEOB09, SWGO02, SWGO03, SWGO04, SWGO10, SWGO11, SWST04, LSGO04, SNGO01, and 0268.

Alternatives Eliminated from Detailed Study

Alternative 3 – Land Adjustments (purchase, sale, condemnation, exchange)

It was suggested that to protect necessary flows in Pole Creek, additional land adjustment strategies should be investigated. These strategies, along with their reasons for dismissal are described below.

1. Partial buyout of the irrigated lands that border Pole Creek.
Although this option has been discussed, there is no partner with sufficient or appropriate funds to comprehensively address this strategy currently. However, the Proposed Action would substantially address the underlying goal of this strategy by revising the existing configuration to avoid the need for any pivot to intersect Pole Creek as they do currently.
2. Compensation for the water right holders to further reduce irrigation.
To a degree, this is a tool that may be utilized by partners within the proposed action, but no partner has sufficient or appropriate funds to substantially reduce the water rights.
3. Purchasing a conservation easement that accomplishes similar goals.
The threshold objectives are already established and can be met under the Proposed Action. Funds would need to be available for the purchase of the conservation easement – either through the Land & Water Conservation Fund (L&WCF) or through a partner. Currently, no such funds are available.
4. Condemnation of the private land to remove the need for a diversion.
The threshold objectives are already established and can be met under the Proposed Action. Funds would need to be available for condemnation – either through the L&WCF or through a partner. Currently, no funds are available.
5. Sale or exchange of the embedded National Forest lands located within the private lands and end irrigation of those lands.
Funds would need to be available for the purchase or exchange of the embedded NFS lands – either through the L&WCF or through a partner. Currently, no funds are available. Even if funds did become available, land exchanges can take several years to process – which would require a separate environmental analysis at that time.

Rationale for Dismissal: Most of these strategies are not reasonably foreseeable. The Proposed Action addresses the underlying goal of each of these land adjustment strategies by achieving instream flows objectives. Funding to accomplish them is not available. Under P.L. 92-400, condemnation proceedings without the consent of the owner may only be used in cases where all reasonable efforts to acquire the land or interest in the land by negotiation have failed. Condemnation would also require the Secretary of Agriculture to request congressional action.

Relative to sale of the embedded National Forest parcels, under P.L. 92-400, exchange, not sale, would be the only mechanism to convey the Forest Service System lands into private ownership. Land exchanges often take years to successfully complete. Forest Service Region 4 typically requires that all but the exclusively governmental portions of a land exchange be funded by the proponent.

Finally, an acquisition of the private lands, either in fee or for a conservation easement would face competition from a host of other collaborative projects for scarce and declining Land and Water Conservation Funding (LWCF). The time period from a successful LWCF submission to acquisition is generally about two years. For the reasons cited above, this Alternative was eliminated from detailed study.

Alternative 4 – No Change – Facilities and uses would continue with no change and would be authorized under a SUP.

Under this alternative, no changes would occur to the existing irrigation system and uses on the National Forest. The facilities and uses associated with the irrigation system on NFS lands would be authorized as they currently exist.

Rationale for Dismissal: This alternative is not viable since the existing facilities and operations do not meet Forest Plan direction. Nevertheless, the effects of this alternative will be represented within the analysis as the *existing condition* in Chapter 3 of the Environmental Analysis.

Alternative 5 –Ditch Improvements in the Proposed Action

A minor modification to the proposed ditch was suggested to gain greater delivery efficiencies, and retain as much water as possible in Pole Creek's natural channel.

Rationale for Dismissal: These considerations are currently included and anticipated within the Proposed Action. A lined ditch or buried pipeline may be utilized for practical purposes or for enhanced efficiencies, as warranted.

Alternative 6 – Fencing Modifications in the Proposed Action

It was suggested that riparian fencing of Pole Creek should be more robust, and a permit should include explicit provisions for inspection and maintenance of fencing to protect Pole Creek from negative impacts of livestock.

Rationale for Dismissal: There are no fences proposed on NFS lands under the Proposed Action. Cumulative effects for wildlife as appropriate will consider the fences on private lands. There are many successful examples of wire fences being compatible with wildlife.

Alternative 7 – Other Strategies to protect and/or increase minimum stream flow.

It was suggested that to protect necessary flows in Pole Creek, additional strategies should be investigated. These strategies included:

1. Further efforts to reduce the amount of flood irrigated land and/or eliminate it completely.
2. Drilling of additional wells to accommodate late season irrigation while reducing withdrawals.
3. Requiring a higher minimum flow than would be provided by the Proposed Action

Rationale for Dismissal: Flood irrigation occurring currently on NFS lands is a minor activity, and a simple byproduct of the larger private pressurized irrigation system. At any moment in time a contingency valve releases water into a waste ditch that is excess to that which can be accommodated within the pressurized irrigation system. Such a valve is necessary for day-to-day operations to accommodate the minor natural fluctuation of flow that enters the system, as well as in event of occasional pivot freeze-ups, etc. When spilled, the resulting water is then turned out of the ditch for irrigation use rather than simply diminishing at length down the waste ditch. These minor, intermittent flows would provide negligible benefits to Pole Creek if returned, and would be off-set by similar detriments of its increased temperature.

The anticipated wells on private land are not part of the proposed action, but are connected. Technical experts worked with the landowner (proponent of the proposed action) to develop the instream objectives necessary to adequately protect habitats. The anticipated changes and investments on the private lands along with the Forest Service Proposed Action are intended to meet the recovery objectives. While even greater instream flow gains, and corresponding investment in strategies such as wells are possible, their purpose would exceed the objectives identified and would therefore need to be otherwise justified by those making the investment. It would also be difficult to contrast and compare the effects between this Alternative and the Proposed Action, as once instream objectives are met, still greater improvements can be difficult and speculative to quantify. For these reasons, this Alternative was eliminated from detailed study.

Alternative 9. Eliminating Livestock Grazing within project area in the Proposed Action.

Under this alternative, livestock grazing on NFS lands within the Salmon Falls Allotment would be eliminated. Livestock grazing on the National Forest is authorized under a livestock grazing permit and is designed to continue to meet or move towards desired resource conditions. Forage utilization is allowed at levels acceptable under the Forest Plan and is based on a variety of factors.

Rationale for Dismissal: The elimination of domestic livestock grazing from the Project Area is outside the scope of this special uses proposal. The effects of the Proposed Action and each alternative will be analyzed with the effects of ongoing grazing in and near the project area as appropriate. These cumulative effects will be analyzed and disclosed in the Chapter 3 analysis. For the reasons cited above, this Alternative was eliminated from detailed study.

Alternative 10 - Impose bypass flows and authorize the diversion on the National Forest with a Special Use Permit

Under this alternative, the Forest Service would instruct the private landowners to maintain a specific bypass flow for the diversions located on the National Forest, as part of authorizing those uses under a special use permit. No other actions on the National Forest would occur, including irrigation of the intermingled parcels of NFS lands.

Rationale for Dismissal: The Proposed Action is to authorize diversion facilities on the National Forest (via a special use permit) including bypass flows. Thus, we are considering this Alternative in the Proposed Action. Similarly, the No Action alternative considers the effects that could occur if irrigation of the intermingled parcels of NFS lands were not authorized.

Implementation

If the Proposed Action is approved and permits issued, reconstruction activities associated with the diversion facilities on NFS lands would not be expected to begin any earlier than the late summer or fall of 2014.

Comparison of Alternatives

Table 2 provides a summary of the effects of implementing each alternative relative to the issues and measures identified. Chapter 3 contains further description and discussion of these conclusions, as well as additional contrasts of the potential effects to other resources and uses.

Table 2: Comparison of Alternatives.

	Alternative 1 (No Action)	Alternative 2
Issue: Fish, Water, and Aquatic Habitat		
Stream flow scenerios (see Figures 11 and 12)	Less than 18 cfs would pass the POD during 75% of all irrigation days; dry channel conditions would occur during 18% of irrigation days.	More than 18 cfs would pass the POD during 81% of all irrigation days; 12 cfs would be the absolute minimum flow if an exceptional drought were to occur.
Indicator: Estimates of available and accessible habitat	For Chinook salmon, suitable habitat within 8 miles of the Salmon River would be diminished from existing conditions; 4.5 miles of lower Pole Creek would remain unsuitable and unavailable; 7 miles of upper Pole Creek would remain inaccessible.	For Chinook salmon, suitable habitat within 8 miles of the Salmon River would be further improved over existing conditions; 4.5 miles of unsuitable habitat within lower Pole Creek would be made available and suitable for use, including by spawning adults; 7 miles of upper Pole Creek would be made accessible.
Indicator: anticipated water temperature differences upstream of the diversion and at the mouth	Water temperature in lower Pole Creek would be substantially diminished from the existing marginal condition; Each season temperatures would ramp up exponentially as streamflows approach dry channel conditions.	Water temperature in lower Pole Creek would be substantially improved from the existing marginal condition; With typically 3 times the flow passing the POD as is stipulated in the current minimum flow agreement, water temperatures would be expected to approximate natural conditions.
Issue: Scenery Resources		
Indicator: Changes to mapped VQO on Private Lands	Mapped VQO objectives are met for all but the irrigation pivot spray component. The spray temporarily affects the Partial Retention VQO to a reduction of 1 classification of Modification – or 'Impairment'. This reduction of only 1 classification meets per Forest Plan direction.	Mapped VQO objectives are met for all but the irrigation pivot spray component. The spray temporarily affects the Partial Retention VQO to a reduction of 1 classification of Modification – or 'Impairment'. This reduction of only 1 classification meets per Forest Plan direction.

CHAPTER 3 – AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter summarizes the existing environment of the affected project area and discloses the potential effects of implementing the alternatives presented in Chapter 2. The analysis that follows primarily considers effects in relation to the key issues identified in Chapter 1, but also the effects to the key values intrinsic to the purpose of the Sawtooth NRA.

Typically, within each topic, the conditions of the particular resource that may be affected (i.e. affected environment) is described first, including relevant Forest Plan direction, followed by consideration of the potential effects to the particular resource. To avoid redundancy, some analysis builds on that which precedes it. As such, the analysis is intended to be considered in its entirety for a full understanding of the potential effects.

Within each topic, the *No Action* alternative is described first, providing a baseline for evaluation and comparison of the Action alternatives that follow. The analysis presented is a summary of the specialist report findings. The project record contains the reports in full, as well as a “substantial impairment review” which provides specific consideration of compliance with PL 92-400.

Overview of Affected Area

The generally affected area includes the private and NFS lands laying either side of the lower reach of Pole Creek, northeast of Sawtooth City, Idaho (Figure 1). The actions associated with the Proposed Action include specific areas of NFS lands along Pole Creek just as it prepares to leave NFS lands, and within isolated parcels of National Forest within private lands either side of Pole Creek to the west (Figure 2). The connected actions extend the directly affected area to the private lands either side of Pole Creek, as well as east of the Salmon River near their confluence. The landscape features of the affected area are primarily derived from past glaciation. Former glaciers, spilling from several tributaries, concluded their advances in the vicinity, leaving behind a broad valley bottom of outwash plains bounded by the rolling topography of the former terminal moraines. This contrasting topography is most dramatic along Pole Creek within the affected area. The topography then largely dictated the native vegetation within the affected area – primarily sage/grass expanses, with specific stands of conifer or aspen in protected areas of former moraines, while willow dominated riparian bottoms historically bounded the Pole Creek and the Salmon River. The native sage habitats have been removed through much of the affected area for agricultural purposes, and similarly willow are now absent along lower Pole Creek.

Highway 75 passes directly to the south and west of the affected area, and the Valley Road directly to the east. The potential indirect affects for specific resources expand this core affected area as described in the sections that follow.

Issue: Fish, Water, and Aquatic Habitat

The stated purpose of the proposed Pole Creek Diversion Authorization is to authorize occupancy and use of private facilities on National Forest System (NFS) lands associated with an irrigation system originating from Pole Creek in a manner that complies with law, regulation, and Forest Plan direction. Irrigation demands can obviously influence instream and streamside water dependent resources, and meeting the needs of both is challenging. The need to also provide for these water dependent resources within such authorizations is recognized specifically within the Forest Plan and within the purpose and need of this action. To that end, operational instream flow management objectives are included in the action, as derived via collaborations between the land owners and technical specialists. Nevertheless, an issue with respect to these objectives within the proposed action was identified:

Operational flow objectives, as described in the proposed action, for Pole Creek could affect aquatic habitat and fish, including the quantity and quality of downstream habitats, and the accessibility of upstream habitats.

The potential effects are considered both qualitatively and quantitatively and reflected within the summary measures: *estimates of available and accessible habitat, and; anticipated water temperature differences upstream of the diversion and at the mouth.* The analysis will generally consider the conditions and potential effects to streams, water quantity and quality, riparian conservation areas (RCAs), TES fish species and other aquatic fauna, in both quantitative and qualitative terms.

For the bulk of this analysis, the principle affected waters include Pole Creek from the proposed point of diversion (POD) near the Valley Road crossing, through the downstream reaches to its confluence with the Salmon River (~4.5 miles). The Salmon River would then also likely experience meaningful influence from the proposed action from the Pole Creek confluence downstream to its confluence with Alturas Lake Creek (~8 miles). For clarity in communicating an effects analysis, this stream network is referred to in 3 broad reaches (Figure 8): A) the short segment of Pole Creek from the POD downstream to the private property; B) Pole Creek through the length of the private property, and; C) the Salmon River from its confluence with Pole Creek downstream to its confluence with Alturas Lake Creek.

Sawtooth Forest Plan Applicable Direction

The Pole Creek Diversion Authorization falls within Management Area 2 – Upper Salmon River Valley. The Management Prescription Category (MPC) encompassing the project area is MPC 3.2 – Active Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Resources. The objective of this prescription is to actively restore or maintain conditions for fish, wildlife, and botanical species of concern or protection, or 303(d) impaired water bodies through a combination of management activities and natural processes (Sawtooth Forest 2012). The Pole Creek watershed is also a priority watershed for the Forest Plan Aquatic Conservation Strategy (ACS), and a high priority for the Watershed and Aquatic Recovery Strategy (WARS) with an *active* emphasis. The ACS (of which WARS is an element) provides direction to maintain and restore characteristics of healthy, functioning watersheds, riparian areas, and associated fish habitats. In essence, this strategy integrates many of the goals and objectives of both the Endangered Species Act and the Clean Water Act. The

federal action, and the connected actions anticipated on private lands, directly address these goals and objectives.

In addition to the clear restoration emphasis of MPC 3.2 and the ACS, many other goals, objectives and standards for riparian, water, and fish resources from the Forest Plan apply, such as those shown in Table 1.

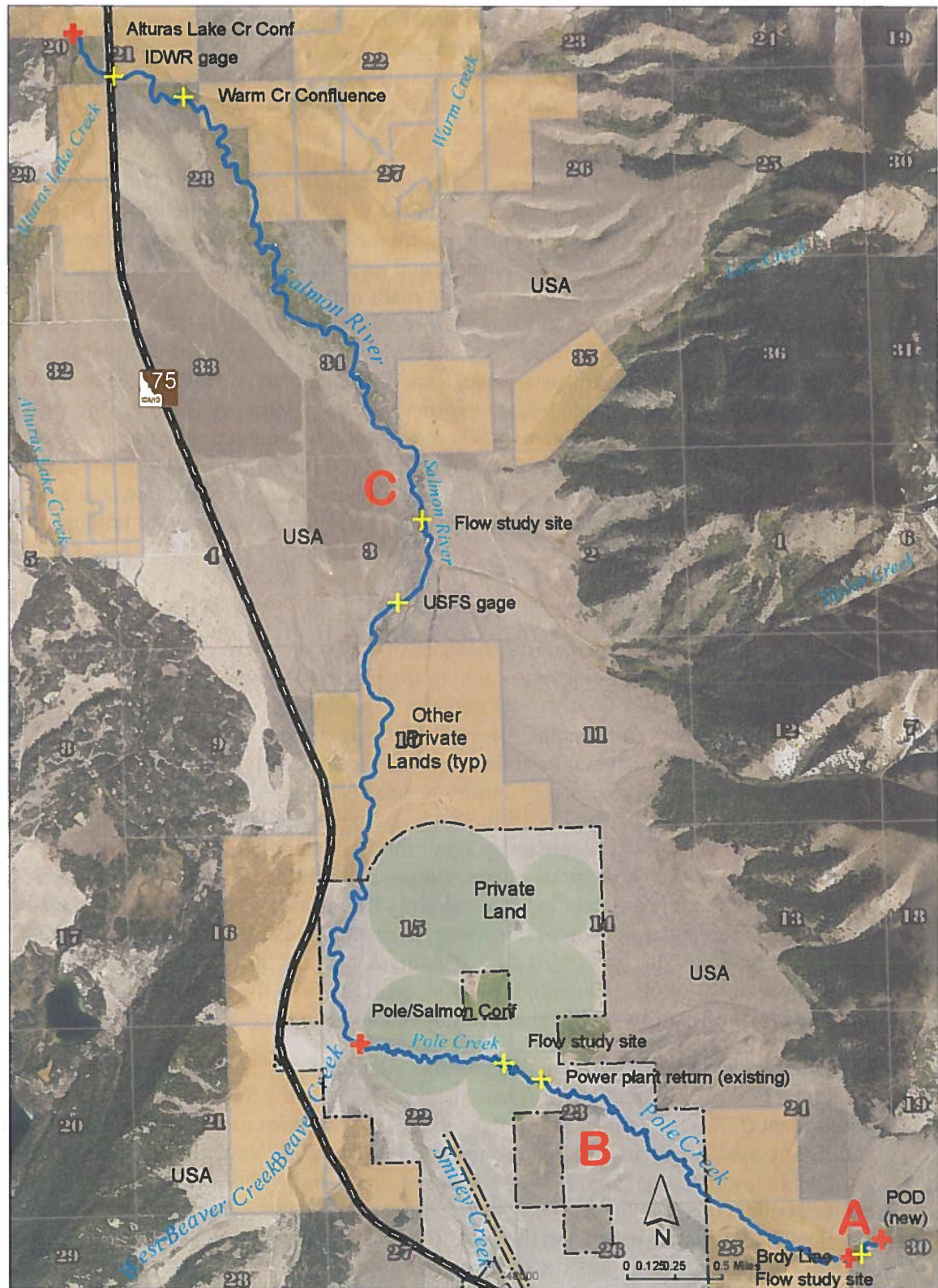
Affected Environment for Fish, Water, and Aquatic Habitat

The features of the Pole Creek drainage are primarily derived from past glaciation. The topography presents a classic glacial U-shaped canyon that expands dramatically at its mouth, spilling till both north and south in rolling moraines (Breckenridge, et al 1988). The proposed actions lie within the Depositional Land Group, and specifically on Dry and Wet Alluvial Landtypes (02 and 03); and Moraine Lands (05 and 06), as defined by Rahm and Larson (1972). These landtypes are characterized by gentle slopes and deep soils, with low inherent erodibility and moderate to high fertility. Precipitation comes primarily as snow in winter, and with spring rains and infrequent, but intense, summer thunderstorms.

The geologic parent material within the drainage can be characterized generally as sedimentary on the north side, and volcanic to the south. In relative terms, these geologies have much higher soil fertility, and are much more resistant to erosive forces than the granitic landscapes common in central Idaho. As would be expected, the depositional landtypes along the gently sloping valley floor appear to be the most stable and productive areas within the watershed. Natural vegetative cover is typical for the settings, with sage/grass expanses on the valley floor, with conifer forest stands on the sideslopes, and shrub/sedge wet areas lining the water courses. Floodplains serve as agents in streamflow regulation, providing channel bank storage and moderation to the extremes of the annual hydrograph. They also serve as buffers to the more hydrologically active lands above, and as filter areas for sediments spilling onto floodplains. Nevertheless, when disturbed and exposed to the forces of water, these bottomland areas remain fragile.

Through much of the past century the vicinity near the Pole Creek diversion was a hub for landscape uses and administration. The Pole Creek Ranger Station was constructed and staffed shortly after the reservation of the Sawtooth National Forest. It was situated at Pole Creek Meadow near the crossing of the then already well-established sheep driveway. In the early 1900s the driveway was a path of severely degraded conditions, and remained so for many decades. With a consistently reducing trend in sheep numbers using the driveway in the decades following the establishment of the Forest (Sawtooth Forest 1941), conditions began to improve on NFS lands within the drainage, and eventually even along the driveway. Today mature willow communities occur along most formerly affected stream channels within the Pole Creek drainage. Nevertheless, some evidence of the past intensive use remains along the driveway, particularly in the Rainbow Creek area. Currently, the area near the Pole Creek diversion lies within the Salmon-Pole-Champion sheep allotment and up to four bands of sheep cross the driveway in the spring and fall. Landscape conditions within the area would suggest that current sheep use is allowing slow recovery of formerly degraded conditions, particularly along the driveway.

Figure 8: Reference map of key stream locations discussed within the effects analysis, and reaches (A, B, and C).



Some road building and timber harvest occurred within the watershed during the 1950s and 1960s. Though more extensive than typically occurred elsewhere in the upper Salmon, in relative terms it remained very minor (<100 acres). Many of the roads associated with these former sales subsequently reverted to native conditions but some continued to be used by visitors. Vegetation treatments within the watershed are currently limited to personal fuelwood harvest, and conservation hand treatments within whitebark and aspen communities.

Both motorized and non-motorized recreation is comparatively popular within the drainage. In recent decades motorized dispersed camping (e.g. RVs) has become increasingly popular, including the rapid increase in accompanying motorcycle and ATV uses. Numerous campsites became established at streamside, and user-created motorized fords through Pole Creek were common. A web of unauthorized roads and ATV trails existed within the watershed, and many were redundant in their routes and destinations. The 2012 decision for the *Pole Creek Travel Management Project* considered this network of unauthorized roads and trails. Where suitable and sustainable, some were adopted and authorized as motorized trails, but most were closed and treated in order to restore native conditions. The closures prescribed within the decision have largely now been implemented resulting in the closure and rehabilitation over 12 miles of unauthorized routes, including 10+ large and small fords through Pole Creek or tributaries. Unsustainable streamside dispersed campsites were also closed. Similarly two barrier culverts within Pole Creek were converted to bridges in 2013 to facilitate consistent fish passage.

Streams and Streamside Conditions

Pole Creek is one of the upper-most tributaries of the Salmon River, and originates along a divide shared with headwater sources of both the East Fork Salmon River and Big Wood River systems. The majority of the stream network within the watershed lies upstream of the Pole Creek diversion. The existing diversion lies within the reach where Pole Creek emerges from its canyon. The reach begins at the head of Pole Creek Meadow near the confluence with Rainbow Creek approximately 2 miles upstream of the POD. The reach is characterized by a meandering channel, roughly 15 feet wide, within broad shrub-sedge dominated meadows, pinched in short segments by small former glacial moraines. The existing diversion sits at one of these pinch points. Downstream of the diversion, conditions remain similar, except that the gradient increases slightly as it passes down the former glacial outwash fan. The upper portion of this lower segment passes between high walls of the former terminal moraine, yet Pole Creek remains largely unconfined. Approximately 2.5 miles downstream of the diversion, the stream emerges from the moraine and meanders the remaining 1.5 miles to its confluence with the Salmon River.

Current population and environmental baseline conditions for Pole Creek are described within the POLE local population within the Sawtooth Valley Subpopulation Biological Assessment (Sawtooth Forest 2014). It concludes that habitat conditions are variable within POLE, but consistently improving throughout the watershed. Nevertheless, past intensive uses, including sheep grazing, timber harvesting, irrigation withdrawals, and mining have reduced habitat conditions that linger today. Most of these uses have ended, or occur at much less frequency or intensity than in the past. The most severe modifications persist on private land, including irrigation, grazing, and a barrier culvert.

A temporary electric fence was erected along Pole Creek through the length of the private land to its mouth in 1989 (upper) and 1990 (lower). Eventual conversion to more permanent facilities was anticipated. However, these temporary fences remains today except where conversions to permanent fencing were initiated in 2013. Though the tentative electric facilities have been routinely breached by livestock through the years, the fencing has proved effective in protecting and restoring streamside habitats. The upper segment of Pole Creek within the fence (i.e. the 2.5 miles downstream of the POD) has seen a return of a streamside riparian shrub community that was essentially absent before the fence.

The electric fence along the lower segment of Pole Creek on private land has had even greater challenges. Along the lower reach, the wheeled towers of two of the existing pivots currently cross Pole Creek as well as the exclusion fencing on either side. Despite these challenges, and with the committed landowner maintenance, the fencing has resulted in substantial stream improvement. Pole Creek in all segments on private land is typically bounded by banks of resilient sedge communities. When evaluated in 2000, all segments were considered to have greater than 90% stability. Nevertheless, in this lower segment pivot towers cross Pole Creek in ~32 locations. In a few locations these crossings are via narrow “bridges”, but most simply ford through the channel. As the pivots pass over the stream, they also “irrigate” these streamside communities, which in-part, likely explains the robust vegetation. However, it may also be this dense sedge community that has excluded the reestablishment of a riparian shrub as has occurred in the upper segment. This effect has been speculated by experts regarding other irrigated streamside communities within Sawtooth Valley (C. Hoag, retired NRCS plant ecologist, per comm).

The Salmon River shows its first real potential as a river beyond its confluence with Pole Creek, growing quickly to widths averaging 25 feet by the time it meets Alturas Lake Creek. Smiley Creek joins the Salmon River just a mile upstream of Pole Creek, and Beaver Creek intersects directly opposite. The first 1.5 miles below Pole Creek are within private lands and open to a pasture grazing system (Figure 8). Impacts are common, but the riparian growth conditions are excellent within the wet meadow environment, and offset much of the potential effects. Downstream of this property, essentially the entire length has been excluded from grazing with fencing since the early and mid-1990s. This primarily relates to the reaches within the former Busterback Ranch, purchased by the USA in 1992, but most of the short segments remaining with private ownership have also been excluded. Nevertheless, the river through much of this segment continues to exhibit compromised functionality. Some is inherent to the dry, naturally losing reach (see *Water Quantity and Quality*), through which it flows. But much is also lingering influence from the intensive use as a cattle/sheep ranch through the previous century.

Current population and environmental baseline conditions for the Salmon River are described within the CVWT local population (which also includes the lower end of the Alturas Lake Creek watershed) within the Sawtooth Valley Subpopulation Biological Assessment (Sawtooth Forest 2014). It relates that these mainstem valley bottom segments have experienced some of the most substantial effects to aquatic habitats in the upper Salmon during the last century. However, a substantial reversal of these most compromised conditions has been realized within recent decades with the many restoration efforts implemented within CVWT. Nevertheless some intensive land use persists on private lands.

Water Quantity and Quality

Stream Flow

Springs appear to constitute a substantial component of the Pole Creek headwater sources. During the high flow period of May through June the unit runoff (cfs per square mile) is often less than other basins in the Sawtooth Valley and peak flows often appear attenuated. As flows recede however, the unit runoff reverses to become considerably higher than other non-spring fed basins. This suggests a large percentage of the snowmelt is captured in groundwater in the upper watershed and slowly released after the peak has receded via springs. Streamflow measurements indicate that during the months of August through October, Pole Creek at the Salmon River confluence, while having significantly less drainage area than the Salmon River, has the potential to provide as much as twice the natural stream flow (USFS et al 2011). These spring sources occur in the headwater/canyon segments of Pole Creek. Once Pole Creek leaves its canyon, and enters the valley floor, studies observe that there is typically a net loss from the creek into the underling valley aquifer to its confluence with the Salmon River, as detailed further below.

USGS has operated a streamflow gage on Pole Creek since 2003. The gage is currently located approximately 500 feet upstream of the existing POD. The gage has typically operated May through October annually, and reflects the unimpaired natural water supply at the location. This period of record includes both very wet and very dry years as inferred from corresponding records at other long-term gages in the region. An indication of the range is contained within the exceedence ranking for the mean annual flow values for the nearest long-term USGS record at Valley Creek 13295000, 20 miles north. They range from 21% for the wet 2012 season, to 90% for the 2005 drought. Figure 9 displays the minimum, maximum, and average daily records recorded at the Pole Creek gage (13292380) during the period.

IDWR has operated a similar gage just downstream of the POD in Pole Creek since 2005. The USFS also operates a gage on the Salmon River near the former Salmon River S45 diversion (Figure 8). Both these gages record flows influenced by upstream irrigation withdrawals. Records also exist for a USGS gage also operated near the S45 diversion 1940-1953, and an IDWR gage operated on the Salmon River just above the confluence with Alturas Lake Creek.

A number of seepage runs have been conducted within the action area. A seepage run is a term describing a series of distributed water measurements of the stream(s) to account for water gains and losses, and may involve within-year iterations to account for use and seasonal influences. Comprehensive runs were conducted in 2006 and 2007 by IDWR and in 2009 by USGS. The USFS conducted similar runs in 2011, as well as runs specific to Pole Creek in 2012 and 2013. For Pole Creek, the consistent results demonstrate a losing reach from the POD to the mouth (~4 to 27%).

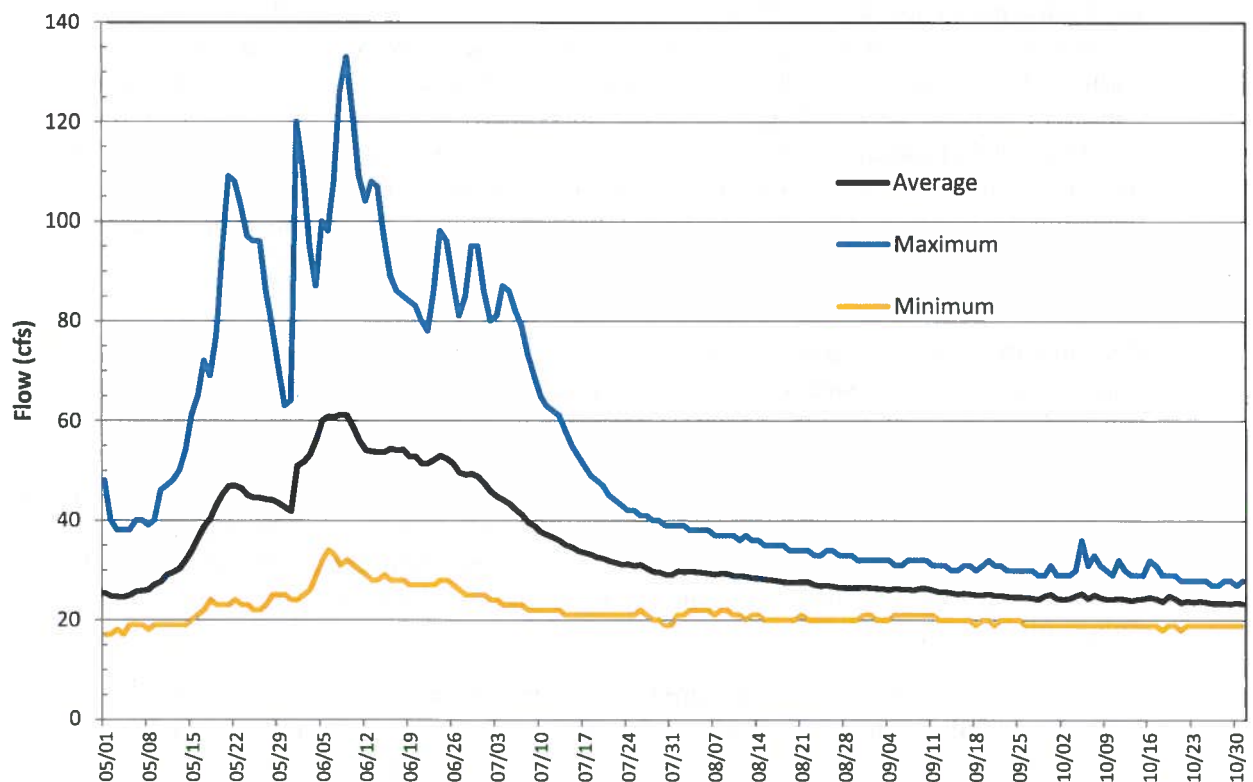
Seepage run data for the Salmon River from all years indicate a net gain between Pole Creek and Alturas Lake Creek (from 12 to 24 percent). However, longitudinally, the results are variable, typically showing an initial gaining reach from the Pole Creek confluence downstream, until transitioning to a losing condition by the time it passes the USFS gage at the former S45 diversion. This net loss to groundwater (from a few percent to as high as 33%) in this long central reach typically persists until the river nears its confluence with

Warm Creek, where gains appear to initiate. The river character quickly changes just downstream, where the contributions from Alturas Lake Creek and groundwater typically triples summer river flows. Other tributaries and consistent groundwater gains continue to build downstream to at least Huckleberry Creek (where seepage runs have ended).

An indicator of the combined insight provided by these various data sources (i.e. gages and seepage runs) is illustrated in Table 6. It displays measured and calculated values of what flows might have been at various locations downstream of the POD on August 15 in water years 2005 and 2008. Water years 2005 and 2008 were locally *dry* and *normal* years respectively. The methods and assumptions utilized in the results presented in Table 6 can be found with the effects analysis of the *Proposed Action*.

Bankfull discharge of Pole Creek is estimated to be ~100 cfs (USFS et al 2011). Bankfull discharge, in alluvial streams like Pole Creek approximates the flow that is the most effective discharge (as a function of magnitude and frequency) for mobilizing sediments (Emmett, W., Wolman, M.G. 2001). Mobilization of sediments is needed to maintain the aquatic ecosystem by scouring pools, flushing accumulated fine sediments, sorting spawning gravels, etc. Since 2003, flows of this magnitude have been recorded during three seasons within Pole Creek: 2003, 2006, and 2012.

Figure 9: Daily average and extremes at the Pole Creek USGS gage 2003-2013



Historic and Current Water Use and Infrastructure

Historically water withdrawal from seven or more diversions from Pole Creek resulted in lengthy segments of stream that were completely dry during the irrigation season. Two water rights were initially decreed for this use. A water right with a May 1, 1918 priority date allowed removal of up to 25.6 cfs total from Pole Creek, Smiley Creek, or the Salmon River. The decree further defined an additional right of 40.0 cfs that, in total, could be diverted from the same sources (Breckenridge Decree 1948). The topography and soil conditions likely dictated why nearly all of this 65.6 cfs of allotted use had been developed from Pole Creek. The descendants of these original rights (all in Basin 71) appear to be: 60, 62, 10882, 10883, 10918, and 10919.

The eventual history of these rights was not further researched for this assessment, but substantial reductions occurred. The core of the revisions likely occurred when the irrigation system was converted from flood to overhead pivots in 1982. Currently 22.6 cfs remains allotted from the original 1918 right between two landowners: 22.0 cfs and 0.6 cfs. These rights include irrigation of a total 1,053.6 acres as beneficial use from May 1 through October 31. The 22.0 cfs right also includes stockwater as a beneficial use. An additional use was attached to the 22.0 cfs right in 1988, which allows up to 7 cfs of the 22.0 cfs to be used for power production.

As motivated by the low water year of 2004, the Idaho Water Resource Board worked with the landowner to develop a minimum flow agreement for Pole Creek. The resulting agreement was first applied in 2005. The stated purpose of the Agreement was to provide additional water when needed to enhance the flow of Pole Creek to facilitate migration and rearing of salmon, steelhead, and bull trout. Specifically, the agreement stipulated that a minimum of 5 cfs would be spilled past the diversion during the irrigation season. In 2011 the minimum was increased to 6 cfs. Replacing this water demand at such times requires replacing the power that would have been generated with the hydroplant with a diesel generator. Annual minimum flow agreements have been in place during every season since 2005.

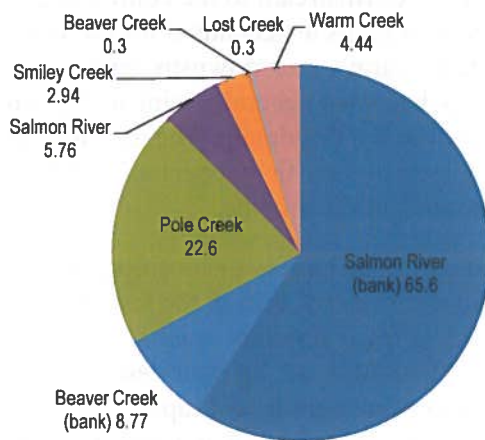
Prior to 1982, flood irrigation of limited acreage was supplied by 7 points of diversion from Pole Creek. The new system conceived and implemented by the landowner at that time consolidated the 7 diversions to a single upstream point which was capable of producing sufficient pressure to supply overhead pivots and drive an electrical turbine for the pivot power. By design necessity, the single point of diversion was consolidated at the small uppermost existing diversion, residing just east of the property boundary on NFS lands. These particular NFS lands had recently (1974) been transferred from the BLM with the creation of the Sawtooth NRA. The intended change was considered and authorized by the USFS (Sawtooth Forest 1981).

The small existing POD and ditch were revised comprehensively with the conversion in 1983. An intended fish bypass/ladder at the POD, and a screen within the head of the ditch, were incorporated the same year. Since then, the infrastructure has remained mostly unchanged except for the replacement of the fish screen in 1997. From the POD the ditch routes approximately 2 miles to a pool that serves as the entry point of water into the pressurized irrigation system. From this pool, water enters a pipe and immediately divides

between the power and pivot systems. A relief outlet for any momentary excess of water entering the system is also spilled immediately into a waste ditch just below the pond. When sufficient, this excess is spilled downditch on small areas for flood irrigation. Water that passes through the turbine immediately returns to Pole Creek ~1.5 miles above its mouth (Figure 8). The 5 pivot system covers ~1,000 acres.

Sixty-seven percent (74.37 cfs) of all administered surface water rights within the Salmon River drainage upstream of the

Figure 10: Irrigation water rights upstream of the Salmon River confluence with Alturas Lake Creek



River drainage upstream of the confluence with Alturas Lake Creek are currently leased to the State Water Supply Bank for instream flow purposes. These come from a Idaho Water Resource Board agreement with a landowner on Beaver Creek, and primarily from rights associated with the former Busterback Ranch acquired by the USA in 1992. Of the remaining actively used surface water rights, 62 percent are assigned to Pole Creek as discussed above. The remaining active rights (13.74 cfs) are supplied from Beaver Creek, Smiley Creek, and the Salmon River in the south (upper) end, and from Lost Creek and Warm Creek in the lower (north) end of the drainage. Figure 10 provides a summary of these rights.

Groundwater

Recent investigations associated with the groundwater conditions within the private lands in the vicinity (i.e. north of Pole Creek and east of the Salmon River) have observed the static groundwater elevation well below surface water elevations. At a test well drilled adjacent to Pole Creek near the core of the private lands, the groundwater surface ranged roughly between 50 and 70 feet below the surface water elevation, as recorded during the period September 2012 to October 2013 (Taylor 2012 and Wright 2013). At a test well drilled at the northwest corner of the private property along the Salmon River, the groundwater surface was approximately 48 to 56 feet below the river surface during the same period. These conditions are also reflected in another well drilled adjacent to the Salmon River in 1993 on the opposite (west) side, where the groundwater surface was estimated to be 45 feet below the ground surface (IDWR well driller's report). These results indicate that the surface water and groundwater systems are disconnected in these reaches during typical conditions.

As mentioned earlier, seepage runs indicate that a short reach just downstream of the Pole/Salmon confluence is a gaining reach. However, the well drilling results and the features expressed at the surface near the river indicate much of these gains are likely originating from sources to the west towards Beaver Creek. A test well drilled in 1983 near the Highway 75 crossing of Beaver Creek encountered groundwater at only 11 feet below the ground surface (IDWR well driller's report). Correspondingly, the wet meadow evident on aerial photographs sits to the west of the river.

Otherwise, groundwater beneath the vicinity of Pole Creek appears to be generally supplemented from surface sources, rather than the inverse. The groundwater is assumed to flow parallel with the valley bottom (i.e. north). The re-appearance of groundwater is indicated by gaining reaches of stream where the water table intersects the streambed and floodplain elevation. These gains then often accumulate over large areas/lengths of river, and are usually apparent on aerial imagery where floodplains support abundant vegetation. With limited well data, these are the best indicators available (J. Gurrieri, USFS Hydrogeologist, per comm). Seepage runs on the Salmon River consistently show the first gaining reach downstream begins no sooner than near the mouth of Warm Creek (~6 river miles downstream, Figure 8). Seepage results from this reach downstream to the confluence of Huckleberry Creek (~11 miles) have consistently shown gains unaccounted for directly from tributary contributions. Similarly, from the reach near Warm Creek downstream, the riverine character, as evident on aerial photographs, gradually becomes generally wide and green, indicating greater availability of subsurface water within the floodplain. The transit time of waters entering the groundwater system near Pole Creek to their first appearance at the surface near Warm Creek is unknown but likely requires many months.

Groundwater within this large alluvial valley is thought to be largely unconfined, though discontinuous confining or semi-confining zones appear to exist. Within the few IDWR driller reports for the area, one or more layers recording trace amounts or more of clay are typical, but always in a matrix of sand and/or gravel. Few of these, by their descriptions, strongly suggest a strong confining layer, yet “leaky confinement layers” appear likely (J. Gurrieri, USFS Hydrogeologist, per comm). The results of a pump test at a well near Pole Creek in 2012 indicates a semi-confining layer exists above the intake zone (Taylor 2012).

Water Quality

Idaho DEQ has assigned designated beneficial uses for all waters of the State. If a waterbody does not have uses specifically designated, then the *general uses* apply. All waterbodies within the project area are considered Undesignated Waters and are protected for Cold Water Biota and Primary or Secondary Contact Recreation. Within the project vicinity IDEQ has assessed water quality at one location on the Salmon River, 2 locations on lower Pole Creek, and at 5 locations upstream of the POD within the Pole Creek drainage, and concluded that beneficial uses were fully supported at all sites. No waters within the project area are included in IDEQs most recent 2010 Integrated Report of impaired waterbodies (i.e. 303 (d)) (IDEQ 2011).

Water temperature is the aspect of water quality that is most likely to be influenced by the proposed action. Sediments conditions could also be affected, but primarily in temporary terms. These are discussed below. Other aspects of water quality are summarized within the population and environmental baselines for POLE and CVWT local population within Sawtooth Valley Subpopulation Biological Assessment (Sawtooth Forest 2014).

The influence to instream water temperature from the withdrawal of water for irrigation in the upper Salmon has long been recognized (Munther 1975; Petrosky and Holubetz 1986). In a characterization study within the Sawtooth NRA in 2001, Rothwell and Moulton observed several tributaries where the removal of water from the stream channel appeared to accentuate the natural tendency of water within the tributaries to warm as it enters and passes

over the valley floor. However, the proportion attributable to a reduction in the natural flow was beyond the scope of the study and was not determined. While mechanistic explanations regarding how air temperatures affect stream temperatures are well described within the literature, less is understood regarding the more specific relationship between discharge and stream temperatures because it has often been assumed that this effect operates indirectly by increasing the sensitivity of streams to air temperature influences. Isaak et al (2011) tested this question and found no clear relationship between discharge and stream temperature. They encourage further investigation of the question while speculating that discharge may be in reality a surrogate for water velocity such that higher discharges are indicative of decreased travel time through a reach and less opportunity for streams to absorb local heat influences.

The results of the local 2001 characterization study, and many other field observations by the author suggest that, regardless of the mechanism, the warming effect accelerates with diminishing flows. This assumption is consistent with the speculated influence of water velocity on stream temperature (Isaak et al 2011), since as discharge drops, velocity decreases logarithmically (Leopold and Maddock 1953). That is, water within the channel experiences an increasing influence from the relative friction of the channel bed and banks as stage diminishes. This relationship has been observed in flow data sets within Pole Creek.

Flow emerging from the tributary canyons, such as Pole Creek, typically carry substantial cold water inertia. When this volume is reduced substantially by withdrawals, the effects associated with the increased residence time (i.e. decreasing velocity) of water passing through the open valley floor, in a seemingly oversized channel, accelerate. In late August 2001, with 90 percent of the natural flow diverted, instream water warmed from 15°C above the diversion, to 23°C approximately 2.7 miles downstream (just upstream of return flows from the hydropower plant) (Rothwell and Moulton 2001). Streamflow was not recorded at this downstream temperature station, but was likely well below 5 cfs, since less than 2 cfs was measured bypassing the diversion upstream. No continuous record of water temperatures in Pole Creek have been collected since 2001, nor have flows been so low since 2005 when the first minimum flow agreement was implemented. However individual temperature measurements made during seepage runs in Pole Creek appear consistent with the premise of accelerating temperatures with decreasing flows/velocity. Temperatures jump at flows less than 7 cfs but never to levels observed in 2001 (17°C max). When flows were greater than 10 cfs, water temperatures were recorded at less than 11°C in lower Pole Creek downstream of the diversion, with the exception of two measurements in 2009.

Impacts to water temperature are also exacerbated in situations where heated flood irrigation waste waters return to streams. At the Salmon River S45 diversion in 1974, waste water returns were measured at over 6°C warmer than river temperatures (Munther 1975). Similar heating likely occurs within the long ditchline that supplies the Pole Creek irrigation system, but with the overhead sprinkler irrigation system, no excess irrigation water returns to the streams via surface flow. However, the portion of the current water that passes through the hydropower turbine immediately re-enters the creek. In 2001 two paired thermographs (one just above, and the other just downstream of the hydro return) showed essentially no difference (Rothwell and Moulton 2001). That is, both appeared to have substantially

elevated water temperatures. Pole Creek likely gained heat from reduced instream flow, and that coming from the ditch, from similar exposure.

Within the Salmon River downstream of Pole Creek, with the natural and land use related influences, water temperatures are also elevated. Throughout the 2001 season, temperatures in the Salmon River downstream of the Pole/Beaver Creek confluence were routinely elevated 6 to 8°C above the baseline condition ~2.5 miles upstream on NFS lands. However, overall temperatures were considerably cooler than within central Pole Creek, with only a brief period exceeding 20°C. During the similarly hot, dry season in 2013, water temperatures within the Salmon River roughly 2 miles downstream of the 2001 site were comparable, with weekly average maximum temperatures just 1.4°C cooler than in 2001. No comparable upstream temperature dataset was collected in 2013.

Sediment conditions have not been comprehensively considered within Pole Creek since 1990 when the condition of in channel percent fines was considered moderate through much of Pole Creek. Surface fines were 14% and 20% in two reaches in lower Pole Creek when assessed in 2000. These results are comparable to natural conditions (Overton et al 1995). Similarly, at a monitoring site upstream of the private land in 2005, percent fines in pool tailouts was very low (7%). The absence of granitic parent material within the watershed likely benefits this condition. Nevertheless, intensive past uses and disturbance within the watershed, from mining, sheep grazing, and associated roads, likely contributed considerable sediments. Many of these influences have been substantially reduced or resolved in recent decades, possibly influencing an improving trend in sediment conditions. Where assessed, similar fine sediment conditions appear to extend downstream within the Salmon River. In 1992 surface fines were less than 10% in the four reaches downstream of Pole Creek.

Aquatic Fauna

Fish

Three of the four fish species that are federally listed for protection under the Endangered Species Act within the upper Salmon River, are associated with streams within the project area: Snake River Chinook salmon, Snake River steelhead, and Columbia River bull trout. Sockeye salmon within the upper Salmon are associated with lakes and therefore never occupied habitats within the Salmon River upstream of its confluence with Alturas Lake Creek. Other fish species known present include: westslope cutthroat trout (FS sensitive), sculpin, and nonnative eastern brook trout. The ESA status of species of special concern are listed in Table 3.

All of the Salmon River from its confluence with Alturas Lake Creek to its confluence with Pole Creek (~8 miles, reach C on Figure 8), as well as all of Pole Creek from its mouth to the POD (~4.5 miles, reaches B and A, Figure 8) has been designated critical habitat for the three ESA protected fish. Designated critical habitat extends upstream from the POD 6.9, 6.7, and 7.0 miles for Snake River Chinook salmon, Snake River steelhead, and Columbia River bull trout, respectively.

Table 3: Endangered Species status of species of special concern within the project area

Common Name	Species	Federal Register Listing	Current Listed Status	Federal Register Critical Habitat Listing
Snake River sp/su Chinook salmon	<i>Oncorhynchus tshawytscha</i>	57 FR 14653, Apr 22, 1992, June 28, 2005	threatened	58 FR 68543, Dec 28, 1993 64 FR 57399, Oct. 25, 1999
Snake River steelhead	<i>Oncorhynchus mykiss</i>	62 FR 43937, Aug 18, 1997, Jan 5, 2006	threatened	70 FR 52630, Sep 2, 2005
Columbia River bull trout	<i>Salvelinus confluentus</i>	63 FR 31674 June 10, 1998	threatened	75 FR 63898, Oct 18, 2010
westslope cutthroat trout	<i>Oncorhynchus clarki lewisi</i>	65 FR 20120 Apr 14, 2000	not warranted	n/a

Native salmonids are generally rare within the project area. Non-native eastern brook trout occupy most available salmonid habitats within the Salmon River drainage upstream of Alturas Lake Creek, particularly within the tributaries. Sampling within Pole Creek has consistently observed brook trout, particularly within the mid and lower drainage. High brook trout densities may limit the growth and survival of juvenile Chinook, steelhead, and bull trout. Brook trout are known to aggressively defend feeding territories and out-compete anadromous salmon (Hutchison and Iwata 1997). Similarly, Rieman and McIntyre (1993) concluded that brook trout presence and density were important variables explaining the observed distributions and number of bull trout among streams. IDFG biologists conclude that their presence at current densities within Pole Creek may be the most significant factor affecting bull trout presence (Warren 2013). Only 2 sub-adult bull trout have been observed in sampling within the drainage in recent decades (both recently in 2012 and 2013). Brook trout are also known to hybridize with bull trout and competitively exclude them from suitable stream habitats (Benjamin et al. 2007). Historically, the cool water habitats upstream in Pole Creek were likely used for spawning and rearing by bull trout. The warmer transitional stream habitats within Pole Creek on the valley floor, and certainly the Salmon River within the action area, were likely used historically only as transitory habitats, connecting populations throughout the valley.

Native cutthroat trout, and even juvenile Chinook salmon and steelhead, now appear to be present in most years within the Pole Creek watershed, but the number of individuals remains very low. Cutthroat have typically been observed in the upper watershed, and juvenile Chinook salmon and steelhead have consistently been observed near the mouth by IDFG since 2004 (Table 4). In 2013 they were observed as far upstream as the existing POD. Given the high densities observed in this sampling just downstream of the POD, and their absence at any sampling point upstream, the POD appears to have obstructed their passage. This barrier condition to juveniles had been assumed previously. The number of juveniles using the habitat and their upstream extent is likely influenced by many factors including, fundamentally, the number and proximity of adult spawning. Juveniles emerging from redds in both Pole Creek and the Salmon River would likely be inclined to use Pole Creek for early

rearing as refugia from mainstem flows and temperatures. As flows decrease, and water temperatures increase, juveniles typically continue moving upstream seeking preferred habitat conditions. With the drought conditions in 2013, these motivations were likely present.

Table 4: Fish densities (per 100m²) in IDFG monitoring transects in Pole Creek within or near the action area.

Area	Year	CH	ST	BT	WCT	BK	Notes
Pole in meadows (~0.7 miles upstream of POD)	2004	0	0	0	0	2.3	
	2012	0	0	0	0	2.9	
	2013	0	0	0	0	4.9	
Pole below existing diversion	2004	~	~	~	~	~	
	2012	0	0.6	0	0	2.5	
	2013	128.9	1.3	0.3	0	7.3	snorkeled just below POD
Pole near hydro return	2004	38.7	1.1	0	0	3.9	
	2012	0	0.5	0	0	2.7	
	2013	3.7	0	0	0.4	0.2	
Pole near mouth	2004	3.2	0.3	0	0	0.3	
	2012	1.8	0	0	0	0.9	
	2013	1.3	0.8	0	0	0.5	

Little direct sampling within the Salmon River has occurred since the late 1990s when IDFG concluded comprehensive research objectives within the upper Salmon (Kiefer and Lockhart 1994). During this period, where sampled within this segment of the Salmon River, juvenile Chinook salmon were common and generally the most abundant salmonid at all sample sites. Some of the research objectives occurring at the time involved small outplants of spawning adult Chinook in the tributaries upstream, and the contribution of their progeny to the distribution and abundance of juveniles is unknown. Mountain whitefish were also plentiful within the sampling, and brook trout were observed at all sites. Juvenile steelhead and bull trout were essentially absent (2 and 4 individuals observed respectively). Though more recent sampling is minimal, these same patterns would be expected to have held in habitat that is thought to be improving through the period. If anything, an even greater abundance of juvenile Chinook would be expected with the return of consistent flow and spawning within the reach since the late 1980s.

Since the ESA listing, Chinook salmon spawning had not been observed in Pole Creek, including in the annual aerial overflights conducted by IDFG, until 2010. The annual IDFG flights occur annually over established index segments throughout the Salmon River basin, typically during the first week of September. Additional spawning can and does occur outside these temporal and spatial parameters of the IDFG index flights. Four index segments apply to the general area: two within the Salmon River, and two within Pole Creek, and are reported in Table 5.

Within the lower index segment of the Salmon River, the actual mapped distribution of these 10 years of redds, shows an increasing preference moving downstream. This is consistent with what may be expected from the flow results of the seepage runs, with the transition between a losing reach (upper end) and gaining reach (lower end). Chinook salmon consistently demonstrate a preference for upwelling conditions for redd construction (Healy 1991). Similarly, in the upper index segment on the Salmon River, a preference is also

apparent for the upper end where a gaining reach is also consistent in the seepage runs. In Pole Creek, the recent spawning has all occurred in the lower 1.5 miles near the mouth.

Table 5: IDFG results of annual aerial Chinook salmon redd surveys 2004 to 2013.

Index Segment	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Salmon River from Alturas Lake Creek to former S45 diversion (NS-15c)	6	15	16	43	13	10	1	7	8	12
Salmon River from former S45 diversion to Pole Creek (OS-5)	2	7	11	10	0	3	0	1	0	0
Pole Creek mouth to diversion (NS-13a)	0	0	0	0	0	0	2	1	1	0
Pole Creek diversion to head of Pole Meadow (NS-13b)	0	0	0	0	0	0	0	0	0	0

Habitat conditions are variable throughout Pole Creek and the Salmon River, but overall are still considered *functioning at risk* (Sawtooth Forest 2014). Conditions have improved considerably within recent decades from both passive and active treatments and changes, and quality habitats can now be found throughout the subject reaches. Nevertheless, key factors relating to flow and habitat connectivity continue to limit the habitat potential. The *Streams and Streamside Conditions* section provides further description of these habitats. More specific information can also be found regarding the habitat conditions, as well as the distribution and status of fish within the project area, in the population and environmental baseline descriptions for POLE and CVWT within Sawtooth Valley Subpopulation Biological Assessment (Sawtooth Forest 2014).

It has long been recognized that the upper reaches of the Salmon River contain unique and very high quality natural production habitat (Petrosky and Holubetz 1986). The significance and potential of Pole Creek specifically within this production potential has also been recognized. Scott et al. (1981) considered Pole Creek the “highest quality fishery habitat within the SNRA and has great potential to accommodate spawning of anadromous fish.” They estimated that, under full seeding, Pole Creek downstream of the diversion (same as NS-13a above) would support 250 Chinook redds and 200 steelhead redds. Upstream of the diversion they estimated 375 Chinook and 300 steelhead redds could be supported by the available spawning habitat. Similarly, downstream of the former Salmon River S45/46 diversions (same as NS-15c above) they estimated habitat for 600 redds was available. More recent interagency consideration of the upper Salmon, and Pole Creek’s place within it, came to similar conclusions (USFS et al 2011). It has also been recognized that benefits to flow within Pole Creek would also provide additional support to the Salmon River downstream (USFS et al 2012).

For decades the Salmon River was routinely dewatered by mid-summer by withdrawals at the S45 and S46 diversions for irrigation of the former Busterback Ranch. This routinely precluded access for adult Chinook to an estimated 32.5 miles of production habitat. Many strategies were explored to remedy this condition. A rapid sequence of events in late 1991 lead to the acquisition of the ranch by the United States. Water formally used for irrigation has remained instream ever since. Though the potential production for the habitat remains diminished as a result of downstream regional influences and upstream water use (particularly in dry years) this change in ownership has largely addressed the objectives that so many had labored towards.

While agencies focused on the fundamental impact associated with use at the S45 and S46 diversions, in the early 1980s the Salmon Falls Land and Livestock Co implemented their fundamental change to the irrigation system at Pole Creek. Hopes were high that this positive change would see a corresponding response from native salmonids, and BPA made additional investments within the drainage including a fish screen, fencing, habitat improvements, and studies of potential supplementation strategies (Petrosky and Holubetz 1986). Nevertheless, the immediate response they hoped for did not materialize. In retrospect, their efforts occurred on the front end of the substantial decline in Chinook escapement to the upper Salmon River that bottomed in the mid-1990s. The minimal use of Pole Creek by adult and juvenile Chinook that they witnessed in the mid-1980s has only recently been achieved again.

Other Aquatic Fauna

Other native aquatic fauna also inhabit Pole Creek, though no formal surveys are known to have quantified, nor even documented their specific presence. In 1988 an observer in lower Pole Creek reported that “Although I didn’t see any mollusks or crustaceans, there were a good number of aquatic insects.” The nearest known specific survey of mollusk communities occurred nearby at Alturas Lake in 2005. The survey was part a baseline assessment of mollusk communities within the outlet streams of four of the principle valley bottom lakes within Sawtooth Valley. Thirteen native gastropods were identified and four native bivalves (Lysne et. al. 2011). The authors concluded the results suggested a relatively rich molluscan community within the Sawtooth NRA. Of the 17 native species they observed, 16 are considered “secure” within their current distributions, and 1 (western pearlshell, *Margaritifera falcata*) is considered only one status lower with “apparently secure” (naturereserve.org). Western pearlshells are known to occupy stream systems similar to Pole Creek within the Sawtooth NRA, and are also known to be sensitive to environmental changes, so they will be the addressed here as an indicator and surrogate for the non-fish aquatic community.

M. falcata is native to central Idaho, preferring cold clean creeks and rivers that support their host salmonid populations. Their reproduction and distribution relies on fish, as their larva live temporarily as parasites in the gills or on other external parts of fishes. Cutthroat trout, steelhead, and Chinook and sockeye salmon are all known to be native hosts. In their absence non-native eastern brook trout may serve as host, though it is speculated that native fish – that mussels coevolved with – might be better hosts than nonnative species because they are better adapted to local environmental conditions (Nedean et. al. 2009). The average life span of a western pearlshell is approximately 60-70 years which is essentially spent in the same locale. They generally prefer sand, gravel, or cobble substrates within stable areas of the channel. Of the influences to which they are sensitive, water temperature and dewatering are those applicable to current conditions and habitats within Pole Creek. Water temperatures above 27.3°C have been found to preclude successful reproduction in a similar genus (Spring Rivers 2007).

Environmental Consequences for Fish, Water, and Aquatic Habitat

The specific character of the stream flows described within the Affected Environment utilized the insight provided by the various past data sets (i.e. gages and seepage runs). Within these extensive data sets, for some characteristics, water years 2005 and 2008 were used to represent conditions during dry and normal water years, respectively. The analysis that follows utilizes and extends this same approach to effectively characterize the potential effects and contrast them between the alternatives. That is, the alternative treatments are applied to past water supply scenarios to illustrate and contrast the hypothetical conditions that might have occurred if they had been applied during specific past dates or periods.

Also, in order to comprehend the results of the effects analysis that follows, it is important to understand one particular nuanced point of difference between the two alternatives – that is, the contrasting outcomes and bounds of reach A (Figure 8). Under Alt 1 (No Action) the existing POD would be removed from NFS lands and natural flows restored to ~800 feet of stream between the existing POD and the private lands. Downstream through reach B on private lands substantial irrigation withdrawals would likely occur with effects extending to reach C. In contrast, the Proposed Action (Alt 2) would relocate the POD another ~800 feet *upstream* (~1,600 feet total on NFS lands) and implement operation flow criteria that would authorize, with limits, irrigation withdrawals, whose effects would extend downstream through reaches A, B and C. That is, in reach A, effects related to flow are either absent (Alt 1) or present (Alt 2), whereas the impacts vary by degree between the two alternatives in the downstream reaches B and C.

Alternative 1 - No Action

The No Action alternative would result in several temporary actions on NFS lands associated with the removal of the existing irrigation infrastructure. Several other changes would also be anticipated on private lands as a consequence of the removal of these facilities from NFS lands. They would involve temporary constructed changes to the irrigation infrastructure, and then ongoing use of the new irrigation system(s). Since these actions would be solely on private land, the scope and extent of the possible actions can only be speculated for this analysis, and coarse assumptions are necessary. It is assumed two fundamental objectives would motivate the possible private actions: 1) the existing 22.6 cfs of water rights would be fully utilized and maintained, and 2) approximately 1,000 acres would continue to be irrigated.

Direct & Indirect Effects

Measures

Estimates of available and accessible habitat: As described and defined for contrast within the analysis, during 75% of all irrigation days, flow in Pole Creek downstream of the POD(s) would be below 18 cfs, and during 40% of the years, extended periods of dry channel conditions would result. During these periods 4.5 miles of lower Pole Creek would be unsuitable for all aquatic dependent resources, and access to ~7 miles of upstream habitats for ESA protected fish would be impossible. On August 15, during an average water year, downstream of the POD, Chinook salmon spawning habitat would be reduced 66% from natural within Pole Creek and 19% in the Salmon River (Table 7).

Anticipated water temperature differences upstream of the diversion and at the mouth: With flow conditions expected to return to pre-2005 conditions, occasions of acute water temperatures would be expected, similar to those observed in 2001 when water temperatures in lower Pole Creek ranged routinely through the season between 20°C and 25°C (Rothwell and Moulton 2001). Within the Salmon River, temperatures would also be expected to be elevated slightly as compared to current conditions as a result of diminished flow/velocity.

Stream Flow

Under the No Action it is assumed 22.6 cfs would be withdrawn from Pole Creek during the typical irrigation season. The feasibility of hydropower generation is uncertain as it relates to the limited natural topography, as well as the uncertainties of land ownership and necessary ditch right-of-ways. In the absence of hydropower, commercial power would be required, and thus the mechanism for the current minimum flow agreement no longer applicable. Given the design challenges inherent with such a system, it is assumed that the full 22.6 cfs of existing water rights would be utilized from Pole Creek in a combined sprinkler and flood irrigated system.

This demand for Pole Creek water would return to pre-2005 flow conditions where Pole Creek waters would be required in full in some seasons. Based on a decade of gage records and various other actual measurements Table 6 displays a hypothetical example of what flows might have been during the irrigation season under the No Action conditions for August 15 in years 2005 and 2008. Water years 2005 and 2008 were locally dry and normal years respectively. The corresponding section under the Alternative 2 provides a more extended description of the methods and assumptions utilized to derive the characterizations provided here.

A substantial reduction from natural flows would obviously have occurred with withdrawals under the No Action Alternative, particularly during the 2005 drought year. Flows downstream of the POD would have dropped below 18 cfs in all years, and in 4 years the segment below the POD would have gone dry. In total, 75% of all irrigation days (as defined in the characterization as June 1 to October 15) would have been below 18 cfs, and 18% of the days would have resulted in dry channel conditions. Even during the wettest year the majority of summer days would have seen flows downstream of the POD below 18 cfs – during the driest year, essentially all would have been. Similarly, in only 1 year would channel maintenance flows above bankfull (~100 cfs) have occurred. In the absence of persistent higher flows, conditions would be further exasperated by the lack of bank and floodplain water storage to bolster late season flows. Finally, reductions to the water supply as a result of climate change would further deplete and constrict water available for instream purposes.

However, note that since the POD would be relocated downstream to private lands, the intervening segment on NFS lands would now experience natural flows. This length of restored natural flows would be no less than the minimum distance to the private lands (~800', corresponding to reach A in Figure 8). Downstream of the POD, conditions would resemble those discussed above, and as displayed in Table 6 for a distance of, or less than, 4.1 miles for Pole Creek (depending on the eventual POD locations), and ~8 miles of the

Salmon River. The chronic impacts to flow described within the affected environment would persist, returning to the even more reduced pre-2005 conditions.

Fish Habitat

Fish habitat/flow studies have been conducted in each of reaches A, B, and C. Figure 13 relates a graphical example of the relationships between available Chinook salmon adult and spawning habitat at the lower Pole Creek flow study site (reach B) for hypothetical flow scenarios on August 15 in 2005. The corresponding section under Alternative 2 provides a more extended description of the methods and assumptions utilized to derive the characterizations provided here.

Table 6 relates the calculated results for August 15 in 2005 and in 2008 – locally dry and normal years respectively with the withdrawal of 22.6 cfs. During either date, under the premises of the No Action, natural flows would have passed through reach A (~800') since the diversion facilities would have been moved to private land. In contrast, downstream on private land, as related in Table 6 on August 15, 2005 the channel would likely have been dry from the POD(s) to the mouth, and habitat for all fish would obviously have been absent throughout the reach. In 2008, on August 15, flow would have remained in Pole Creek throughout. The habitat model indicates that Chinook spawning habitat would have been reduced 66% from natural in 2008 in reach B, and 34% for adult habitat. In 2010 Chinook salmon spawned in the reach at flows possibly as low as 9 cfs. Though temperature or other habitat preferences would likely preclude use of any of the reaches by bull trout, with just flow as a consideration, the lower velocities predict that suitable adult habitat would actually increase 32% over natural conditions in reach B. However, suitable spawning habitats for bull trout would reduce 75% within the same reach. Some steelhead redds established within spawning gravels in April/May would likely have been exposed and desiccated prior to emergence in 2005 in lower Pole Creek. The typical rectangular channel shapes would likely have still provided some water cover to steelhead redds in lower Pole Creek in 2008 and in the Salmon River in 2005 and 2008.

At the most shallow transect within lower Pole Creek study site, the water surface elevation would have been ~4.4 inches lower than the natural condition on August 15, 2008, and dry on the same date in 2005. At the Salmon River study site the water surface would have been 2.9 inches lower than natural flows. Summer migratory use of the Salmon River by fish would have experienced little influence. However, the dry conditions in lower Pole Creek would have prevented access to ~7 miles of critical spawning and rearing habitats upstream in 2005. Since the hypothetical flow conditions for lower Pole Creek in 2008 would have been similar, or slightly less, than observed in actual flows of recent years, a similar lack of connectivity might be expected. That is, no access or use of upper Pole Creek is known to have occurred in recent years by adult Chinook, with only two documented observations of bull trout. Juvenile chinook and steelhead have consistently made use of lower Pole Creek, but during only one recent year have they attempted to reach upper Pole Creek. The degree to which flow has influenced juvenile movements is uncertain, but the No Action would only exacerbate the mechanisms.

While the current physical barrier associated with the existing POD would be removed, it is uncertain whether, by necessity, another(s) would replace it on private lands downstream. In

some years a physical barrier would certainly exist in the form of a dry channel, regardless of the structural configuration. Access to approximately 7 miles of designated critical habitat upstream would likely be further diminished from current conditions. As such, a population of bull trout is unlikely to re-found Pole Creek, and the approximately 11 miles of potential habitat for Chinook and steelhead would also not contribute towards their recovery.

The probable reconfiguration of the pivots under the No Action would include the continued crossing of pivot towers through Pole Creek. These chronic intrusions into Pole Creek would continue to generate channel, sediment, and riparian impacts, and also present risks to any fish spawning and incubation that might occur in the reach.

The key limiting factors for the persistence of western pearlshell (*Margaritifera falcata*) would also remain. Dry or substantially reduced in-channel water conditions would not support colonies within lower Pole Creek, and the absence of native fish hosts for their reproduction and distribution would undermine their persistence within Pole Creek if present, or prevent any re-founding.

Water Temperature

With flow conditions expected to return to pre-2005 conditions, occasions of acute water temperatures would be expected, similar to those observed in 2001 when water temperatures in lower Pole Creek ranged routinely through the season between 20°C and 25°C (Rothwell and Moulton 2001). Within the Salmon River, temperatures would also be expected to be elevated slightly as compared to current conditions as a result of diminished flow/velocity. Within reach A (~800 feet), where natural flows would return with the relocation of the diversion to private lands downstream, temperatures would improve relative to current conditions.

Other Considerations

With the removal of facilities from NFS lands, and their reconstruction on private lands, temporary sediments and habitat disturbance would occur. While some assurance of the minimization of these necessary disturbances would be present on NFS lands, the motivations and authorities to do so on private lands would be less assured. Nevertheless, all of the construction related impacts would be temporary in nature, and a return to a reasonable degree of natural habitat resiliency and diversity would be expected in the short-term. However, the maintenance needs and objectives of the new instream facilities on private land would also result in minor effects, but would be chronic to the nearby habitats.

The installation of the necessary water and electrical utilities on private lands would be expected to result in only minor effects to stream or streamside habitats given the substantial separation and gentle topography between water and the bulk of the likely utility installations.

Cumulative Effects

Since direct effects would result from implementing the No Action Alternative, there would also be cumulative effects. The past, ongoing, and potential future cumulative actions in the vicinity are nearly identical between the No Action and Proposed Action alternatives. The potential effects associated with these cumulative actions are presented with the Proposed Action. Where the potential cumulative effects could differ with implementation of the No Action Alternative, they are described below.

Many of the principal contemporaneous cumulative actions occurring within the vicinity were conceived within the same collaborations that anticipated the Proposed Action. These objectives, on both public and private land, were intended to address the principle limiting factors for aquatic habitats within Pole Creek. Since the similar objectives on private lands are not related to the irrigation system, the plans and collaborations to see them implemented could proceed if the parties remain capable and willing. This analysis assumes they would.

Physical barriers unrelated to the irrigation system or its operation (i.e. road culverts) are being addressed throughout the drainage. Nevertheless, as described earlier, functional barriers as a result of the irrigation infrastructure or operation would persist with the No Action Alternative. As such, the No Action would maintain seasonal instream inaccessibility to ~7 miles of upstream designated critical habitat.

Roughly half (1.5 miles) of the length intended for permanent riparian fencing on private lands has been constructed. However, the other half (1.5 miles) would likely prove impossible or impracticable to construct given the necessity of the pivots to continue to pass through Pole Creek. The utility of providing off-stream livestock water may also be questionable, but would provide some streamside relief if pursued.

Consistency with Sawtooth Forest Plan

Because the No Action Alternative would not authorize the continued occupancy and use of NFS lands for the proposed purpose, the non-action would be in compliance with the Forest Plan. However, it would not contribute towards attainment of Forest Plan goals and objectives for streams, fish, and RCAs. As such, it would be inconsistent with the MPC 3.2 prescription, as well as with the related goals and objectives, including the ACS and WARS priority emphasis. Failure to facilitate a fundamental resolution to a known and chronic impact to imperiled fish populations would also fail stewardship responsibilities and affirmative obligations under ESA. It would also fail to implement the specific Forest Plan objectives 0243. The potential for bull trout reestablishment (an MIS species, and ESA Threatened) within Pole Creek would remain remote, since the principle limiting condition would not be addressed.

Figure 11: Actual inflow and hypothetical outflow scenarios of the Proposed Action and No Action as they might have occurred in 2008 (normal water year)¹

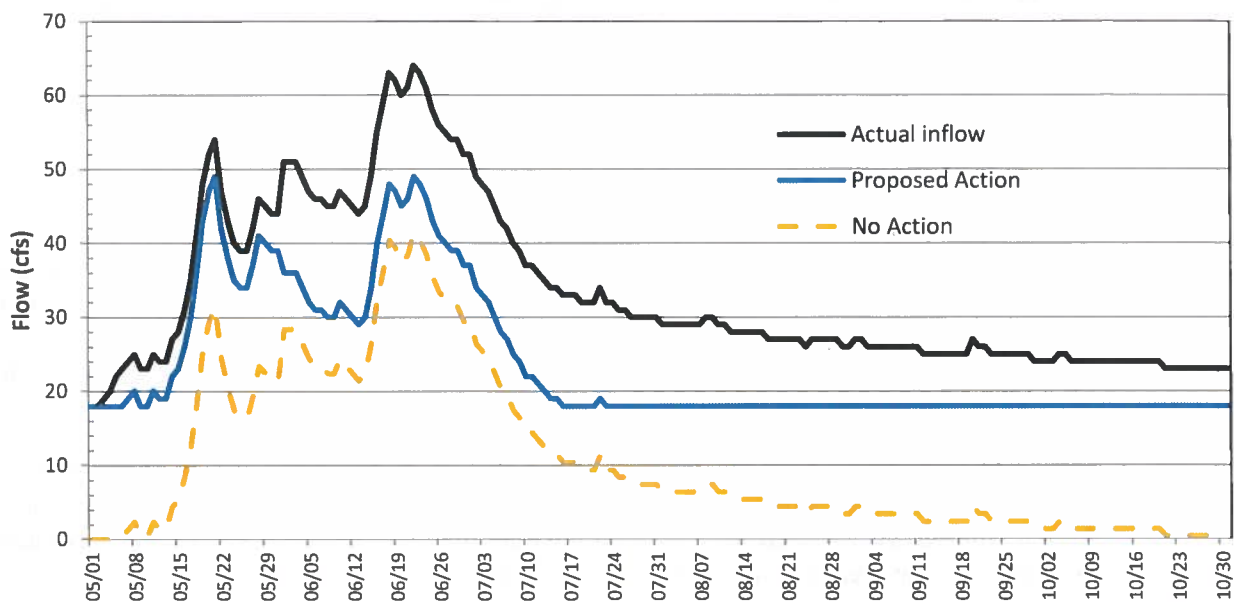
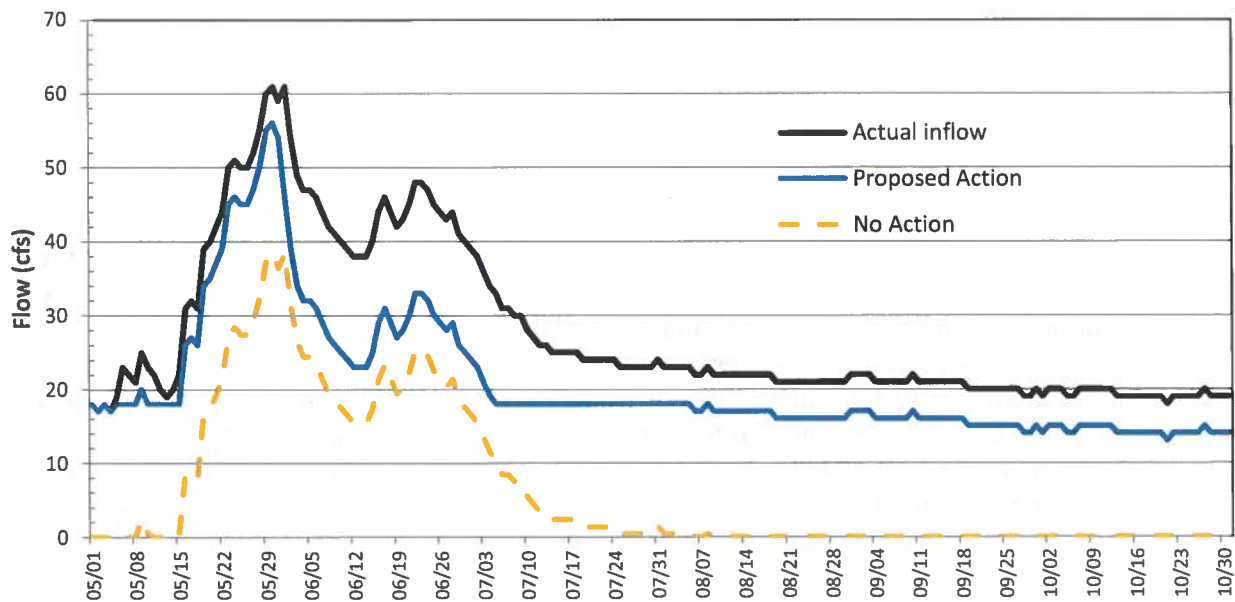


Figure 12: Actual inflow and hypothetical outflow scenarios of the Proposed Action and No Action as they might have occurred in 2005 (dry year)¹



¹ Note: use is shown through the extent of the possible legal irrigation season (per the water rights), though actual demand is typically minimal during the month of May and absent in October.

Table 6: Hypothetical flow scenarios for August 15 under the Alternative scenarios during normal (2008) and dry (2005) years

Location	Pole Creek at Existing POD ¹	Pole Creek at Lower Flow Study Site	Pole Creek at Mouth	Salmon River at USFS Gage	Salmon River at Flow Study Site	Salmon River near Highway 75
Downstream Distance (mi)	0	3.1	4.2	7.3	7.8	11.9
2005 (dry)						
Natural Flow ²	23	23.8	20.1	43.5	40.1	39.7
Alt 2 (Proposed Action)	17	17.6	14.9	37.2	34.3	33.9
Actual	4 ³	4.1	3.5	23.5	21.7	25.7
Alt 1 (No Action)	0	0	0	19.3	17.8	17.6
2008 (normal)						
Natural Flow ²	28	28.9	24.5	56.9	52.4	51.8
Alt 2 (Proposed Action)	18	18.6	15.8	46.3	42.7	42.2
Actual	7 ³	12.4	10.5	40.0	36.9	41.6
Alt 1 (No Action)	5.4	5.6	4.7	33.0	30.5	30.1

¹ just downstream of POD; for Alt 1 the POD would move downstream at least to private land (~800'); for Alt 2 the POD would be relocated slightly upstream (~800')

² "natural flow" in Salmon River includes status quo withdrawals from other than from Pole Creek

³ minimum flow agreement with IDWR began in 2005

Table 7: Habitat model results utilizing hypothetical flow scenarios at study sites for August 15 under the Alternative scenarios during normal (2008) and dry (2005) years

Reach	Flow Scenario	Weighted Useable Area (normalized % maximum)				Water Surface
		Chinook salmon		bull trout		decrease from natural (feet)
		adult	spawning	adult	spawning	
A	2005 (dry)					
	Alt 1 (No Action)/Natural Flow	100	94	80	89	0
	Alt 2 (Proposed Action)	97	84	82	100	0.09
	Actual	~ ¹	~ ¹	~ ¹	~ ¹	0.28
	2008 (normal)					
	Alt 1 (No Action)/Natural Flow	99	100	79	76	0
	Alt 2 (Proposed Action)	98	86	81	99	0.15
	Actual	82	62	100	75	0.31
B	2005 (dry)					
	Natural Flow	92	76	72	84	0
	Alt 2 (Proposed Action)	85	64	87	71	0.08
	Actual	57	9	91	9	0.33
	Alt 1 (No Action)	0	0	0	0	0.67
	2008 (normal)					
	Natural Flow	96	81	64	92	0
	Alt 2 (Proposed Action)	87	68	84	75	0.14
	Actual	77	41	94	50	0.24
	Alt 1 (No Action)	62	15	96	17	0.37
C	2005 (dry)					
	Natural Flow ²	81	77			0
	Alt 2 (Proposed Action)	76	71			0.07
	Actual	61	47			0.25
	Alt 1 (No Action)	54	37			0.32
	2008 (normal)					
	Natural Flow ²	89	88			0
	Alt 2 (Proposed Action)	83	80			0.09
	Actual	78	74			0.16
	Alt 1 (No Action)	75	69			0.24

¹ below the limits of the model

² "natural flow" in Salmon River includes status quo withdrawals from other than from Pole Creek

Alternative 2 – Proposed Action

Alternative 2 would implement the Proposed Action, including the connected actions on private lands (collectively lumped here under the term *Proposed Action*).

Direct & Indirect Effects

Measures

Estimates of available and accessible habitat: As described and defined for contrast within the analysis, during 81% of all irrigation days flow in Pole Creek downstream of the new POD would be expected to remain above 18 cfs, and during 60% of the years downstream flows throughout the season would remain above 18 cfs. Downstream flows would be expected to rarely drop below 15 cfs and at no time less than 12 cfs. Suitable habitat conditions for all historically present species would be restored to the 4.5 miles of lower Pole Creek downstream of the POD, and access to ~7 miles of upstream habitats assured. On August 15 during an average water year downstream of the POD, Chinook salmon spawning habitat would be reduced 13% from natural within Pole Creek and 8% in the Salmon River (Table 7).

Anticipated water temperature differences upstream of the diversion and at the mouth: With the operational flow criteria, flow conditions in Pole Creek would be roughly 3 times that which has been facilitated with the minimum flow agreement since 2005. As such, water velocities and temperatures would be expected to be near natural, based on indications from individual observations made in reach since 2005. Minimal influence to temperatures would also be expected downstream in the Salmon River as a result of the Proposed Action.

Stream Flow

The proposed *operational flow criteria* are intended to provide for the key ecological needs of the riverine environment (USFS et al 2011) while providing a predictable irrigation supply, to the extent possible. Flows recorded at the Pole Creek USGS stream gage can be compared to these operational conditions to characterize and anticipate the influences that would occur to the Pole Creek water supply if applied. For the purposes of this comparison, water years 2003 and 2005 through 2013 were utilized (10 years). Gage placement issues in 2004 compromised and undermined the confidence in the resulting data, so it has been excluded.

These simple characterizations assume systematic adherence to the criteria, with infinite and immediate control of flow apportionments. They are also reported as if irrigation continued in full through to October 15, though, in practice currently, irrigation typically ramps down between mid-September and early October. As such, these characterizations represent a worse-case scenario. Inversely, these simple characterizations assume no well demand would occur in May, even though in some early dry years, limited need is conceivable in late May. The operational criteria essentially divide the irrigation season into two segments that reflect the typical needs of the actual setting: a pre-season period in May (31 days) when irrigation is typically not needed or utilized until late in the month, and; the core irrigation season that initiates in June and extends here (for the analysis) through October 15 (137 days). These characterizations address the core irrigation season. Note that with the current designs for the

private irrigation system, these characterizations assume supplementation from groundwater would initiate when flow within Pole Creek drops below 30 cfs and would be at capacity (~6.5 cfs) when flow drops below 23 cfs. Table 8 provides the hypothetical summary characterizations by year.

Table 8: Characterization of flow scenarios with the hypothetical application of the Proposed Action's operational flow criteria to past flow conditions, June 1 to October 15, by year

Period (total 137 days)	2003 ¹	2005	2006	2007	2008	2009	2010	2011	2012	2013	Narrative
days when natural flow above 100 cfs	2	0	8 ²	0	0	0	0	0	1	0	on these occasions the criteria give energy to the creek for habitat maintenance
days when natural inflow ≥ 30 cfs	53	39	115	22	63	88	70	119	106	31	days in which there is ample water in Pole Creek alone to satisfy irrigation needs and instream objectives
days when partial supplementation from groundwater occurs; inflows remain ≥ 23 cfs	63	28	14	20	74	49	67	18	30	25	this period defines a ramping up of reliance on the groundwater irrigation source
days when maximum supplementation from groundwater occurs; downstream < 18 cfs but ≥ 15 cfs	4	62	0	75	0	0	0	0	0	81	during these periods, the groundwater source is producing at capacity, in combination with a 5 cfs constant rate from Pole Creek, and downstream flows may drift with the hydrograph to no less than 15 cfs
days when maximum supplementation from groundwater occurs; downstream < 15 cfs but ≥ 12 cfs	0	8	0	20	0	0	0	0	0	0	these periods are the same as above but during the driest years, when downstream flows may further drift with the hydrograph to no less than 12 cfs

¹ record in 2003 ended on September 30, for 122 total days

² three additional days above 100 cfs occurred in late May

These characterizations present the variable outcomes possible given the distinctions between the natural water supply years. However, some features can be generalized with reliance on the same simplifying assumptions described earlier. In 60% of the years, the inflows remained above 23 cfs, such that, at no period during the year would downstream flows have dropped below 18 cfs. In total, 81% of all days would fall into this condition. Some reliance on groundwater would have been anticipated in all years, but in only 4 years would that reliance have reached the maximum well capacity of ~6.5 cfs. However, during the drought years, the reliance on maximum groundwater, which also corresponds to the period when less than 18 cfs would have been passed downstream, was lengthy, extending to 95 days in some years (2007). But note that 47% of the partial groundwater days, and 37% of the maximum groundwater days would have occurred after September 15, when current irrigation practices would likely not have required these outcomes. The two periods of time in 2005 and 2007, when downstream flows would have dropped below 15 cfs, also occurred after September

15. The lowest natural inflow recorded during these years was 18 cfs, which occurred only twice on October 21, 2005 and October 18, 2007.

Given the network of data that has been assembled for the area in the past decade (e.g. flow gages and seepage runs), a reasonable characterization can also be made of instream conditions as they might have occurred with application of the operational flow criteria at various locations downstream of the POD. For this characterization, conditions for August 15 for water years 2005 and 2008 are illustrated in Table 6. August 15 was selected for comparative purposes since, with the persisting heat of summer, demand for irrigation water remains high, and the surge of spring Chinook salmon spawning is typically underway. Water years 2005 and 2008 were locally dry and normal years respectively.

While utilizing the same general assumptions presented earlier, the values shown in Table 6 incorporate actual conditions observed at stream gages and extended to other sites via insights gained from seepage runs. Gains and losses are applied through the specific reaches based on these measured results, as refined with professional judgment. While a reduction from natural flows would obviously have occurred with irrigation withdrawals under the operational flow criteria, conditions would have been substantially improved over those actually experienced, and even more so over conditions that would have occurred with the No Action, particularly during the 2005 drought year. As such, under the Proposed Action, similar benefits would be expected in the future carrying through the ~12.5 miles of downstream habitats. However, for the 1,600 feet on NFS lands, impacts under Alt 2 would be greater than under Alt 1, since Alt 1 would move the impacts downstream to private lands.

The ecological benefits of peak and base flows are specifically recognized within the included operational flow criteria. These criteria limit withdrawal to 5 cfs when flows are above bankfull (100 cfs) for maintenance of channel and habitat features. During base flow periods (<23 cfs) the criteria also limit withdrawal to 5 cfs. Recent flow records indicate that in most years at least 18 cfs would pass downstream season long. In the case of extreme drought conditions, the criteria stipulate an absolute minimum of 12 cfs, and for only one consecutive season. Secondary benefits to the substantial increase in baseflows, such as an increase in bank and floodplain storage, would also be expected, which may provide extended season benefits to baseflows.

The operational flow criteria would also anchor instream ecological needs given the uncertainty of changes that might occur with climate change. Modeling conducted in a pilot study of the possible changes to stream flow in various USFS locations predicted a possible 22% decrease in streamflows by 2040 (Furniss et. al. 2012). The operational flow criteria would assure ecological stream flows remain during a changing climate.

Fish Habitat

Four fish habitat/flow studies have been conducted in the stream segments associated with the proposed action since Chinook salmon were first listed for protection under ESA 1992 – three within Pole Creek, and one within the Salmon River, with at least one in each of reaches A, B, and C (Figure 8). The operational flow criteria are closely derived from recommendations provided by technical experts that considered these studies in their deliberations (USFS, NOAA Fisheries, and USFWS. 2011). The site within reach A extends

just downstream of the existing POD. For lower Pole Creek (reach B) the most limiting hydrologic reach was utilized, approximately 1.1 miles upstream of the mouth. The Salmon River site is located slightly downstream of the former Salmon River S45 diversion, roughly 4.4 river miles above its confluence with Alturas Lake Creek.

Available fish habitat as a function of stream flow was indexed at these sites using instream flow habitat modeling. Field crews utilized the Physical Habitat Simulation System (PHABSIM) to assess instream flow fish habitat. PHABSIM is an integrated collection of hydraulic and microhabitat simulation models designed to quantify the amount of microhabitat available for target species over a wide range of discharges (Milhous, et al., 1998). The model utilizes field data of channel structure, habitat features, and flow characteristics to evaluate and simulate habitat variables at different flows. Species suitability criteria can then be applied to these results to estimate the available habitat at alternate flows for the species/life stages of interest (Stalnaker, et al. 1994). As a byproduct, the model is also able to predict water surface elevation as a function of stream flow based on the stage discharge information collected at the various study transects. The Pole Creek study sites include 2 stage discharge pairs and velocity sets at 5 to 6 transects. The Salmon River study site includes 2 stage discharge pairs and 3 velocity sets at 12 transects. Note that modeled *optimum habitat conditions* are not necessarily *natural flow conditions* (and in fact rarely are). For example, there simply may not be sufficient natural flow to fill and make available all possible habitat features within the channel space at a given point in time, or conversely, reduced flows with slower velocities may make some habitats more suitable for a particular species/life stage than would be there naturally. The results obtained for specific study site also do not anticipate or evaluate the natural distribution, importance, or rarity of a particular habitat within a watershed.

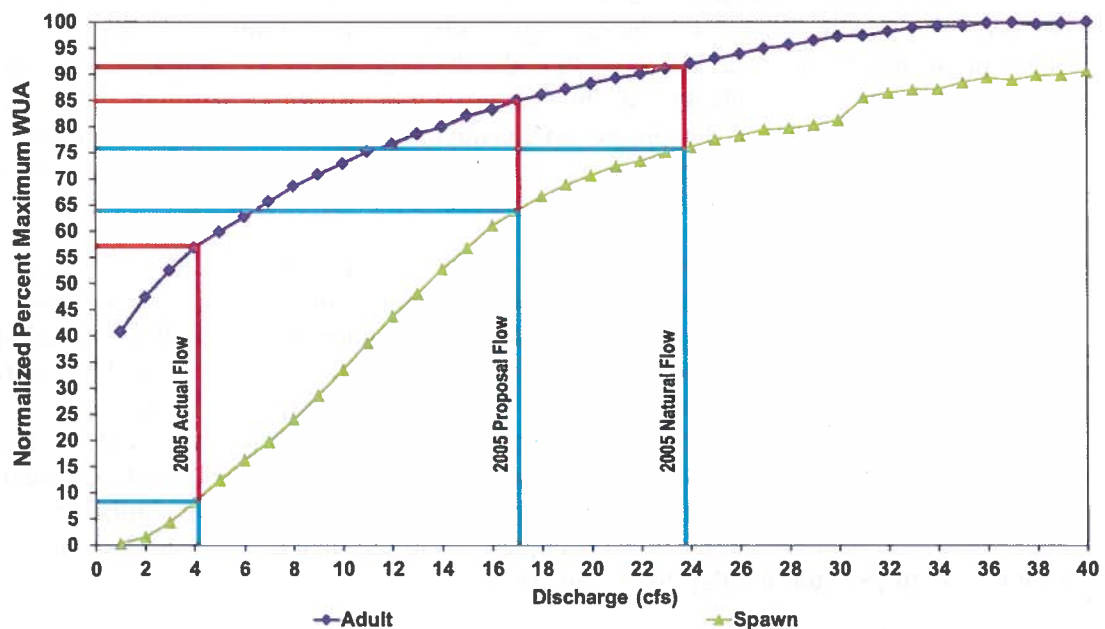
Just as the sites selected for study represent the hydrologically limited segments, for contrast and clarity this analysis focuses on the mid-August period as the seasonally limited period within local stream habitats. To focus and display these considerations, this analysis presents hypothetical outcomes for August 15 for water years 2005 and 2008. As described earlier, August 15 was selected for comparative purposes because, with the persisting heat of summer, demand for irrigation water remains high and the surge of spring Chinook salmon spawning is typically underway. Water years 2005 and 2008 were locally dry and normal years respectively.

Figure 13 relates a graphical example of the relationships between available Chinook salmon adult and spawning habitat at the lower Pole Creek flow study site (reach B) for hypothetical flow scenarios on August 15 in 2005. Table 6 presents the model results for the same date in both 2005 and 2008. For Chinook salmon, the model indicates there would be notable improvement in reach C of the Salmon River (~8 miles) with the Proposed Action as compared to the existing condition or with Alt 1. In Pole Creek, in reach B (~4.5 miles), there would be substantial improvement, particularly as compared to the No Action, which would provide little adult or spawning habitat. In contrast, reach A would experience a small reduction in adult and spawning habitats under Alt 2 as compared to natural flows, which would be restored/maintained under Alt 1 in this the short ~0.3 mile segment on NFS lands. Note that the estimated actual flows within the reach in 2011 and 2012, when Chinook salmon spawned there, were very similar to those prescribed by the operational criteria (20

and 18 cfs respectively). In 2010 Chinook salmon spawned in the reach at flows calculated to be roughly half (9 cfs) of those that would be prescribed by the operational criteria.

No bull trout population currently utilizes Pole Creek. These valley bottom segments associated with reaches A, B, and C may have only been used as transitory/migratory habitat historically based on recognized bull trout habitat preferences. Nevertheless, the physical habitat model was applied to bull trout adult and spawning criteria for Pole Creek and the results are displayed in Table 7. Note that the resulting curves for bull trout adult habitat suggest “optimum” conditions (e.g. velocity) exist at stream flows ~7 to 8 cfs, well below natural flows within the reach. Similarly, curves for bull trout spawning habitat in reach A peak at ~17 cfs. As such, the current flow practices (“actual”) are predicted to provide the most bull trout adult habitat, and near optimum spawning conditions in reach A would occur with the Proposed Action. Though, again, the migratory improvements of increased flow and barrier removals within the reach may be the greatest anticipated benefits to bull trout.

Figure 13: Relationships at the lower Pole Creek flow study site between Chinook salmon habitat and normalized weighted useable area from hypothetical flow scenarios on August 15, 2005 (dry year)



Predicted differences in water depth were also modeled for the Pole Creek study sites and Salmon River study site. Within each of the study sites, the transect with the least water depth was evaluated. The results were more pronounced at Pole Creek where the relationship to flow reductions is more intimate. Nevertheless, in the shallowest transect within the upper Pole Creek study site (reach A), a reduction of less than 1.8 inches would have occurred from natural conditions/Alt 1 if utilizing the operational flow criteria on August 15 of either 2005 or 2008. At the most limiting transect within the lower reach B study site, a similar reduction of less than 1.7 inches would have occurred with the operational flow criteria on August 15 of either year. This compares to an estimated 4 inches of reduction associated with actual use

in 2005 at the lower site, and 8 inches (dry) that would have been expected with Alternative 1.

At the Salmon River study site the differences would have been even more subtle. In either year there would have been less than a 1.1 inch difference between the water surface of the natural flow and that associated with the Proposed Action using the operational flow criteria.

The Salmon River and Pole Creek are known or believed to provide migratory habitat for adult Chinook salmon, steelhead, bull trout and native cutthroat trout. Steelhead adults utilize the stream segments prior to the irrigation season, and would be unaffected directly by either alternative. Given the minimal change to the wetted channel dimensions that would be expected with use under the operational flow criteria, these migratory corridors would be expected to be fully accessible to salmon and native trout. As such, these flows would consistently connect approximately 7 miles of upstream designated critical habitat for Chinook salmon and bull trout, as well as for cutthroat trout.

Steelhead emergence from redds is believed to be complete by mid-summer within the action area. Chinook incubation begins with spawning in early to mid-August and continues through the remaining irrigation season. As evidenced in the slight differences to water surface elevations just discussed, the rectangular channel forms common in these stream segments would maintain sufficient depth under the expected flows using the operational flow criteria to protect steelhead and Chinook incubation. Rearing conditions for both Chinook and steelhead would be improved considerably with the benefits of additional flow and streamside protections over those currently occurring, and distinctly over the chronically impaired conditions that would exist with Alternative 1.

Though dewatering associated with the installation of the new POD is unlikely to encounter any ESA or sensitive fish species, there is at least a remote possibility. The use of the prescribed NMFS electrofishing guidelines (2000) would minimize any effects to individuals handled and relocated. Also, during the brief period when the new POD would be installed (<5 days), it is anticipated that upstream fish passage for some species/life histories may not be possible through the temporary stream bypass. Prescribed practices for the POD relocation objectives would be anticipated to keep any temporary effects associated with sediments or turbidity within acceptable levels. Monitoring of turbidity in 2013 at two similar projects in Pole Creek remained within the 50 NTU objective and returned to near background levels within an hour (Sawtooth NRA 2013, and 2013a).

The Proposed Action objective of removing the barrier associated with the current POD would also constitute a fundamental element to restore access to approximately 7 miles of designated critical production and rearing habitat. The new instream POD facilities, and included operational flow criteria, would support connectivity very similar to natural conditions.

Sockeye salmon historically utilized the Salmon River upstream as far upstream as Alturas Lake Creek as a migratory corridor to and from morainal lakes in Sawtooth Valley. However, none have been passed over the weir at the Sawtooth Hatchery for natural migration for many years. Nevertheless, with the operational flow criteria, flows in the Salmon River, just downstream of its confluence with Alturas Lake Creek in 2005, would have been reduced

less than 5% from natural. As such, sockeye access to Alturas Lake, when it resumes, would remain assured with the Proposed Action.

The potential effects from implementation of the Proposed Action to ESA protected fish species, or their designated critical habitat, and to Forest Service sensitive fish species, have been considered separately within a biological assessment/evaluation (within the project record). The analysis concludes the action would have *no effect* to Snake River sockeye salmon, but *may affect, but is not likely to adversely affect*, their designated critical habitat. The action *may affect, and is likely to adversely affect* Snake River Chinook salmon, steelhead, and Columbia River bull trout individuals, and their designated critical habitat. The action *may impact* individuals of westslope cutthroat trout or habitat, but would *not likely contribute to a trend towards Federal listing or cause a loss of viability to the population or species*. These conclusions are primarily associated with temporary risks to individuals and impacts to habitat associated with the relocation of the POD facilities, as well as ongoing influences from water withdrawal. Overall the analysis concludes that the Proposed Action and connected and similar actions would address nearly all the principle limiting factors for fish within Pole Creek.

Finally, with resolution of the principle limiting factors for native salmonids within Pole Creek under the Proposed Action, potential for restoration and maintenance of colonies of western pearlshell, (*Margaritifera falcata*) would exist, since salmonids serve as their hosts for reproduction and distribution. Instream habitats within reaches B and C would see fundamental and substantial improvement in quality (e.g. flow and temperature) as compared to the No Action. Similar outcomes would be anticipated to other native invertebrates.

Water Temperature

Given that a volume of water would be removed from Pole Creek as it enters the valley floor under the Proposed Action, with a corresponding decrease in velocity, some added heat to that remaining volume would be expected. Rothwell and Moulton (2001) illustrated the magnitude that water temperatures can increase, particularly when volumes/velocities are particularly low within oversized channels affected by water withdrawal. No site specific predictive models for instream temperature were found for this analysis. As such, the incremental expected benefit to water temperature within Pole Creek by increasing instream flow with Alt 2 remains uncertain. Researchers believe that water velocity may be a fundamental mechanism influencing temperature (Isaak et al 2011). The influence of bed and banks on velocity increases as stream stage drops (Leopold and Maddock 1953) such that residence time can increase dramatically as flows diminish into and around the streambed substrate. The Proposed Action would leave substantially more water instream (~55% to 96% of natural) than likely occurred (~<10%) when the very high water temperatures were observed by Rothwell and Moulton (2001) in Pole Creek (25°C MWMT). As an example, in random individual measurements of water temperature in lower Pole Creek, taken during 4 separate years of seepage runs, when flows were greater than 10 cfs, water temperatures were recorded at less than 11°C, with the exception of two measurements in 2009. These patterns are consistent with many other observations by the author within Sawtooth Valley. The operational criteria of the Proposed Action would provide roughly 3 times the flow in Pole Creek as has been facilitated by the minimum flow agreement during the period of these measurements. As such, while the exact influence from natural conditions remains unknown,

it is anticipated to be relatively small, and would constitute resolution to this limiting factor that would otherwise remain chronic under the No Action.

Given the high elevation generally of the Sawtooth NRA, the possible effects of climate change are less pressing. Furniss et al (2012) predicted only a 2 percent decrease in suitable habitat for bull trout, as predicted by stream temperature by 2040. The Proposed Action would restore thermal connectivity to cold headwaters of Pole Creek, and add buffer capacity to the downstream waters of both Pole Creek and the Salmon River.

Other Considerations

Additional sediments would be expected with the one-time or ongoing disturbances on NFS lands: the reconstruction of the POD; installation of electrical and water utilities. The substantial separation and gentle topography associated with some of these disturbances and the design and prescribed practices intended for all would minimize these effects and risks, and promptly revegetate disturbed areas. Local monitoring of similar treatments has shown that vegetated resiliency typically returns within 3 to 5 years (Photo 8). Connected actions on private lands would be proximate to habitats in a few specific locations (e.g. where buried lines approach their bridge attachments), and would likely result in a some potential for of some sediments to reach habitats. With partner involvement, this analysis assumes standard BMPs for sediment retention and containment would be utilized on the private lands.

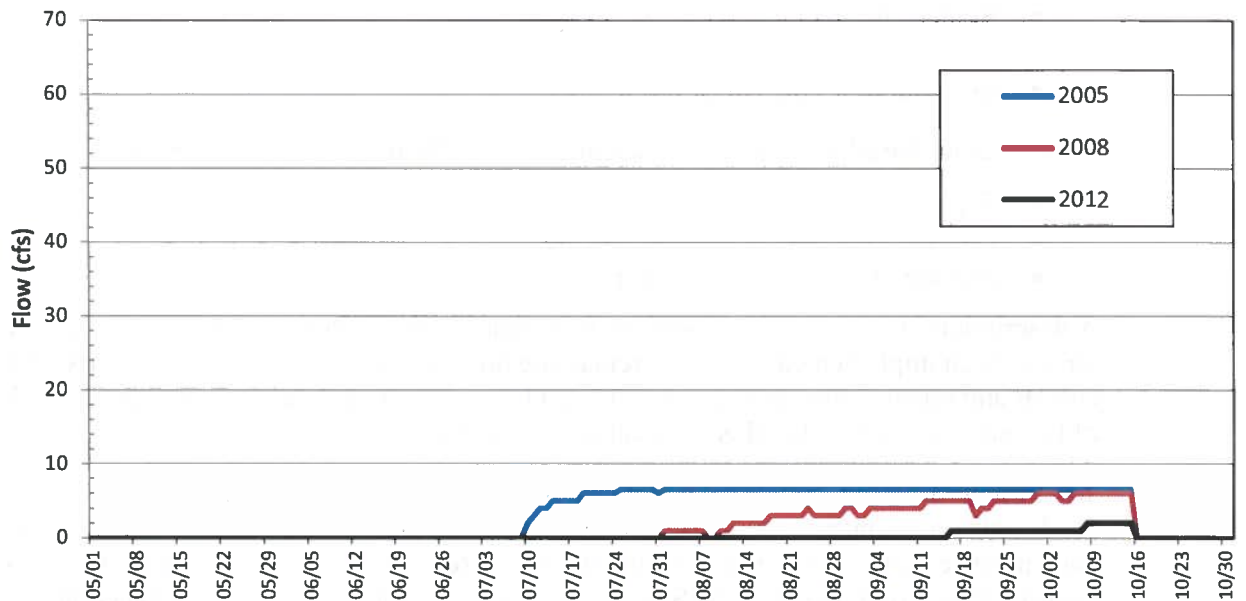
Reconstruction of the instream diversion facilities would also have localized and temporary impacts to streambanks. The bio-engineering methods intended would be expected to provide resilience in the short-term and quickly restore naturally vegetated and stable banks. The included intent within the operational flow criteria, to pass above bankfull flows downstream when they occur, would also provide more consistent opportunity for natural habitat maintenance. Also, the anticipated connected actions on private lands of removing two pivots (with 32 tower crossings), that currently pass through Pole Creek, would be expected to result in several localized improvements, particularly in the long-term to streambank and streamside conditions.

The generally recognized consumption rate of water applied for irrigation in central Idaho is 1.5 acre-feet per acre (AF/ac) irrigated per season. This factor was checked against predictors of evapotranspiration for the Stanley National Weather Service weather station (108676) for grass pasture (high management). This model (potential) predicted 1.4 AF/ac over the growing season. Nevertheless, 1.5 AF/ac is used in this analysis for consistency, and as a conservative value. For a typical irrigation season at this elevation (i.e. approximately 126 days), this rate roughly equates to 0.006 cfs per acre of consumptive water use for irrigated pasture. The current private land irrigation system covers approximately 1,000 acres and utilizes roughly 12 cfs applied through the existing pivot system. As such, an estimated 6 cfs (i.e. half) is consumed for plant growth. The other half presumably returns to the hydrologic system. This simple relationship is assumed in this analysis. So, as is, the current system is presumed to consume ~1,500 AF per season.

With the same assumptions provided within the Affected Environment, annual groundwater use (from turn on to max capacity) would have varied greatly between water years, ranging between 14 and 115 days of use. For contrast, Figure 14 displays the hypothetical conditions

in 2005, 2008, and 2012 (locally *dry*, *normal*, and *wet* years respectively) relative to the potential groundwater demand. Note that in this simple characterization, much of the groundwater demand is shown under the premise of full irrigation objectives to October 15, though current irrigation practices begin ramping down in mid-September.

Figure 14: Hypothetical scenario of well demand during dry (2005), normal (2008), and wet years (2012); Y-axis scale set comparable to Figures 11 and 12



These results vary substantially by water year from 1% of the annual plant needs to near 50%, averaging ~20%. The potential effects of partial season dependence on groundwater, a connected action on the private lands, could influence natural gains to surface water in the very lower end of reach C. On average ~300 acre-feet of groundwater may be consumed per year, or ~20% of the total ~1,500 acre-feet consumed for pasture irrigation annually on the property.

As discussed above, half of the volume removed from groundwater would be expected to return to the hydrologic system. Within the irrigated acres on private land, this likely occurs via infiltration back through the soil profile, since the soil texture promotes such infiltration, and no channels of direct runoff to surface streams are known or suspected. As described earlier, the first indication of a groundwater/surface water connection downstream of the irrigated area occurs in the Salmon River near the mouth of Warm Creek (Figure 8) – roughly 4.3 miles (straight line) from the intended central well on the private lands. This diffuse groundwater—surface water connection (i.e. gaining reach) appears to continue over the next several miles downstream. Given the small annual volume of groundwater affected, under these dispersed and distant surface water connections, within an aquifer with zones of reduced transmissivity, a slow and substantially attenuated response would be expected within the Salmon River from groundwater withdrawals – negligible and unmeasurable at any point in time.

Cumulative Effects

Many of the principal contemporaneous cumulative actions occurring within the vicinity were conceived within the same collaborations that anticipated the Proposed Action. These objectives, on both public and private land, were intended to address the principle limiting factors for aquatic habitats within Pole Creek. Related actions on National Forest System Lands include:

- Replace barrier culverts on NFS Lands
- Travel system network changes on NFS lands
- Relocation of Pole Creek Road 70197

Objectives on the adjacent private lands unrelated to the irrigation system include:

- Replace the ranch culvert crossing of Pole Creek on private land
- Construct permanent riparian fencing
- Provide off-site livestock water

A description of these *similar* objectives is included with the Proposed Action. Some have already been implemented, while the remaining are anticipated in the next few years. The culvert and travel system changes on NFS lands have been implemented, and the relocation of the main Pole Creek Road is reasonably foreseeable.

The Proposed Action, connected actions on private lands, and the cumulative actions would resolve all known man-made barriers to fish within the Pole Creek drainage. To date, 2 of 5 known barrier culverts have been replaced, and the remaining 3 culvert barriers (1 on private lands on Pole Creek, and 2 on NFS lands on Pole Creek tributaries) are anticipated in 2014. As such, the proposed, connected, and similar actions would cumulatively provide natural instream accessibility to ~7 miles of formerly seasonally isolated upstream designated critical habitat.

These changes would build on other substantial improvements to fish passage in recent decades. The purchase of the former Busterback Ranch in 1992 by the USA, and the State Water Resource Board water transaction on Beaver Creek in 2004 dramatically changed former flow conditions within both, particularly in the Salmon River downstream of its confluence with Pole Creek. Routine lengthy dry reaches that occurred each summer in both, no longer occur.

The cumulative efforts are also providing restorative and protective measures to several miles of stream and streamside habitats. Approximately 12 miles of unauthorized routes, including 10+ large and small fords through Pole Creek or tributaries have been closed and rehabilitated. Several unsustainable streamside dispersed campsites have also been closed. Roughly half (1.5 miles) of the length intended for permanent riparian fencing on private lands has been constructed. With removal of the 2 pivots from crossing Pole Creek (a connected action ~2015), the final fence segments would be constructed, including the closure of the existing badly degraded livestock water gaps, to be replaced with off-stream troughs.

Most of these cumulative activities result in temporary effects as they are implemented. For those on NFS lands the effects have been substantially limited by utilizing modern protective practices and designs. With the existing collaborations, the related objectives on private lands would also be anticipated to use similar approaches. The slight staggering of implementation objectives would further minimize the temporary effects. Collectively they are expected to facilitate a pronounced decreasing trend in the chronic effects of recent decades within the watershed.

In addition to these restorative objectives within the vicinity, many other uses and activities will remain. A network of roads, and motorized and non-motorized trails remain within the watershed. However, with the recent changes, those that remain are thought to be sustainable and compatible with the ecological needs of the landscape. Dispersed recreation occurs throughout the drainage on NFS lands, with concentrations (i.e. campsites) typically adjacent to water when it is accessible. The most problematic sites have been removed and restored, yet challenges and pressures with dispersed recreation are expected to continue.

There have been no recent treatments of forest vegetation within the watershed, except as associated with hand treatments of whitebark pine. Sheep are currently authorized to use the watershed as part of the Salmon-Pole-Champion Allotment. Though areas/occasions of intensive use still occur, general monitoring and observations indicate the area experiences minimal influence from the annual grazing. Historically, this area (particularly the sheep driveway), were utilized much more intensively, and some permanent or lingering alteration of soil and vegetation exists. The most intensive grazing within the vicinity occurs on private lands downstream along Pole Creek and the Salmon River. However, as described within the Affected Environment, most stream segments have been excluded from livestock – some more effectively than others. Nevertheless, lingering effects from past intensive uses persist in many reaches.

On private lands some developments exist or are possible in the coming years that could undermine segments of habitat. A hot-tub and related infrastructure was recently constructed on the north streambank of Pole Creek approximately 0.5 miles after it leaves NFS lands, immediately adjacent to a new bridge constructed within the last decade. Though all the adjacent properties are encumbered by conservation easements, similar limited physical development is anticipated to occur in the coming years within them. Applications have also been submitted to IDWR in recent years for small new water developments. Given the emphasis on restoring suitable instream flows in the vicinity, the applications were protested by the Idaho Water Resource Board as *not in the local public interest*. To date, neither the applications, nor the protests, have been withdrawn. Nevertheless, given the precedent, it seems unlikely that any development would be approved that would undermine the instream flow goals in the foreseeable future.

Consistency with Sawtooth Forest Plan

The Proposed Action would be in clear compliance with the Forest Plan. It is directly applicable to, and motivated by, the clear restoration emphasis of MPC 3.2 and the ACS for the Management Area, as well as the many other goals, objectives and standards for riparian, water, and fish resources within the Forest Plan. The action would address known threats to fish populations (including ESA protected), and water dependent resources, and fully address

stewardship commitments and emphasis prescribed for the watershed: “Active Restoration and Maintenance of Aquatic, Terrestrial, and Hydrologic Resources”. It would also directly implement the specific Forest Plan objectives: 0243, TEST07, and SWST06. The benefits of flow and connectivity derived from the proposed and connected actions would extend many miles upstream and downstream through Pole Creek and the Salmon River. The potential for native fish to rebound within the Pole Creek drainage (including bull trout, an MIS species) would be greatly bolstered by the action, since the principle limiting conditions would all be addressed.

Issue: Scenery Resources

The Sawtooth NRA has long been recognized as one of America's scenic gems. High mountain splendor, lush valleys, sparkling lakes and diverse natural resources make up this mountainous heart of Idaho. Attempts to legislate protection of the natural resources of the area go back to 1911 when a National Park proposal was endorsed by a group of Idaho Clubwomen. Bills to establish a National Park in the Sawtooths were also introduced in subsequent years. (Sawtooth NRA – Revisited, The First Ten Years, 1982)

PL 92-400 emphasized the enhancement of recreation values and the protection of scenic, natural, pastoral, and other values of the area. All three of the main access highways into the Sawtooth NRA have been designed as "Scenic Byways" and converge at the town of Stanley. Driving for pleasure through the Sawtooth NRA is consistently the #1 recreational activity identified by the approximately 375,000 visitors who use the Sawtooth NRA each year. Whether enticed through photographs, literature, or media articles, most area visitors have an image of what they expect to see within this rural landscape and rustic western atmosphere.

Lands adjacent to main travel routes within the Sawtooth NRA are comprised of vast expanses of open range, forested land, small clusters of ranch structures, corrals, dude ranch facilities, fencing, irrigation ditches and dirt roads. What clearly stands out is the common thread of scenic integrity – the wholeness or intactness of a perceived landscape. For the most part, development within the Sawtooth Valley has remained subordinate or consistent with the characteristic landscape. Scenic vistas have been maintained through the use of careful siting of new developments, landscape plantings, and attention to architectural details.

The Visual Management System (VMS) is a management tool that determines scenic values and establishes allowable levels of human-caused change to the scenic environment (*National Forest Landscape Management V2, Ch. 1, The Visual Management System*). This system is used to plan project activities in order to keep visual impacts within levels of acceptable change. Management of the scenic environment using the VMS requires the determination of Visual Quality Objectives (VQOs) for all areas within the National Forests. VQOs provide the scenic yardstick used to gauge the effects of activities. In the late 1980's, the Sawtooth NF published the *Visual Management System for the Sawtooth National Forest* (Sawtooth VMS) to further refine the process and basic concepts presented in the national VMS.

The Forest Service has developed long-term VQOs for the protection of the scenic values on all lands within the Sawtooth NRA. The current Forest Plan displays Standards and Guidelines relating to the management of all visual resources (see below). The Sawtooth Forest VQO map was reviewed during the 2003 revision of the Forest Plan. Inherent in the application of the VMS is a project-level analysis or 'truthing' of the adopted VQO for accuracy. Because Forest VQO mapping typically occurs at a forest-wide level of detail, a more site specific review is always included in a visual resource report to either prove or disprove the accuracy of the broader-level mapping. This is also described in the VMS handbook on page 43 and the Sawtooth VMS on page 31.

Measure of Substantial Impairment - Scenic Value

The threshold against which substantial impairment to scenic values will be evaluated is incorporated into the Forest Plan through standards related to the VRMS and VMS (or the Scenery Management System when it is available). Violation of any of these standards, individually or cumulatively, may represent substantial impairment of the scenic values.

The analysis for visual resources forms the basis for determining if there is Substantial Impairment to the scenic values of the Sawtooth NRA. Determination of substantial impairment is directly linked to the analysis of the projects consistency with the assigned VQO.

Photo 9: Project Area Characteristic Landscape



Applicable Forest Plan Scenic Direction/Guidelines:

- (SCST01) All projects shall be designed to meet the adopted Visual Quality Objectives (VQO) as displayed on the Forest VQO maps.
- (SCGU13) When a structure of facility is created for other than public use, the materials, color, and location should be chosen to reduce the visual contrast of the structure.
- (SCGU14) The use of natural or neutral colors and non-reflective surfaces should be considered for structures...
- (SCGU15) Natural or neutral colors should be used to help structures blend in with the landscape.
- (WSST02) Assign VQOs to the classifications of eligible, suitable, and designated Wild and Scenic River corridors as follows:
 - a) *Preservation* to a Wild classification
 - b) *Retention* to a Scenic classification (Salmon River)
 - c) *Partial Retention* to a Recreational classification
- (SNGO01) Administer and protect the SNRA in such a manner as will best provide:...
 - ...b) Conservation and development of scenic, natural, historic, pastoral, wildlife, and other values that contribute to and are available for public enjoyment...

- (Objective 0384) Manage federal and private lands to retain a pastoral or natural-appearing landscape consistent with the scenic values for which the SNRA was established.

Management Area 2 – Upper Salmon River Valley – Guidance

- (Objective 02121) Manage federal and private lands to retain a pastoral or natural-appearing landscape consistent with the scenic values for which the SNRA was established.
- (Standard 02124) All new utilities shall be placed underground if technically feasible.
- (Guideline 02126) Use the SNRA Private Land Regulations in conjunction with current visual management direction to provide the basis for visual management of private lands.
- (Guidelines 02127/02128) Development or uses on private/public lands should meet inventoried VQOs wherever feasible. Where the inventoried VQO of *Retention* or *Partial Retention* cannot be met, a reduction of one VQO constitutes impairment. Any activity that produces discordant elements in excess of the next lower VQO may constitute substantial impairment...

Inventoried/Adopted VQOs - Visual Quality Objectives are mapped/adopted for the Sawtooth National Recreation Area. The inventoried/adopted Visual Quality Objectives for the project area are nearly exclusively *Partial Retention* except for a narrow section of land along the Pole Creek riparian corridor which is identified as *Retention*. See project VQO map for further detail.

Distance Zones/Travel Routes – The entire project area will be visible from within the foreground and middleground viewing distance zones along primary project travel routes which include State Highway 75 and Forest Roads 194/197 (Valley Road/Pole Creek Road).

Sensitivity Levels – The high amount of recreational travel that occurs along both of the relevant project travel routes of significance commands high viewer sensitivity purely as a result of its regional/national significance. As a result this project area warrants the highest level of viewer sensitivity (Level 1) to Forest management activities in this area. Due to the very-high level of recreation use this area receives, users will likely display a high-level of sensitivity to the landscape character, equating to a Sensitivity Level of ‘1’ or highest (out of 3) as inventoried, mapped and adopted in the Sawtooth Forest Plan.

Project Level VQO Analysis –The current mapped/adopted VQOs are found to be consistent with the defined criteria with one exception.

Existing Visual Condition (EVC)

EVC measures the level of visual quality presently occurring on-the-ground. It is measured in terms of condition types from 1 (only ecological changes present) to 5 (changes are in glaring contrast to the ‘natural’).

The applicable EVC rating for the irrigated pasture lands within the project area is Type 3 – Areas in which the natural appearance of the landscape still remains dominant - consistent with a VQO of *Partial Retention*. Only when the pivots are operational does the EVC rating of 3 move toward an EVC rating of 4 or a *Modification* VQO due to the dominant discordant color/line/texture presented by the pivot spray against the characteristic landscape. The EVC rating of 2, which applies to the creek and river drainages, and is defined as landscape changes not visually evident, exceeds the standards of *Partial Retention* and is consistent with *Retention*.

However – the existing Point of Diversion (POD) structure located just down-creek from Road 194 (Valley Rd.) does not meet the mapped EVC rating of 2 and, by extension, does not currently meet the adopted VQO of *Retention* and is thus currently out of compliance with the Forest Plan.

Photo 10: POD at Pole Creek/Forest Road 194



Alternative 1 – No Action

Indicator – Changes in VQO:

Facilities and uses on National Forest System (NFS) lands associated with the irrigation system would not be authorized and subsequently removed. As a result – it is expected that the activities removed from NFS lands would then be accommodated elsewhere on adjacent private lands. The result is expected to be an expanded footprint of irrigation facilities, particularly to the south, due to the locations of the Forest Service ‘in-holdings’ amid the private parcels that would need to be avoided – thus spreading the impacts slightly further afield. It is also assumed that the *scenic mitigations* prescribed with the Proposed Action are unlikely to be implemented with the No Action. Additional impacts would also include new buried power, new Pole Creek diversions, and new access roads.

Because of the Forest Plan Standard that requires projects to meet mapped/adopted VQOs on Forest lands (SCST01); and because Forest Plan Guideline 02127 defines the impairment of the visual resource on private lands; both public and private lands are analyzed for impacts to the visual resource – although to the differing standards described above per the Forest Plan.

The net visual impact(s) for Alternative 1 is expected to be similar enough (due to a combination of visual rating factors including: management activities proposed, relative similarity/minor differences between the actions, characteristic landscape, and the distance zone(s) from which the project is being analyzed) to that described below for Alternative 2 that the outcome would not vary drastically enough to warrant a change in the overall ability (or disability) of either Alternative to meet VQOs. The mapped VQOs would be met.

For example – facilities such as the point of diversion that currently does not meet the mapped VQO and the associated ditch that would be removed from Forest lands would need to be located further from the affected travel route (Road 194) in order to be located fully upon private land, and would thus meet the visual requirements of the *Retention* VQO. Similarly, the presence/location of irrigation pivots associated with this Alternative would primarily occur in the middleground distance zone, from which the impacts would most likely be virtually indistinguishable from those proposed in Alternative 2 to the casual Forest observer. See the discussion under Alternative 2 below for more information. The No Action alternative would be compliant with Forest Plan direction for scenery resources.

Alternative 2 – Proposed Action

Direct and Indirect Effects

The Proposed Action includes the following (from the EA) management activities that have potential to impact the visual resource:

- Irrigation facilities include: a headgate control at Pole Creek; approximately 800 feet of open ditch (4' x 15'); 300 feet of buried pipeline; a fish screen; and a measuring device. An associated 0.6 miles of water ditch within one of the NFS parcels. The headworks would include a boulder grade control structure within Pole Creek.

- The proposed action would authorize continued irrigation within small isolated parcels of NFS lands, not to exceed 75 acres.
- Segments on NFS lands of unimproved 2-track access routes associated with the irrigation facilities and/or ranch operations would be authorized. All but ~230 feet currently exist.
- The new irrigation system would operate via buried underground power and water supply pipelines.
- The existing and new PODs lie within a sedge/shrub riparian area surrounded on either side by sage uplands on gentle topography.
- The former diversion structure, approximately 120 feet of ditch, the former fish screen, and associated access routes would all be removed.

Scenic Mitigation for the Proposed Action

- All exposed metal surfaces will be designed or treated to minimize reflection, such as with use of weathering metals, or as painted or stained to medium matte brown or rust.
- All concrete will be dyed or stained to a medium brown shade.
- Structures will be backfilled and graded to the maximum extent possible to minimize exposure.
- Live native shrub cuttings and/or transplants will be utilized around structures within riparian areas to promote and retain the natural setting, and screen their visibility from travel routes.

Connected Actions on Private Lands

- Convert from site generated hydropower to commercial power for the irrigation system. Approximately 0.8 miles of new buried power line could be installed on private lands.
- Utilize new wells for groundwater. One existing and one new well (to be drilled) would be utilized.
- Reconfigure/Replace the pivots – A total of approximately 10 primary – and approximately four additional short-swing pivots would be located within the same general area, but in a different configuration, that the five existing pivots operate. Also included would be buried support power and water supply utilities.

Pole Creek POD

Both the existing and proposed Pole Creek POD facilities occur on Forest land within the highly sensitive *Retention* VQO. The new POD proposed in this Alternative, while located within the immediate foreground distance zone, is located upstream of Forest Rd. 194 and would be visually screened amid an existing cluster of riparian willow – supplemented by further plantings of the same, if necessary. The layout of the facilities at the Pole Creek POD (as described above), include many BMPs and visually mitigating provisions sensitive to the aquatic (and by extension – the visual) resource, and as a result, the management activities proposed at the Pole Creek POD would meet the mapped adopted VQO of *Retention*.

Irrigation Pivots

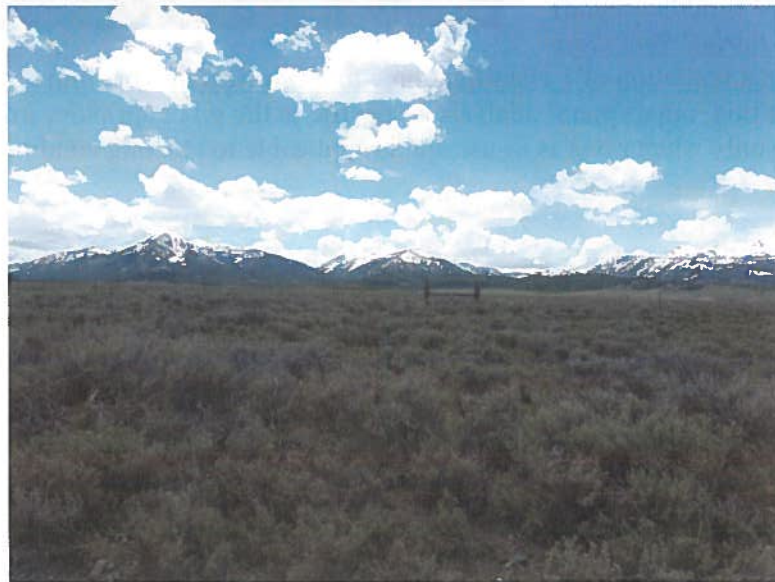
Views of the irrigation pivots on private lands occur primarily from Highway 75. The highway travel route is located at or slightly above the same elevation as the irrigated lands with the lowlands of the Salmon River in-between. As a result – a near unobstructed view of the project area exists.

Photo 11: View from Highway 75 Pull-Off



While the overall number of irrigation pivots is expected to increase by at least double as a result of the proposed action, the presence of pivots within the most sensitive viewshed, the foreground, is not expected to change significantly between Alternatives. Currently, approximately 12% of the total project pivot irrigated lands are within the Highway 75 foreground distance zone. In Alternative 2, irrigated lands would comprise approximately 11%. Given these very similar results, it is assumed that under Alternative 1 the outcomes would also be similar, though the possible configuration of the pivots is unknown.

Photo 12: Typical Project Area View from Valley Road



Views of the pivots from Forest Road 194 (Valley Road) are more screened by the adjacent landscape. Where the road is closest to the pivots – the road is at a similar elevation as the

pivots, and that combined with the diversity of background vegetation and terrain serve to help mitigate the views of the pivots to the casual observer. Currently, approximately 9% of the total project pivot irrigated lands are within the Valley Road foreground distance zone. In Alternative 2, irrigated lands would comprise approximately 12%. Though the possible configuration of the pivots is unknown under Alternative 1, is assumed the outcomes would be similar to Alternative 2 since the currently unirrigated area nearest the Valley Road would likely be incorporated into the system.

Just as with the existing condition, approximately 77% to 80% of pivot irrigation structures would be located outside of the foreground zone (i.e. in the middleground). In this condition, especially when combined with the visual treatment of the structures themselves, as prescribed for the Proposed Action (see Scenic Mitigations above), the management activities proposed for the pivot structures on private lands would meet the mapped/adopted VQO of Partial Retention.

Pivot Irrigation Spray

While the presence of fine water spray from the pivots would increase their visibility/visual impact, it does so equally between Alternatives because the irrigated area is roughly the same. This combined with the

fact that the pivots are not operated continuously in season and that they are not used year-round ensures the visual impacts of the water are 'ephemeral' and not deemed significant enough in the primary project distance zone that they exist (middleground) to affect the Partial Retention

Photo 13: Irrigation spray



VQO beyond a reduction of 1 classification – to Modification – or 'Impairment'². It should be noted that this 'impairment' analysis is specific to the pivot sprinkler irrigation white/mist water plume only when pivot is in-use and is applicable to existing conditions *and* both Alternatives.

Roads

The natural surfaced system and non-system roads proposed for either Alternative are consistent in type, frequency, and relative visibility from primary travel routes with the *Partial Retention* VQO in which they are primarily located and therefore meet Forest Plan visual resource standards.

Utilities

² See Forest Plan Management Area 2 – Upper Salmon River Valley – Guideline 2127 above. Visual 'impairment' on private lands is permitted and is consistent with Forest Plan guidance with respect to the visual resource such that 'substantial impairment' is not 'committed' by the proposed management action.

All utilities are proposed to be buried for either Alternative and therefore they would either meet (*Retention*) or exceed (*Partial Retention*) project VQOs.

Effects Conclusions for Scenery Resources

Based on a comparison of the natural site characteristics, existing dominance elements, the physical proximity of forest users to the project area, viewer sensitivity, and the degree of landscape alteration created by the project proposal, this project, if implemented as proposed with the design measures identified above would meet the mapped and updated Sawtooth National Forest Land and Resource Management Plan Visual Quality Objectives of *Retention* and *Partial Retention* on Forest lands.

On private lands, only the pivot irrigation water spray negatively affects the mapped/adopted VQO of *Partial Retention*, reducing the VQO by one level, meeting a *Modification* VQO which constitutes 'Impairment' of the visual resource on private land within the Sawtooth National Forest – consistent with Forest Plan Guideline 2127. The Proposed Action alternative would meet Forest Plan guidance for Scenery Resources.

Cumulative Effects for Scenery Resources

Past, present, and reasonably foreseeable projects that have occurred, or are occurring are considered in this section. The project area – specifically the National Forest – has experienced a variety of land disturbing activities over the past 40 years, including timber harvest for firewood, road construction, road maintenance, trail maintenance, dispersed camping, hunting, and wildfire suppression and prescribed fire activities. The project area has been grazed by domestic livestock over this time period. In the past decade, twelve miles of non-system routes have been closed and rehabilitated improving the scenery resource. The purchase of the former Busterback Ranch in 1992 by the USA, contributed towards maintaining the historic and pastoral values as seen from State Highway 75.

Many other uses and activities will remain. A network of roads, and motorized and non-motorized trails remain within the watershed. However, with the recent changes, those that remain are thought to be sustainable and compatible with the ecological needs of the landscape. Dispersed recreation occurs throughout the drainage on NFS lands, with concentrations (i.e. campsites) typically adjacent to water when it is accessible. The most problematic sites have been removed and restored, yet challenges and pressures with dispersed recreation are expected to continue.

There have been no recent treatments of forest vegetation within the watershed, except as associated with hand treatments of whitebark pine. Sheep are currently authorized to use the watershed as part of the Salmon-Pole-Champion Allotment. Though areas of intensive use still occur, general monitoring and observations indicate the area experiences minimal influence from the annual grazing. Historically, this area (particularly the sheep driveway), were utilized much more intensively, and some permanent or lingering alteration of soil and vegetation exists. The most intensive grazing within the vicinity occurs on private lands downstream along Pole Creek and the Salmon River.

On private lands some developments exist or are possible in the coming years that could visual quality. A hot-tub and related infrastructure was recently constructed on the north streambank of Pole Creek approximately 0.5 miles after it leaves NFS lands, immediately adjacent to a new bridge constructed within the last decade. Though all the adjacent properties are encumbered by conservation easements, similar limited physical development is anticipated to occur in the coming years within them.

In addition, activities on private lands in the area include, road construction, domestic livestock grazing, various types of recreation, building construction, water development/spring development, and water diversion for irrigation and domestic use.

Reasonably foreseeable actions in the Pole Creek area include relocation of approximately 1.3 miles of Pole Creek Rd (FS #70197) which is located within the Riparian Conservation Area (RCA). Once the existing route is relocated it would be decommissioned and rehabilitated. Additionally, this proposal would close and rehabilitate approximately 0.25 miles of Twin Creek Loop Road (FS #70412) which will no longer be necessary due to the relocation of the Pole Creek Road.

The effect of all these other actions combined with the Proposed Action activities should be minor with respect to scenery resources. Forest Plan direction for scenery resources would be met.

Effects to Other Resources

Most terrestrial Management Indicator Species (MIS), as well as Threatened, Endangered, and Region 4 Forest Service Sensitive (TES) species have either no habitat within the project area, or would see no effect as a result of any action alternative. Of those species that could be affected, those effects are anticipated to be minor and further reduced from even this potential with specific project design criteria and mitigations. The design criterion for the Proposed Action satisfactorily addresses these minor potential effects to these few wildlife and botanical species.

Based on the scoping responses it was determined that public disclosure of the effects to terrestrial Endangered, Threatened, and Sensitive and MIS wildlife and botanical species was important. These resources were analyzed in detail in a Biological Assessments / Biological Evaluations, and/or within resource reports, in the project record and are briefly summarized here.

Endangered Species Act Listed Wildlife Species

Implementation of the Proposed Action **may affect, but would not likely adversely affect** greater sage-grouse, a *candidate* species for protection. This determination is based on the conclusion that the project would cause a long-term decrease in sagebrush habitat on Forest Service lands from irrigation facilities (2.5 acres) and an increase in irrigated area (10 acres). These effects are insignificant defined as not reaching the scale where take occurs.

Forest Service Region Four Wildlife Sensitive Species

Implementation of the Proposed Action **may impact individuals** of spotted Bat, Townsend's big-eared bat, pygmy rabbit and spotted frog, but would not result in a trend toward federal listing of these species. Beneficial impacts to bats and spotted frog would also likely occur. Table 9 summarizes the effect determinations on sensitive species and the rationale.

Table 9: Summary of sensitive wildlife species determinations

Species	Determination	Habitat in the Project Area	Rationale
spotted bat, Townsend's big-eared bat,	May impact individuals and beneficial impact	yes	Small decrease in foraging habitat from new facilities and increase in foraging habitat quality from increased irrigated acres on Forest Service land.
pygmy rabbit	May impact individuals	yes	Decrease in habitat from new facilities and increase in irrigated acres on Forest Service land.
Spotted frog	May impact individuals temporary, Beneficial impact long-term	yes	New facility installation and old facility removal may result in temporary impacts; beneficial impact long-term from improved riparian conditions.
gray wolf, wolverine, bald eagle, peregrine falcon	No effect	yes	No measurable change in habitat.
bighorn sheep	No effect	yes	Only dispersal habitat occurs in the project area and activities would not affect dispersal potential.
fisher, common loon, northern goshawk, great gray owl, flammulated owl, boreal owl, white-headed woodpecker, three-toed woodpecker	No effect	no	No habitat in the project area.

Endangered Species Act Listed Plant Species

Based on the analysis of direct, indirect, and cumulative effects, implementation of the Proposed Action would have **No Effect** on ESA listed plant species: Ute ladies'-tresses orchid (*Spiranthes diluvialis*) or whitebark pine (*Pinus albicaulis*). These determinations are based upon absence of known occurrences and potential habitat in the Pole Creek Diversion SUP Authorization analysis area.

Regional Forester's Sensitive Plant Species

Implementation of the Proposed Action would have **No Impact** on Lemhi milkvetch (*Astragalus aquilonius*), White Cloud milkvetch (*Astragalus vexilliflexus* var. *nubilus*), Idaho primrose (*Douglasia idahoensis*), pointed draba (*Draba globosa*), Stanley's whitlow-grass (*Draba trichocarpa*), guardian buckwheat (*Eriogonum meledonum*), Sacajawea's bitterroot (*Lewisia sacajaweanana*), and Marsh's bluegrass (*Poa abbreviata* ssp. *marshii*). These determinations are based on the conclusion that there is no habitat for these species in the Pole Creek Diversion SUP analysis area, or that no disturbance would occur in habitat.

Based on the analysis of direct, indirect, and cumulative effects, implementation of the proposed action **May Impact** individuals or habitat slender moonwort (*Botrychium lineare*), Stanley Thlaspi (*Nocceae idahoense* var. *aileeniae*), least phacelia (*Phacelia minutissima*), bugleg goldenweed (*Pyrrocoma insecticuriis*) **but would not likely contribute to a trend toward federal listing or cause a loss of viability to the population**. These determinations are based upon avoidance, compliance with design criteria, and best management practices to minimize impacts that would lessen the quality of any habitat components to the degree that survival or reproductive success for these species are negatively affected.

Sawtooth National Forest Watch Plant Species

Implementation of the Proposed Action would have **No Impact** on Northern sagewort (*Artemisia campestris* ssp. *borealis* var. *purshi*), Challis milkvetch (*Astragalus amblytropis*), Engelmann's sedge (*Carex engelmannii*), sand sedge (*Carex incurviformis* var. *incurviformis*), Mt. Shasta sedge (*Carex stramineiformis*), Yellowstone draba (*Draba incerta*), and Kruckeberg's hollyfern (*Polystichum kruckebergii*), and petal-less campion (*Silene uralensis* ssp. *Montana*), , beautiful Bryum (*Bryum calobryoides*) Buxbaum's sedge (*Carex buxbaumii*), pale sedge (*Carex livida*), spoon-leaved sundew (*Drosera intermedia*), giant helleborine orchid (*Epipactis gigantea*), Blandow's Helodium (*Helodium blandowii*), silvery primrose (*Primula incana*), Farr's willow (*Salix farriae*), wedge-leaf saxifrage (*Saxifraga adscendens* ssp. *oregonensis*), and nodding saxifrage (*Saxifraga cernua*). These determinations are based on the conclusion that there is no habitat for these species in the Pole Creek Diversion SUP Authorization analysis area, or that no disturbance would occur in habitat.

Based on the analysis of direct, indirect, and cumulative effects, implementation of the Proposed Action **May Impact** individuals or habitat of tall swamp onion (*Allium validum*), park milkvetch (*Astragalus leptaleus*), and least moonwort (*Botrychium simplex*) **but would not likely contribute to a trend toward federal listing or cause a loss of viability to the population**. These determinations are based upon avoidance, compliance with design criteria, and best management practices to minimize impacts that would lessen the quality of any habitat components to the degree that survival or reproductive success for these species are negatively affected.

CHAPTER 4 - CONSULTATION AND COORDINATION

The Forest Service consulted the following individuals, Federal, State, and local agencies, tribes and non-Forest Service persons during the development of this environmental assessment.

Interdisciplinary Team Members:

Mark Moulton	Water and Fisheries, Team Leader, Writer/Editor
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Robert Kenworthy	Hydrologist, USFS Intermountain, Region Instream Flow Group
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Joe Gurrieri	Hydrogeologist, USFS National Operations, Minerals & Geology

Federal, State, Local, and Tribal Entities:

US Fish and Wildlife Service
National Marines Fisheries Service
Army Corps of Engineers
Bureau of Reclamation
Idaho Department of Water Resources
Idaho Water Resources Board
Idaho Office of Species Conservation
Idaho State Historic Preservation Office
Shoshone-Bannock Tribes
Custer Soil and Water Conservation District

Others:

Western Watersheds Project
Idaho Conservation League
Idaho Rivers United

CHAPTER 5 - REFERENCES

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