



United States  
Department of  
Agriculture

Forest  
Service

Pacific  
Northwest  
Region

P.O. Box 3623  
Portland, OR 97208-3623  
333 S.W. First Avenue  
Portland, OR 97204

File Code: 2350

Date: July 13, 1998

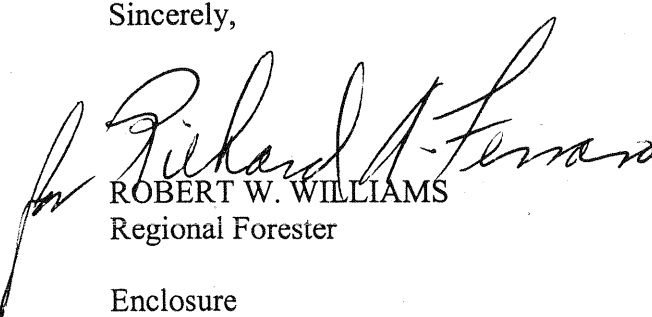
Colonel Robert T. Slusar  
Commanding Officer  
U.S. Army Corps of Engineers  
P.O. Box 2946  
Portland, OR 97208-2946

Dear Colonel Slusar:

Enclosed is our finding under Section 7(a) of the Wild and Scenic Rivers (WSR) Act for the private property bank stabilization proposal on the Imnaha River (ACOE Joint Permit Application #97-1048). Based on the short term nature of the bank protection material (wood with limited anchor rock) and its intent to restore structure and function of the riparian area, I find that the proposed action will not have a direct and adverse effect on the values of the Imnaha WSR.

We appreciate the "team" approach being employed in evaluation of proposed water resources projects on the Imnaha WSR. Site visits that include staff from affected federal and state agencies and landowners increases our ability to respond in a timely manner and to find a solution that does not have an adverse effect on WSR values. For continued coordination on this project, please contact Tom Glassford at the Hells Canyon National Recreation Area (541-426-5537).

Sincerely,



ROBERT W. WILLIAMS  
Regional Forester

Enclosure

cc:  
Wallowa-Whitman (gernst)  
HCNRA ( t.glassford, k.clark)  
NR (dheller, mlohrey)  
SP (dcarkin)  
OGC (jsomers)  
RLM (jdiedrich)



Section 7(a)  
Army Corps of Engineers #97-1048  
Garnett Bank Protection Project

The purpose of this document is to analyze whether the proposed Garnett private land protection project on the Imnaha Wild and Scenic River (WSR) would have a direct and adverse effect on the values for which the Imnaha was designated. Specifically, it analyzes the effects on the river's free-flowing condition, its water quality, and the outstandingly remarkable values (scenery, recreation, historic/prehistoric, fisheries, wildlife, vegetation/botanical, and traditional value/lifestyle adaptation).

The proposal was originally submitted in August 1997 as a series of permanent flood control structures (rock deflectors). The USFS, in concert with the ACOE, alerted the applicant that the proposal was likely to have a direct and adverse effect on the free-flowing character of the Imnaha WSR. The applicant, working with staff of the ACOE, Oregon Division of State Lands, Oregon Department of Fish and Wildlife, and the USFS, modified his proposal, resubmitting it in June 1998.

The following analysis is based on information presented in the ACOE Joint Permit Application Form (June 1998) as well as a site visit by staff of the ACOE, Oregon Division of State Lands, Oregon Department of Fish and Wildlife, and USFS, and the landowner (June 4, 1998).

1. Proposed Activity
  - a. Project

<b>Comment:</b> Consider using photographs to provide context for the proposal.
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The flooding that occurred in Wallowa County, Oregon during January 1997 and May 1998 realigned several segments of the Imnaha WSR. Some uses of private property within the Imnaha River corridor were adversely affected by the flooding. The applicant has lost pasturage along the east and west banks of the river due to the development of several braided channels. The proposed project would reestablish a stable, single thread channel, and use of a pasture. Stabilization of a meander bend will also be required in order for the project to be successful. The objective of the proposed project is to reestablish and stabilize the river into a single thread channel through the use of soft structures that will promote the establishment of riparian vegetation.

- b. Location

<b>Comment:</b> Recommend including a map of the project's location.
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The proposed project is located on privately owned land in a recreational segment of the Imnaha WSR corridor (also within the Hells Canyon National Recreation Area). The legal description for the project area is Township 3 South, Range 48 East, Section 22, Willamette Meridian.

- c. Purpose and Need

The reach of river channel within the project area has been altered by natural and human-caused factors. Natural factors have included flooding of pastures, log jams, erosion of stream banks at meanders, and gravel bar/island formation. Under natural conditions, the channel in this reach

should migrate or meander very slowly because its bank would be well armored by riparian trees and shrubs. However, the effects of the 1997 flood event as well as previous flood events were magnified by the conversion of riparian vegetation to pasturage, allowing for bank instability and extreme erosion rates on outside meander bends. This has resulted in the loss of pasturage through rapid channel migration and heightening the applicant's concern about the need for reestablishing a more stable channel form.

**Comment:** Recommend including a sketch or diagram of the project.

#### d. Proposed Action

The project entails placing large woody material (logs, rootwads, and limited anchor rock) against the east bank and as a partial deflector to allow riparian vegetation to reestablish. The final design of the placement of material will be determined at low water flows with assistance from the Oregon Department of Fish and Wildlife. The use of woody material will allow for recovery of the structure and function of the riparian area without the use of a permanent "structural" remedy such as rock riprap. The applicant is not proposing restoration efforts for his west pasture allowing the braided area to provide rearing habitat for salmonids.

**Comment:** Include or reference information that supports these conclusions.

#### 2. Analysis of Effects

The potential effects on within-channel conditions, riparian and floodplain conditions, upland conditions, off-site conditions, and hydrologic and biologic processes have been analyzed.

Within-channel conditions were altered by high flows in January 1997 and May 1998. On both sides of the river, a new system of braided channels was created. Braided channels, in this geomorphic setting, are not a stable form. The proposal is to reestablish a more stable channel form by placing large woody material as a bank protection and to deflect normal flows toward the pre-flood channel of the river. The set of braided channels on the west side of the river would not be altered, and further agricultural use would be abandoned in favor of fish habitat.

Riparian and floodplain conditions would not be directly altered by the proposal, and none of the proposed actions would restrict the river from occupying its floodplain during high flows.

Upland and off-site conditions would not be directly altered since the proposed activity is localized and designed to mimic natural processes.

In the proposed project area, riparian shrubs and trees have been replaced by grasses through cultivation and by recent high flows. Existing grasses do not have the root strength to retard bank erosion in higher velocity flows. This proposal is designed to reduce further erosion on the east bank by strategically placing rootwads that deflect flows toward the original channel. While cultivation of the east pasture would continue, the rootwads should provide enough erosion protection for reestablishment of riparian vegetation. On the west bank, the risk of erosion would be reduced over time as field cultivation ceases and riparian vegetation is reestablished.

### 3. Determination

#### a. Free-Flow

Free-flow is defined in the WSRs Act at Section 7 as "existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway." The placement of large woody material (rootwads with limited rock anchoring) will temporarily alter flow patterns. This alteration of flow is intended to mimic natural processes that occur when abundant riparian shrub and tree communities are intact. Therefore, this proposal would not have a direct and adverse effect on the free-flowing condition of the river.

#### b. Water Quality

**Comment:** Recommend list of or reference to mitigation measure.

Mitigation measures for scheduling and monitoring of instream work minimize any short-term adverse effects on water quality. The proposal should improve water quality over the long term by decreasing the rate of erosion from lateral movement of the east banks.

#### c. Outstandingly Remarkable Values

**Comment:** Reference any other Federal or State agency findings or append (e.g. a determination under the ESA).

The outstandingly remarkable values for the Imnaha WSR are scenic, recreation, historic/prehistoric, fisheries, wildlife, vegetation/botanical, and traditional value/lifestyle adaptation.

Scenic values would not be affected as placement of rootwads will appear similar to natural conditions which occur when trees eroded by high water events fall into the river and lodge their rootwads into the bank and channel.

Recreation values would not be affected. The river is not floatable through this section and the private land is not available for public fishing access.

Historic/prehistoric values would not be affected; ground-disturbing activities are limited to the active channel.

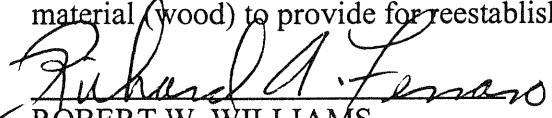
Fisheries, wildlife, and vegetation/botanical values will benefit from abandonment of agricultural use of the west pasture. Eventual replacement of pasture grasses with riparian vegetation will reduce floodplain erosion, improve water quality, and enhance riparian wildlife habitat.

Traditional value and lifestyle adaptation is protected; the owner will be reestablishing riparian structure and function with continued ability to use upland areas for pasturage.

Determination

**Comment:** Determination should also include water quality and outstandingly remarkable values.

It is my determination that the proposed action will not have a direct and adverse effect on the free-flowing characteristics of the Imnaha WSR. The proposal utilizes temporary structural material (wood) to provide for reestablishment of the riparian area.

*for*   
ROBERT W. WILLIAMS  
Regional Forester

7/13/98  
Date