Worksheet
Determination of NEPA Adequacy (DNA)
U.S Department of the Interior, Bureau of Land Management

A. Background

BLM Office: Prineville District Office  
NEPA Log #: DOI-BLM-OR-P040-2012-0038-DNA

Location: Big Wall Creek, JV Ranch – near Monument, Oregon.

Proposed Action Title: Big Wall Creek Headcut Stabilization

Description of the Proposed Action:

Install two rock cross vanes in order to stabilize a headcut located just upstream from the crossing on the USFS Road 24 near the intersection with County Rd 3. Big Wall Creek has developed an approximately two foot high headcut just upstream from the road crossing with USFS Road 24 which and was likely caused by combinations of the road crossing, grazing, upper watershed forest management and fire, and past agricultural practices that occurred within the JV Ranch. In order to stabilize the headcut and prevent further upstream migration, two rock cross vanes will be installed at the location of the headcut and 60 feet upstream from the primary drop.

The vanes will be constructed utilizing large, 1 to 4 cubic foot angular rock placed in a v-formation with the apex oriented up-stream (page 6). The apex of the vane will be flush with the upstream elevation of the channel and will have a drop of 4 to 5 inches. The arms will rise at approximately an 8% slope until they are flush with the bankfull elevation. This will help to redirect flow towards the middle of the channel and help prevent lateral and bank erosion. The vane will also utilize a layer of geotextile fabric along the upstream end, buried beneath the surface. This will help to prevent water from flowing through the structure and undermining its integrity.

From just upstream of the first structure to just downstream of the second one, a channel will be constructed in order to facilitate the two cross vanes. The channel is designed to be 8 inches in depth and have a bankfull width of 10 feet in order to accommodate a bankfull flow of 15 cubic feet per second. In addition, a bank full bench, 30 feet in width, will be constructed along the channel. Once complete, coir fiber netting will be staked down over the surface of the bankfull bench in order to add roughness and reduce erosion during any possible overbank flows before vegetation can become established.

At each location where the cross vane encounters the bankfull bench, a rock sill will be installed just below the surface of the bench and will extend a minimum distance of 8 feet into the bank. The sill will be constructed of rock and cobble and will be two feet deep and two feet wide. It

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will be wrapped in a layer of geotextile fabric. This will prevent over bank flows from eroding into the bankfull bench and thus bypassing the rock vanes.

**B. Land Use Plan Conformance**

Land Use Plan Name: John Day Resource Management Plan and Record of Decision  
Date approved (ROD): August 1985

The proposed action is in conformance with the applicable plan, even though it is not specifically provided for, because it is clearly consistent with the following land use plan decisions (objectives, terms, conditions):

to “enhance water quality and manage aquatic habitat with particular attention to those watersheds with major downstream uses including native anadromous species, other sport fisheries, and agriculture” (p. 12).

**C. Identify applicable National Environmental Policy Act (NEPA) documents and related documents that cover the proposed action**

The following NEPA documents cover the proposed action:


The following other documentation is relevant to the proposed action:

- Bureau of Land Management, US Forest Service - Aquatic Restoration Biological Assessment – December 2006

**D. NEPA Adequacy Criteria**

1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?
The proposed action is a feature of the selected alternative within the Headcut Stabilization EA and is located within the same analysis area.

“A second method of addressing stream degradation may be the construction of log or rock weirs. Rock and log weirs are very low channel spanning structures that are often used to stabilize streambeds and halt channel incision.” (Headcut EA, p. 6)

“The project area for this EA encompasses all BLM managed stream corridors within the Prineville District.” (Headcut EA, p. 13)

A complete list of all project design features that will be employed for this project can be seen in the Headcut Stabilization EA (p. 8-12)

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action, given current environmental concerns, interests, and resource values?

The existing alternatives were just decided upon in January of 2012 and are still relevant to this project. During the timeframe between the completion of the Headcut Stabilization EA and this document, no new information or circumstances have occurred. It can be reasonably concluded that there are no new information or circumstances that would substantially change the alternatives analyzed within the existing NEPA.

3. Is the existing analysis valid in light of any new information or circumstances (such as rangeland health standard assessment, recent endangered species listings, updated lists of BLM sensitive species)? Can you reasonably conclude that all new information and new circumstances would not substantially change the analysis of the new proposed action?

The existing analysis was just completed in January of 2012 and is still relevant to this project. During the timeframe between the completion of the Headcut Stabilization EA and this document, no new information or circumstances have occurred. It can be reasonably concluded that there are no new information or circumstances that would substantially change the analysis of the proposed action.

Wall Cr. contains mid-Columbia River Summer Steelhead and actions pertaining to Wall Cr. headcut stabilization are covered under the Aquatic Restoration Biological Opinion (ARBO, 2007).

4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document(s)?
Yes, the effects resulting for the implementation of the proposed project are similar to those analyzed in the Headcut Stabilization EA. These include:

"During construction activities, some bank and bed excavation may be necessary in order to key stabilization structures into the landscape and greatly reduce the probability of failure. These actions would likely result in increased sediment during construction and possibly immediately following the completion of the project. “ (Headcut EA, p. 17)

and

"Disturbed lands would also be more susceptible to erosion during high flows after project implementation until riparian vegetation can become reestablished. "(Headcut EA, p.17)

5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action?

Yes, the public involvement and interagency review that was incorporated into the development of the Headcut Stabilization EA is adequate for this project. Consultation with the public and other agencies occurred both in April of 2011 prior to the development of the EA and again in November of 2011 following the completion of the EA.

E. Persons/Agencies/BLM Staff consulted

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Resource/Agency represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mike McKay</td>
<td>Hydrologist</td>
<td>Hydrology</td>
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<tr>
<td>Jimmy Eisner</td>
<td>Fish Biologist</td>
<td>Fisheries</td>
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<tr>
<td>Rick Demmer</td>
<td>Wildlife Biologist</td>
<td>Wildlife/Botany</td>
</tr>
<tr>
<td>Ryan Griffin</td>
<td>Archeologist</td>
<td>Cultural Resources.</td>
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Note: Refer to the EA for a complete list of the team members participating in the preparation of the original environmental analysis or planning documents.

Conclusion
Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the documentation fully covers the proposed action and constitutes BLM’s compliance with the requirements of the NEPA.

Signature
Responsible official: ___________________________  7/20/12
H. F. “Chip” Faver  
CORA Field Manager

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Note: The signed Conclusion on this Worksheet is part of an interim step in the BLM’s internal decision process and does not constitute an appealable decision.

Contact Person
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Plan View

Profile View

Cross Section Views

Source: Rock Cross Vane
Typical Schematic

Drawn by: Sean Flynn
Revised by: L. K. Brannaka
12/11/06

Rock Cross Vane
Typical Schematic

Source: Dave Rosgen
Wildland Hydrology
1996