

## Annual Road Work Plan for HCP Covered Lands



Creek Crossing Upgrade, Road A51.19, Monument Creek Basin, winter BMPEP inspection


HCP 6.3.3.1.3 and 6.3.3.5.5

2012-2013 Reporting

May 23, 2013

The contents of this summary and the supporting maps and documents have been prepared and/or reviewed by:

HRC Roads Manager



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Tagg Nordstrom

I certify that, to the best of my knowledge, after appropriate inquiries by myself and/or persons under my control of all relevant persons involved in the preparation of this report, the information submitted is true, accurate, and complete.

HRC Stewardship Manager



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Maralyn A Renner

## Road Work Plan Overview

As set forth in HCP Section 6.3.3.1.3, HRC shall develop an annual road work plan. This plan shall include a prioritization and scheduling of stormproofing activities, a description of road work conducted in the previous year and road work anticipated to be conducted during the next 12 month period, beginning April 15.

HRC is committed to meeting these standards and provides this report for compliance with HCP Sections 6.3.3.1.3 and 6.3.3.5.5.

### Goals Set for 2012:

HRC planned to address ~900 sites to achieve 75 miles of stormproofed road, with an anticipated sediment savings of roughly 73,400 cubic yards.

### Goals Achieved for 2012:

HRC stormproofed 75 miles of road. Stormproofing miles were achieved through road abandonment and restoration, and by upgrading segments of existing and in-use roads with culverts to accommodate 100-year flow events.

HRC employed five company Excavator / Dozer pairs and seven contracted Excavator / Dozer pairs to remove 57,374 cubic yards of soil at 825 sites.

### Goals Set for 2013:

HRC anticipates the completion of ~780 sites, with an estimated sediment savings of about 40,000 cubic yards.

HRC intends to continue its utilization of new culvert technology to increase the life span of culverted crossings. We intend to expand our use of exhumed Large Woody Debris (LWD) as both channel armoring and bank stabilization material. Past experiences have shown that this material is readily available, functions very well when applied as bank stabilization and to counteract downcutting, and results in channel conditions more consistent with those found naturally. Utilization of this material is cost effective and expedites mitigation efforts, allowing for additional sites to be accomplished in the same season. We also intend to adapt the on-site mitigation depending on features that become evident during the site excavation. For example, in some cases we will stop excavating when we encounter LWD and leave it in the channel for stabilization and structure. Past experience has shown that in some geologies this is a better alternative than attempting to exhume all LWD. Please refer to the 2012 BMPEP report for more details

### MATO Reporting

This Annual Road Plan and Report is intended to meet the obligations of HRC's MATO for annual reporting.

Please contact either Tagg Nordstrom or Maralyn Renner if you have questions.

## Additional Road Plan Reporting Obligations set forth in HCP 6.3.3.1.3

Below are the report components as required by the HCP. We have provided the HCP section for clarity and our response in bold font. Note that the majority of our reporting is documented in large titled maps that have been saved digitally as a pdf files (file name in parentheses).

3.1 Roads that have been closed or decommissioned

**See 4-map set titled “HRC\_StormProofbyYear.”**

3.2 Locations of roads assessed and already stormproofed.

**See 4-map set titled “HRC\_StormProofbyYear.”**

3.3 Location, explanation, and justification of alternative measures undertaken in the previous year that result in less potential sediment delivery to Waters compared to prevention of diversion.

**List pending submittal as of 20 May 2013; previously submitted sites are still in effect.**

3.4 Locations of roads anticipated to be stormproofed during the next 12 months.

**See 4-map set titled “HRC\_StormProofbyYear.”**

3.5 Sites anticipated being stormproofed and their priority ranking.

**See document titled “HRC\_2013WorkOrders.”**

**See map titled “HRC\_2013ProposedRoadWorkMap.”**

3.6 Dates when roads were assessed according to 6.3.3.1 Item 1.

**See map titled “HRC\_2012RoadAssessmentAreas.”**

3.7 Locations of anticipated road construction and reconstruction.

**See map titled “HRC\_2013ProposedRoadWorkMap.”**

**See document titled “HRC\_2013WorkOrders.”**

3.8 Roads that are anticipated to meet the standard of a permanent road. No additional upgrading to the permanent road standard is anticipated.

3.9 Other information as appropriate.

**See document titled “HRC\_2012 AnnualRoadInspections”** - a list of roads inspected for the Annual Road Inspection Program (ARIP and WRIP) per 6.3.3.5. The inspections conducted in December 2012 count for spring 2013 (approved by Wildlife Agencies).

**See documents titled “HRC\_2011-12AWRIP-WorkOrders”** and **“HRC\_2012ARIP-WorkOrders”** - two lists of work orders for sites identified in the 2012 road inspections per 6.3.3.4 for maintenance in 2012.

**See document titled “HRC\_2012AnnualSiteWork”** - a list of work orders for all sites completed in 2012 other than the maintenance sites identified in the ARIP and WRIP inspections.

**See document titled “HRC\_2012SedimentSitesRepaired”** – a list of sediment sites repaired in 2012 by Planning Watershed.