



File Code: 1950

Date: March 29, 2002

Route To: Dave Herr
Environmental Coordinator

Subject: Lower Clear Creek-Granite Creek Floodplain Restoration Project

To: Craig Smith-Dixon
District Ranger

The Environmental Assessment for the Lower Clear Creek – Granite Creek Floodplain Restoration Project was completed April 1999. The Decision Notice and Finding of No Significant Impact was signed on June 12, 2000 with project work starting July 2000. Project work on both Clear Creek and Granite Creek is in progress with the majority of the heavy equipment work scheduled for completion summer 2002. The Confederated Tribes of the Umatilla Indian Reservation are partners in this Bonneville Power Administration funded project.

The Oregon Department of Fish and Wildlife is the lead agency for implementing the Granite Creek portion of this project. Their heavy equipment work on Granite Creek is near completion. The private landowner with holdings on Granite Creek and Clear Creek asked to be included in the project. The purpose of this memo is to consider the effects of a modification to the Environmental Assessment to continue work adjacent to the original project area.

Description of the Original Preferred Alternative

The objectives of the original preferred alternative are to: 1) Reestablish the natural floodplain functions and improve water quality of Clear and Granite Creeks, 2) Promote riparian vegetation recovery, 3) Enhance fish habitat, 4) Remove instream structures that are not fully functional, and 5) Reduce maintenance problems associated with the mine effluent drain pipes.

The original proposed action is to restore the floodplain by re-contouring dredge tailing piles along approximately two miles of Granite Creek (RM 5.9 to 7.7) and one mile of Clear Creek (RM 0.8 to 1.9) on both private and federal land. Excavators are used from an upland position to pull tailings away from the streambank for re-deposition on the uplands to establish a more natural floodplain. Any soil discovered under the dredged materials is salvaged and stored for later dispersal over the re-deposited tailings. Materials are blended into the natural topography. The preferred alternative also included riparian planting of native grasses and sedge as well as trees and shrubs on disturbed areas along Clear and Granite Creeks. Large wood would also be placed on the newly established floodplain of Clear Creek. The large wood placement described in the EA Preferred Alternative would not be implemented on Granite Creek between RM 7.7 to 8.7 and Clear Creek RM 0.0 to RM 0.8.

The original proposed action did not include instream activities that were determined Likely to Adversely Affect the ESA listed Mid-Columbia steelhead. Three damaged plunge pool structures in Clear Creek were not removed by excavator. Drainage pipes from three hard rock addit mines were not replaced with larger 18" diameter pipe. Objectives 4 and 5 of the original



preferred alternative were not met by the original proposed action and will not be addressed in the proposed project extension. A future decision could include these activities.

Description of the EA analysis area and proposed modification

The lower Clear Creek-Granite Creek Floodplain Restoration Project is located on the North Fork John Day Ranger District, Umatilla National Forest, approximately three air miles west of Granite Oregon, in Grant County (Figure 1). The project area includes portions of T8S, R35E, sections 27, 35 and 36; and T9S, R35E, sections 1, 2, 10, 11, 14, and 15 Willamette Meridian (Figure 1). The project area follows Forest Road 1035 parallel to Granite Creek and Forest Road 10 (County Road 240) parallel to Clear Creek for approximately .75 miles. Clear Creek flows into Granite Creek a tributary of the North Fork of the John Day River.

A larger area encompassing the entire associated subwatersheds was used to analyze effects on fish, water, and wildlife resources. This 14,442 acre area is referred to as the analysis area and includes the following subwatersheds; Lower granite Creek (93A), Lower Clear Creek (93F), and Middle Clear Creek (93J). The new opportunity area is within the original analysis area.

The extended project area, Granite Creek floodplain RM 7.7 to 8.7 and Clear Creek floodplain RM 0.0 to 0.8 is similar to other areas of Clear Creek and Granite Creek within the original project area. Tailing piles restrict available floodplain during high flows. The restoration activity in the extended project area would use the same techniques that have proven effective on Clear Creek, Granite Creek, and North Fork John Day River. Track mounted excavators would be used from an upland position to pull tailings away from the streambank for re-deposition on the uplands to establish a more natural floodplain. Any soil discovered under the dredged materials is salvaged and stored for later dispersal over the re-deposited tailings. Materials are contoured and blended into the natural topography often using a dozer to spread and walk the fines into the cobble size material. Riparian planting of native grasses and sedge as well as trees and shrubs on disturbed areas along Clear and Granite Creeks is also proposed.

Consultation for ESA listed species

The Environmental Assessment for the original project was started in 1998. Consultation was initiated with the National Marine Fisheries Service in 1998 in the North Fork John Day Multi-species Biological Assessment. The Environmental Assessment was completed in April 1999. In June of 1999 the Not Likely to Adversely Affect portion of the project was separated from the original consultation batch and consultation with NMFS was documented with a letter of concurrence. The project Decision Notice and Finding of No Significant Impact was signed June 12, 1999.

Clear Creek is a headwater tributary of the North Fork John Day River. The North Fork drainage is a major contributor of Mid-Columbia summer steelhead, listed as threatened under the Endangered Species Act (ESA). Bull trout listed as Threatened under the ESA are found in the North Fork subbasin, including a resident population in the headwaters of Clear and Granite Creeks and over-winter habitat in the North Fork John Day River below this project site.

Columbia River bull trout are not present within the project area and activities were determined No Effect to Columbia River bull trout.

New information for aquatic, wildlife, and plants species on the ESA Threatened and Endangered List or Regional Forester's sensitive species list after the EA was published in April 1999

A Biological Evaluation for plant species listed as "sensitive" on the Regional Forester's Sensitive Plant Species List (dated June 1991) indicated that no sensitive plant species were found in the original project area of the proposed activities. A determination of no impact for the project was made. In May 1999, the Regional Forester's Sensitive Plant Species List for Oregon was updated. Habitat has not been identified within the project area for *Silene spaldingii*, a species proposed for federal listing under the Endangered Species Act and is known to occur on the Umatilla National Forest. The plant occurs in open areas of deep Palousian soils, often on north aspects. There is no potential habitat for this plant in the original or expanded project areas. Two species of sedges (*Carex crawfordii* and *Carex interior*) were added to the list. Both plants are expected to occur on the District. In March 2002 a second Biological Evaluation based on additional survey information indicated that no sensitive plant species were located within the proposed extended project area.

Extending the project activity area upstream along Granite Creek from the mouth of Tencent Creek to the Road 10 culvert and from the mouth of Clear Creek to the Forest Boundary does not change the original wildlife determinations of affect. Project activities will not occur during the bald eagle winter use period. Bald eagle perching habitat (trees and snags) will not be removed. Riparian habitat restoration will improve bald eagle habitat in the long-term. Both the original and expanded project site does not represent potential reproductive habitat for lynx or wolverine. Lynx and wolverine have not been documented on the District making even short-term disturbance of dispersing individuals an extremely low probability. Foraging habitat for the Pacific big-eared bat would gradually improve as the riparian habitat recovers. Project activities in the original and expanded project area would not directly affect bats or their habitat.

Mid-Columbia steelhead, an ESA listed species, are know to spawn and rear within, above and below the original project area and the proposed extension to the project area. Bull trout are found both above and below the project area and expanded project area with isolated populations in headwater tributaries. A migratory radio tagged bull trout was documented in the lower reach of Granite Creek last fall. This is the first confirmation of migratory bull trout over-wintering in Granite Creek. The fish was over 3 miles below the project area and does not change the determination that bull trout are not present in the project area and project activities are no effect to bull trout. Mid-Columbia spring Chinook are a Regional Forester's sensitive species found in the Granite Creek and Clear Creek drainages. Project activities were determined to have no impact on this sensitive species. Activities take place during summer low flow conditions before the start of spawning activity. No instream fill or excavation activities were proposed. No short-term changes to water temperature or water clarity would result from project activities. Extending the project activity upstream would not change the original determination of no impact to Mid-Columbia spring Chinook.

Key Issues Aquatic T&E Species and Habitat

The purpose of the proposed action and the desire to extend the proposed action is floodplain and riparian restoration. The recovery of floodplain function by contouring the existing tailing piles would allow high spring stream flows to spread out on the newly created floodplain. Water on the floodplain is healthy and necessary for the distribution and growth of riparian vegetation. The recovery of riparian vegetation will provide stream surface shade and improved fish habitat.

The project activity is designed to minimize the potential for direct effect to fish or fish habitat. Activities directly adjacent to the creek take place during the summer low flow period even though no instream work is planned. Tailing materials are not placed in the stream channel. Existing stream channel pools are not altered. Streambank disturbance is held to a minimum. No negative cumulative effects to fish or aquatic resources was anticipated or documented during project monitoring for activities completed in 2000 or 2001. Any short-term negative effects from completed work would be past. Monitoring results will be documented in the BPA Annual Accomplishment Report to be posted on the BPA website.

Changes to Aquatic T&E Species and Habitat Key Issues Findings if Proposed Modification is Implemented

Effects of floodplain restoration were assessed in the original proposed project from activities planned on Granite Creek from RM 5.9 to RM 7.7 and Clear Creek RM 0.0 to 1.9. The proposed project modification would extend the project on Granite Creek from RM 7.7 to the culvert on Forest Road 10 at RM 8.7 on both National Forest land and private land. Project work would also be completed on private land from the mouth of Clear Creek to the Forest Road 10 Bridge at RM 0.8.

Key Issue Water Quality

Placer, hard rock, hydraulic, and dredge mining has occurred in the Granite Watershed since around 1870. Dredging and hard rock mining has had a persistent effect on riparian habitat and water quality. During the 1940's and 1950's dredge mining within the proposed project area excavated the alluvium within the valley bottom, screened for gold, and deposited the rock and gravel in piles across the valley bottom. Both Granite Creek and Clear Creek are confined between tailing piles with restricted floodplains within the project area.

Water temperatures have been monitored on streams within the boundary of the analysis area. Both Clear and Granite Creeks frequently failed to meet Oregon State water quality standards during the summer of 1996 and previous years, prompting the State of Oregon to list the streams as water quality limited. Stream water temperature during the summer months can be affected by high air temperature, low stream flow, and stream surface shade. Of these factors, stream surface shade is most affected by management activities. Dredging destroyed riparian vegetation and left behind rock piles that have been very slow to re-vegetate.

The tailing piles have created very stable stream banks and persist in confining the stream to a narrow channel even during times of high spring runoff. The end result has been high water velocity in the channel during times of high flow resulting in poor quality fish spawning and rearing habitat.

Changes to Water Quality Key Issues Findings if the Proposed Modification is Implemented

The physical shape of Clear and Granite Creeks streambed would be restored to conditions closer to those prior to dredging. Floodplain width would be increased between 25 and 200 feet, allowing the stream to deposit sediment on the floodplain to build stream banks. The proposed activity would restore 3.7 miles of riparian area adjacent to Granite Creek and Clear Creek. Project work would be extended one mile upstream on Granite Creek with the proposed additional project activity. Project work would also be completed on the lower 0.8 miles of Clear Creek on private land. Floodplain restoration will lead to riparian vegetation growth that will provide stream surface shade and cooler water temperatures during the summer. The benefits of floodplain restoration with accelerated recovery of riparian vegetation would take place on an additional mile of Granite Creek.

Tracking Issues

The tracking issues identified in the Environmental Assessment are; Management Indicator Species and other species of interest, noxious weeds, visuals, Threatened, Endangered, and Sensitive species, and heritage resources.

Photo point and channel cross-section monitoring is used to document stream adjacent physical changes and vegetative floodplain recovery. Photo points were established and permanently staked prior to the initiation of ground disturbance on the floodplain of Clear Creek and Granite Creek. Photos were taken before project work started and immediately following project completion in 2001. Photos will be taken in the future on a yearly basis to monitor recovery. Floodplain cross sections were also permanently staked and measurements taken. These will be re-measured at periodic intervals in the future.

Management indicator species, which occur in the general project area include Rocky Mountain elk, American marten, northern three-toed woodpecker, pileated woodpecker, and other primary cavity excavators. The south end of the project area borders a Designated Old Growth stand that provides habitat for all of these species. The project is within Management Area C7, Special Fish Management Area, which is also managed to provide riparian habitat for fish and wildlife species. Riparian vegetation is currently sparse, consisting of scattered pole size and smaller conifer. Removal of the dredge tailings encourages development of a functioning riparian ecosystem speeding recovery of riparian vegetation. A general improvement in the habitat of the Management Indicator Species is expected and will be documented through monitoring. There has been no loss of snag or large tree habitat from past project activities. Pond habitat has been protected in the project area. No detrimental affects to Management Indicator Species have been observed.

Visuals within the project area were monitored on a regular basis. The project area where material was removed and where deposited now looks more natural than before project initiation. Our intent was to restore floodplain function and preserve the visual character of the mining activities of the past. Tailing piles left by the dredge operation of the past are still present in the project area. Tailings have also been repositioned away from stream adjacent areas to improve

riparian habitat and preserve the mining character of the area. There has been no detrimental effect to visual resources.

Spawning ground surveys for Mid-Columbia spring Chinook and summer steelhead are completed in this area and are reported by ODFW in their report annually. Spring Chinook adults were present in both Clear and Granite Creeks during project activities in 2000 and 2001 with no observed detrimental effects to the fish. Care is taken to not disturb the spring Chinook holding in pools within the activity area. Project work was completed before the start of spawning activity. No detrimental affects to aquatic species were observed due to project activities in 2000 and 2001.

The spread of noxious weeds was also identified as a tracking issue. There are 5 noxious weed sites within the project area. A leafy spurge site has also been identified on Beaver Creek, a tributary of Clear Creek, approximately 2.5 miles above the activity area. Prevention strategies and mitigation measures to reduce the likelihood of the spread of noxious weeds have been followed and appear to be effective. Monitoring for noxious weeds will continue for five years after project completion. No new sites or evidence of contamination has been observed due to past project activity.

Heritage resources surveys were conducted in the original project area and would be conducted on all additional project activity areas before work would begin. All historic properties would be protected from any ground disturbing activity. Heritage resources have been protected with all project activities conducted in 2000 and 2001.

Compliance with other laws and regulations in the EA

The proposed additional project work on Granite Creek RM 7.7 to 8.7 and Clear Creek RM 0.0 to 0.8 would comply with Wetlands and Floodplain protection described in Executive Orders 11988 and 11990. This project activity would reestablish functioning floodplains in additional area that was disturbed by past dredge mining activity.

The purpose of the Clean Water Act of 1977 and subsequent amendments was to restore and maintain the chemical, physical, and biological integrity of the Nation's waters in order to protect the many beneficial uses. Both Clear Creek and Granite Creek were listed as Water Quality Limited for high water temperatures during the summer. The proposed additional project activity would create functioning floodplain that would lead to the recovery of riparian vegetation. Riparian vegetation would increase stream shade and reduce solar heating of the streams during the summer. Reduced solar heating of the streams during the summer will contribute toward the de-listing of these streams. The proposed project with the modification is in compliance with the Clean Water Act of 1977 and subsequent amendments.

The original Preferred Alternative was found to have no impact on air quality. The additional proposed project work would not change this determination. No fuels treatments are planned so there would be no effect to the areas designated for protection under the State of Oregon's Smoke Management Program.

Proposed activities would not alter land-use relative to prime farmland, rangeland, or forested land designation within the expanded project area.

No irreversible commitments or irretrievable commitments was associated with the original proposed project or would be with the additional project work on Clear and Granite Creeks.

The additional project work would also be governed by contracts awarded to qualified purchasers and contractors regardless of race, color, sex, religion, etc. The additional floodplain restoration work will create jobs. No quantitative output, lack of output, or timing of output associated with these projects would affect the civil rights, privileges, or status quo of consumers, minority groups, and women.

Conformance with new Forest Service policy and Executive Direction

There are no new Forest Service policies or Executive Direction since the EA was published in April 1999 and the Decision Notice and Finding of No Significant Impact was signed June 12, 2000 that would be effected by the proposed extension of the Preferred Alternative.

Recommendations

The Lower Clear Creek – Granite Creek Floodplain Restoration Project was executed as planned during 2000 and 2001. The use of existing technology developed over several years has been successful in restoring the floodplain to near normal conditions. Tailings were disposed in a manor that is consistent with current management objects for this area. The project area appears like other areas that have since recovered substantially. We can expect high water to flow outside of the channel decreasing velocities and causing deposition of fines, gravel, and wood on the riparian area and in the channel. Natural soil and vegetative recovery will probably take several years, however the base materials are now in place. There are still substantial tailings in the vicinity of the project but outside of the current project area. In future years it will be beneficial to continue these dredge tailing relocation projects.

Kathy Ramsey, Umatilla National Forest representative on the Level I Consultation Team agrees with the determination that extending the project activity as described will not change the determination of Not Likely to Adversely Affect Mid-Columbia steelhead or lead to the adverse modification of critical habitat. The Level 1 Consultation Team will review this proposal in the field in May 2002.

I recommend supplementing the Environmental Analysis to complete the proposed modification to the Lower Clear Creek – Granite Creek Floodplain Restoration Project.

/s/ John Sanchez

John Sanchez
Fish Biologist