POA-2010-772
FH-43 Improvements Project
El Capitan Passage
Applicant: Kiewit Infrastructure West Company
Agent: PND Engineers, Inc.
February 8, 2013

DRAFT Compensatory Mitigation Options Statement

The applicant is proposing a combination of an approved In-Lieu-Fee program and permittee responsible compensatory mitigation in order to mitigate for impacts to jurisdictional wetlands and waters of the U.S. due to the proposed upgrading of a 12-mile segment of FH43. At this time, the applicant and U.S. Forest Service (FS) have presented several projects that may qualify as compensatory mitigation. Upon approval by the Corps, these FS projects would be incorporated into the formal project Draft Mitigation Plan for approval by the district reviewer prior to permit issuance. The Draft Mitigation Plan will include baseline information and methodology for determination of credits. The Final Mitigation Plan would be submitted for approval by the district engineer before the permittee commences work in waters of the United States.

Permittee Responsible Mitigation

The applicant is actively working with the FS to identify projects that are ecologically beneficial in terms of projected changes in functions and values of wetlands or streams involved, are located on Prince of Wales Island near the impacted watershed, and can be implemented within an approved time frame relative to permit issuance. The applicant will partially or entirely fund these projects. Applicant and FS will enter into a collection agreement to establish means of payment and outline project commitments and objectives.

Location

The FS projects under consideration are primarily within the Staney Creek watershed located due south of the proposed road upgrading project on Prince of Wales Island. The Staney Creek Watershed has been listed as a priority watershed by the Tongass National Forest and as a very high priority for restoration by the Nature Conservancy (2008) due to its high biological value and its moderate to high modification of riparian habitat. Staney Creek supports three species of anadromous salmon – coho, pink and chum, as well as, resident and anadromous coastal cutthroat, rainbow/steelhead trout, and Dolly Varden char.

Background

A significant percentage of riparian areas in alluvial large wood-dependent channels have been harvested or roaded. Thirty-three percent of the riparian area has been harvested since 1965. Both road density and road proximity to streams pose potential long term risk to the hydrologic function and fish habitat condition in Staney Creek. Timber harvest practices and construction of timber extraction roads took place prior to the environmental safeguards of today.

Proposed Projects

The nature of the projects proposed to offset debits incurred by the upgrading of FH-43 are intended to address these impacts through enhancement and restoration of fish streams, riparian thinning, and red culvert removal or replacement to allow for fish passage. These projects will improve sediment transport, habitat complexity, future large wood recruitment, hydrologic connectivity, and provide fish passage.

1. In-Stream Enhancement: In-stream restoration of small tributaries and large channel reaches includes placement of large woody debris (LWD), rocks and bank repair using heavy machinery and/or hand tools pending accessibility, to restore stream bank and channel processes. Enhancement is specific to fish bearing reaches that have lost their depth, pool frequency, and large wood as a result of past timber harvest and road construction.

2. Riparian Thinning: Perform timber thinning within areas adjacent to fish bearing streams to encourage faster growth of natural and beneficial sources of large woody debris over the short- and long-term. Riparian thinning improves floodplain function by increasing the growth rate of young trees for future large woody debris which in turn increases bank stability and understory growth. In some cases conifers cut when thinning are large enough to use for as woody debris structures in small channels.
3. Fish Barrier Culvert Removal or Replacement: Where possible, complete removal of existing "red" category culverts characterized by a high certainty of not providing juvenile fish passage. If retention of a structure is necessary at a particular location, it will be replaced with a structure that allow for natural migration by adult and juvenile fish during various flows such as a bridge or a culvert that allows for fish passage.

Ecological Benefits and Objectives

Ecological benefits that help to qualify these projects for use as compensatory mitigation include:

1. Improvement or restoration of the natural range and frequency of aquatic habitat conditions that sustain the diversity and production of fish and other freshwater organisms.
2. Increased channel and habitat complexity in the Staney Creek watershed.
3. Increased growth of understory vegetation and species diversity.
4. Faster return of riparian vegetation to pre-harvest conditions.
5. Improved salmon and steelhead rearing and refugia habitat in the watershed.
6. Increased steelhead spawning habitat in watershed.
7. Increased Coho and Chum spawning habitat in the watershed.
8. Improved or restored biological, physical, and chemical integrity of the watershed.
9. Improved or restored stream bank and stream channel processes.
10. Improved or restored recruitment of LWD over the short and long term.

Performance Standards and Monitoring

Monitoring of these projects to ensure that performance standards are met will include implementation and effectiveness parameters. Implementation monitoring will ensure that treatments were applied as planned and will be conducted through as-built surveys, documentation and geo-referencing of structures constructed and habitat associated with each structure relative to pre-treatment baseline data. Pre- and post-treatment photography will also be included. Effectiveness monitoring will be used to detect trends in biota and habitat conditions over time. Performance indicators will include measures such as juvenile fish abundance and species diversity, pool frequency, riffle length, and substrate characterization.

Maintenance and Long Term Management

Detailed maintenance obligations, adaptive management strategies, and long term management of the mitigation areas will be based on the Tongass-wide Stream Restoration Effectiveness Monitoring Program currently administered by the FS and described in detail within the Draft Mitigation Plan. Methods of financial assurances that may be deemed necessary to provide funding for the long term will be included in the agreement between the applicant and the FS as well as the Draft Mitigation Plan.

In Lieu Fee Program

If the Corps determines that the FS' proposed projects are not eligible or only provide partial credit for the compensatory mitigation required, the applicant would make use of the In-Lieu-Fee program for the balance of the mitigation. In-Lieu-Fee program would be executed through the Southeast Alaska Land Trust or other entity approved by the Corps.