North Umpqua Hydropower Mitigation Fund
Project Nomination Form

Project Name: Copeland Creek LSR Vegetation Restoration Project (Middle North Umpqua Watershed)

Total Mitigation Funds Requested For this Fiscal Year: $39,800

Submitted by: Russ Oakes
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Type of Project (mark one that applies):

Wetland/stillwater habitat	___	Vegetation management	X
Terrestrial species connectivity	___	Riparian/aquatic species connectivity	___
Erosion control	___		

Explanation of why this project is time critical:
Early seral, plantation stands within the hydropower mitigation fund project area are currently overstocked and are in need of stand density management. Stand density management is necessary in order to increase residual stand growth, health and vigor, and to restore stand density, desired species composition, and structural diversity. Stands proposed for treatment are currently 20-25 years old and are quickly moving out of the window of opportunity for successful precommercial thinning treatments.

Description of hydropower project caused impacts that project is addressing (aquatic, terrestrial and natural resource related including wetland, aquatic & terrestrial connectivity, vegetation management, soil loss/erosion, etc.). Be specific how/what the project mitigates:
This project will mitigate impacts to terrestrial vegetation and wildlife habitat that is currently maintained in an early seral condition due to hydropower project facilities and activities, including transmission lines, roads, and forebays. By mitigating these direct hydropower project impacts through precommercial thinning and advancing late-successional forest structure, this project is consistent with the management goals specified in the North Umpqua Hydroelectric Project Settlement Agreement (Section 3, Settlement Agreement), with the intended use of the mitigation fund (Section 19.3 Settlement Agreement), and with priority restoration elements specified in the 2003 Umpqua National Forest's Forest Restoration Business Plan.

Point of hydropower induced impact:
Legal: T26S R20E S25-T26S R30E S30

6th field subwatershed: Copeland Creek
5th field watershed: Middle North Umpqua River
Administrative Unit: Diamond Lake RD

Location of proposed mitigation project:
Legal: T26S R20E S25-T26S R30E S30 south to T27S R20E S10-T27S R30E S7

6th field subwatershed: Copeland Creek
5th field watershed: Middle North Umpqua River
Administrative Unit: Diamond Lake RD

Description of project objectives, activities, *measurable* benefits, and expected accomplishments:

The primary project objective includes mitigating the disturbance of forest vegetation resulting from hydropower project implementation, operation, and maintenance through vegetation management. Specifically, this project will reduce conifer stocking levels by precommercially thinning 172 acres of 20-25 year-old plantations in Late Successional Reserve within key watersheds adjacent to the utility corridor. Silvicultural treatments are designed to accelerate the vegetative development of late-successional conditions in previously managed stands through density management and to enhance forest health by increasing height and diameter growth in residual trees. Desired future conditions include moderate to high canopy closure, high structural diversity (vertical and horizontal) with multiple canopy layers, high species diversity, large overstory trees dominating the residual canopy, and abundant large snags and down wood. These desired conditions are tiered to the 1994 Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (ROD), the 1998 South Cascades Late Successional Reserve Assessment (SCLSRA), 2003 Umpqua National Forest's Forest Restoration Business Plan, District watershed analyses recommendations, and a white paper entitled "Analysis of Precommercial Thinning Densities Within Late Successional Reserve 222". Secondary project objectives include restoring habitat connectivity for terrestrial wildlife species associated with late seral habitat within the managed landscape of the hydropower project. The proposed management activities would augment ongoing revegetation activities as specified in the 2004 Vegetation Management Plan to mitigate for the disturbance of forest vegetation associated with hydropower project operation and maintenance activities.

Expected accomplishments include successful vegetation management of 172 acres within currently overstocked and low vigor plantations. Key benefits of management activities include:

- Maintaining and improving terrestrial habitat quality and wildlife species connectivity in managed stands imbedded in a managed forest landscape (Settlement Agreement Management Goal 3.7);
- Maintaining ecological processes and riparian habitat in a sufficient condition to support interconnected and well-distributed populations of native species and maintaining and/or restoring aquatic and riparian connectivity across the landscape within the Northwest Forest Plan (NFP) jurisdiction (Settlement Agreement, Management Goal 3.2);
- Promoting the future development of structurally diverse and species-rich managed stands (including riparian species such as willow, big leaf maple, Pacific yew, serviceberry, elderberry, alder, and western red cedar);
- Planning for the long-term development of contiguous, mature and late seral forest habitat.
- Reducing stand densities in currently overstocked plantations to develop healthy crown ratios to promote height growth and diameter growth in residual trees;
- Restoring stand density, species diversity, and structural diversity to those considered characteristic under a natural disturbance regime;
- Enhancing forest health by reducing risk of insect and disease outbreaks characteristic of overstocked stands.

Key metrics used to measure successful project implementation include acres of plantations thinned from 500-3,500 TPA to 100-200 TPA and acres of activity fuels treated.

Identify any previous work completed (prior year accomplishment of multi-year project, planning, design work, etc.):

- In 2008, formal stand exams were completed on 2,000 acres of managed stands;
- In 2009, this stand exam data was used to formulate silvicultural prescriptions designed to accelerate the development of late-successional forest conditions;
- In 2010, NEPA analysis was completed using FY10 mitigation funding and resulted in the signed decision on the 2010 North Umpqua Zone Precommercial Thin/Fuels Treatment Project; and
- An existing IDIQ contract will be used to accomplish the proposed precommercial thinning vegetation management activities to improve stand health and vigor in stands within the hydropower project area.

Proposed budget:

Activity	*Personnel*	*Contract/Materials*	*Vehicles*	*Total*
Planning/NEPA				
Engineering design & Contract preparation	$1,000			$1,000
Contract costs		$37,300		$37,300
Contract Administration	$1,500			$1,500
Non-contract implementation				
Monitoring				
Totals	**$2,500**	**$37,300**		**$39,800**

If project is multi-year proposal, include budget table for each year of project

Identify other funding (includes appropriated funds) or confirmed, external partnerships of project

Source	**Value of contribution**	**Description of contribution**
FERC Mitigation Fund	$143,000	FY10, FY12, FY13 funding
Silviculture, Fire & Wildlife BLIs	To be determined.	FY14 funding

Proposed project schedule and timeline, including projected date of accomplishment:

The proposed project schedule includes contract preparation using an existing IDIQ Forest Service PCT contract with contract bidding and award scheduled for FY14. Implementation and inspection of silvicultural prescriptions specified in the 2010 North Umpqua Zone Precommercial Thin/Fuels Treatment Project CE will be initiated upon awarding of the contract and will be completed during FY14.

FY14 Mitigation Fund
Middle North Umpqua Watershed LSR Vegetation Restoration Project:
Copeland Creek Subwatershed Restoration

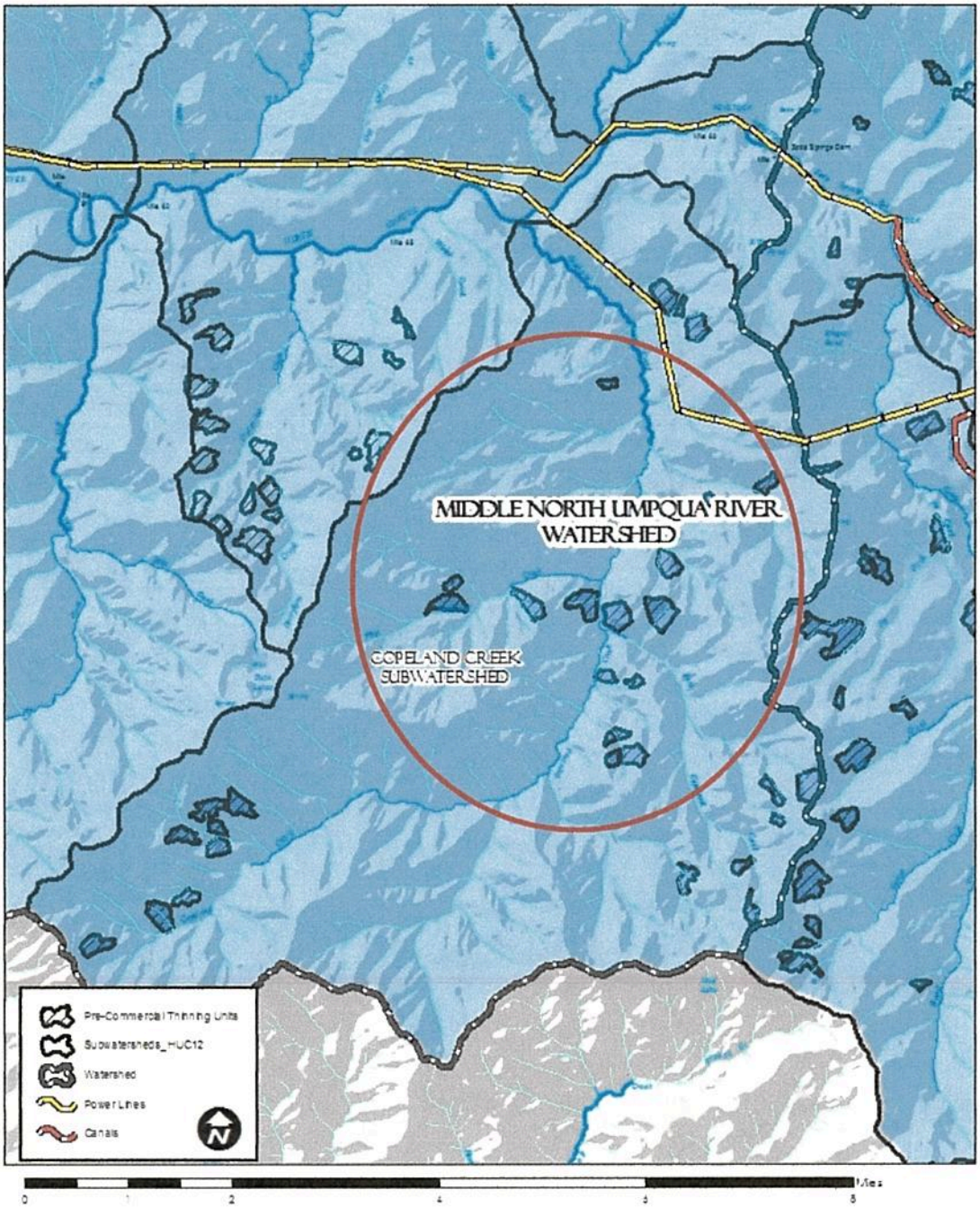

Figure 1. Location of Middle North Umpqua Watershed LSR Vegetation Restoration Project within Copeland Creek Subwatershed.