Camp Dawson / Robin Hood Project

KOOTENAI VALLEY RESOURCE INITATIVE

Scoping Update

November 9, 2017

IDAHO PANHANDLE NATIONAL FORESTS BONNERS FERRY RANGER DISTRICT



Robinson Lake (USFS Photo)

PROJECT AREA OVERVIEW

Both Project Areas are in northeast Boundary County

The Robin Hood project area is approximately 5,750 acres

The Camp Dawson Project Area is approximately 36,500 acres

Total project area: 42,250



EXISTING CONDITIONS

- Reduced stand resilience caused by dwarf mistletoe, insects, root diseases, and blister rust
- Reduced resilience due to overstocked stands, and unnatural stand composition
- Stand stress and mortality lead to fuels accumulation
- Fuels accumulation increases the potential for extreme fire behavior, which is undesirable in the WUI



Overstocked stand with accumulated fuels (USFS Photo)



PURPOSE AND NEED

Based on observed existing conditions, the preliminary purpose and needs for the Camp Dawson / Robin Hood

Project are to:

- Reduce the risk or extent of, or increase resilience to, insect or disease infestation of the landscape in the project area
- Reduce wildfire risk to the local communities and surrounding federal lands
- Protect critical infrastructure and primary egress routes



Example of Mountain Pine Beetle damage (USFS Photo)



PRELIMINARY TREATMENT GOALS

Restore resilience to reduce the risk or extent of, or increase resilience to, insect or disease infestation of the landscape in the project area

- Reduced stand resilience caused by dwarf mistletoe, beetles, engravers, root diseases, and blister rust
- Reduced resilience due to overstocked stands, and a lack of stand disturbance changing the stand composition
- Stand stress and mortality lead to hazardous fuels accumulation
- Fuels accumulation increases the potential for catastrophic fire

Reduce wildfire risk to the local communities and surrounding federal lands

Protect critical infrastructure and primary egress routes



ROBIN HOOD PROPOSED TREATMENTS

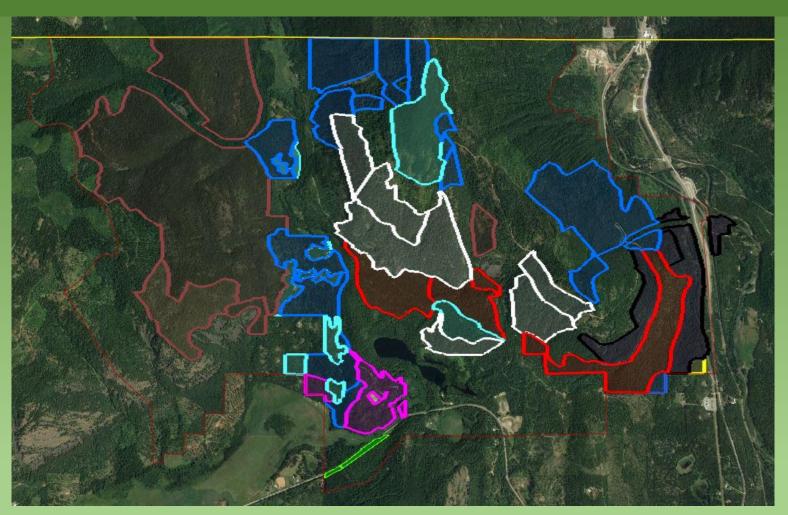
Project Area	<u>Prescription</u>	<u>Logging Systems</u>	<u>Yarding</u>	<u>Units</u>	<u>Acres</u>
Robin Hood	Precommercial Thin	Hand or Machine	Grapple Pile Along Private Land	11	224
Robin Hood	Commercial Thin	Log Forwarder	Grapple Pile	4	289
Camp Dawson	Commercial Thin	Ground-Based or Hand	Whole Tree Yarding	14	571
Robin Hood	Improvement Cut	Ground, Skyline, or Helicopter	Underburn	7	425
Robin Hood	Single Tree Selection	Ground Based	Whole Tree Yarding	2	75
Robin Hood	Variable Density Thinning	Helicopter	Underburn	4	1010
Camp Dawson	Variable Density Thinning	Ground-based or Skyline	Whole Tree Yarding and/or Underburn	5	1269
Robin Hood	Rehabilitation	Ground-Based	Whole Tree Yarding	1	6
Robin Hood	Seedtree	Helicopter	Whole Tree Yarding and/or Underburn	13	651
			Grapple Pile and Underburn, or Whole		
Camp Dawson	Seedtree	Forwarder, Skyline, or Ground-based	Tree Yarding	8	1144
Robin Hood	Shelterwood	Ground Based or Skyline	Whole Tree Yarding	4	188
Camp Dawson	Shelterwood	Ground-based or Skyline	Whole Tree Yarding and/or Underburn	5	503
Robin Hood	Special Cut	Ground Based	Masticate	1	9
Camp Dawson	Prescribed Burn	Not Applicable	Not Applicable	3	506
		то	82	6870	

Proposed prescriptions include:

- Four forms of intermediate harvest or thinning (Pre-commercial and Commercial Thinning, Improvement Cut, and Single Tree Selection)
- Three forms of regeneration harvest (Seedtree, Shelterwood, and Rehabilitation)
- One "hybrid" variable density harvest method (Variable Density Thinning)
- Three overlapping prescribed burn units in Camp Dawson
- One special treatment area in Camp Dawson to reduce shade on Highway 95



ROBIN HOOD PROJECT AREA



Precommercial thin: Aqua, 11 units, 224 acres

Commercial thin: Red, 4 units, 289 acres

Single tree: Pink, 2 units, 75 acres

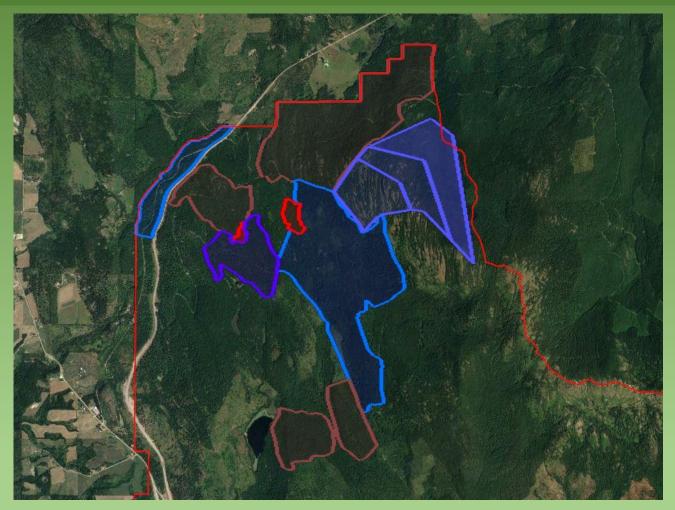
Improvement cut: White, 7 units, 425 acres

Variable density thin: Brown, 4 units, 1010 acres

Shelterwood: Black, 4 units, 188 acres Seedtree: Blue, 13 units, 651 acres Rehabilitation: Yellow, 1 unit, 6 acres Special cut: Green, 1 unit, 9 acres USDA

Image from Google Earth

CAMP DAWSON (North)



Commercial thin: Red, 2 units, 33 acres

Variable density thin: Brown, 4 units, 999 acres

Shelterwood: Purple, 1 unit, 161 acres

Seedtree: Blue, 2 units, 784 acres

Prescribed burn: Light Purple, 150/282/506 acres



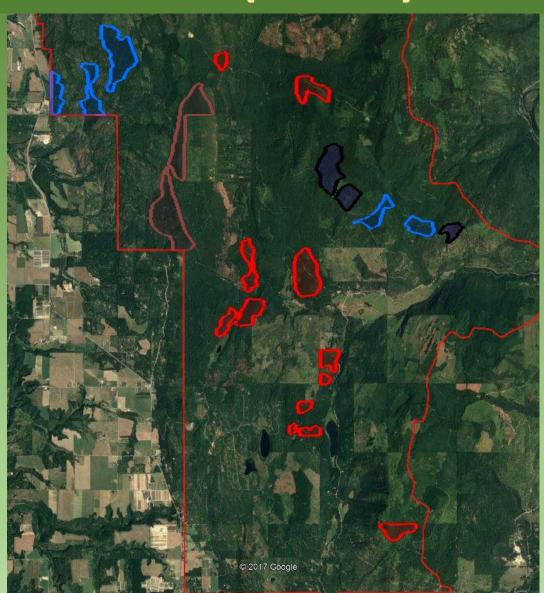
CAMP DAWSON (South)

Commercial thin:

Red, 11 units, 538 acres
Variable density thin:
Brown, 2 units, 270 acres
Shelterwood:

Black, 3 units, 342 acres Seedtree:

Blue, 6 units, 360 acres



Resource Considerations



SILVICULTURE / VEGETATION

- Insect and Disease Concerns
 - Offsite ponderosa pine: 1990's plantations, *Elytroderma* needle cast, beetle mortality
 - Lodgepole pine beetle mortality
 - Douglas-fir and grand fir root disease
 - Larch and Douglas-fir mistletoe
- Goal is a more resilient landscape with more resilient stands
 - Manage stand density
 - Influence fire behavior
 - Thinning and mastication in previously harvested stands
 - Commercial thinning in 30-50 year old plantations
 - Improved conditions for ponderosa pine and larch shade intolerant species
 - Promote desirable stand diversity
 - Replant with blister rust resistant white pine seedlings
 - Aspen enhancement
 - Improve conditions for ponderosa pine and larch disturbance species



SILVICULTURE / VEGETATION

Anticipated Design Features

 Any treatments occurring in old growth are intended to increase the resistance and resiliency of the stands to disturbances and stressors. Treatments will be carefully designed to avoid modifying stand characteristics to the extent that the stand would no longer meet the IPNF Forest plan old growth definition.



RECREATION

- No Designated Wilderness Areas, Wilderness Study Areas, Recommended Wilderness Areas, or Wild and Scenic Rivers within the project areas
- <u>Inventoried Roadless Area</u>: Hellroaring (#128) adjacent to Camp Dawson
- <u>Dispersed Recreation Status</u>: Semi-Primitive Motorized and Roaded Natural; no permanent change anticipated from project activities
- <u>Trails</u>:
- New 4 mile mountain bike trail cut from the Bethlehem Mountain Trail to Brush Lake mountain bike trail system.
 - Meadow Creek Trail head improvement.
 - Arndt Trailhead improvement.
 - Create a comprehensive ATV trails system in the Camp Nine area using existing roads and old roadbeds. Close off "exploratory" of road ATV trails that are causing resource damage.



RECREATION

- No log hauling on the roads around Brush and Robinson Lake on weekends or holidays
- Expedite the work around the Lakes (particularly Robinson)
- Buffer 449 Road by 200' to the Southeast from junction of 2274 Road (Lower Border Mountain)(CD)
- Buffer northeastern shore of Robinson Lake by 200' (RH)



Arndt Trail (Photo courtesy of mtbproject.com)



HYDROLOGY

- Floodplains and watersheds
 - Temperature TMDLS on Brush, Gillon, Harvey, Meadow, and Round Prairie
 Creeks; Moyie River tributaries
 - No TMDLs for sediment
- Municipal Watersheds
 - Beeline Water Association draws water from Meadow Creek watershed
- Wetlands
 - Harvest being evaluated in RHCAs in INFSH buffers along Mission Creek in unit 71 to help meet Riparian Management Objectives
 - Harvest is being evaluated within 660 feet of peatlands; units 3, 4, 5, and PCT



HYDROLOGY

- Primary Forest Service roads are in good condition
 - Secondary roads could be improved as required to implement proposed project activities
 - Preliminary assessments indicate approximately 5.5 miles of new temporary roads may be needed to access potential treatment areas; 1.5 miles in Robin Hood and 4 miles in Camp Dawson
 - Evaluating decommissioning user created trails and roads in project area



Well maintained FS Road in Camp Dawson (USFS photo)



HYDROLOGY

- PACFISH/INFSH Buffers will limit project impacts on stream temperatures
- Follow Idaho Forest Practices Act Best Management Practices (BMPs) for management of sediment
- No ground-based skidding or mechanical felling on slopes over 35%
- Avoid saturated soils, and damage to ditch lines; locate skid trails, landings and yarding corridors to minimize soil impacts, use slash mats as appropriate
- Space skid trails to a minimum of 80 feet apart, minimize excavated skid trails and landings, recontour and apply slash to scarified surfaces
- Retain appropriate coarse woody debris for the habitat type
- Construct temporary roads to minimize runoff and decommission temporary roads after project completion
- Unit-specific design features will be developed for mechanical equipment use in RHCAs for aspen enhancement, improving RMO conformance, and treatment near peatlands, if those treatments are carried forward after scoping



- Threatened, Endangered and Proposed Species:
 - Grizzly Bear (T)
 - BORZ in both, no BMU, no critical habitat
 - Potential for limited disturbance of bears from harvest activities
 - Anticipate a finding of may affect, not likely to adversely affect
 - Canada Lynx (T)
 - Portions of project areas in Round Prairie LAU
 - No critical habitat
 - ~4,000 acres of modeled lynx habitat in project areas, 79 acres overlap treatment areas
 - Anticipate a finding of may affect, not likely to adversely affect



Grizzly bears (Photo: USFWS, via Wikimedia Commons



Canada lynk (Photo: Mathias Appel, via Wikimedia Commons)



- Wolverine (PT)
 - 26 acres of persistent (1 of 7 years) snow cover habitat overlaps Camp Dawson unit 4; No maternal denning habitat (snow cover 5 of 7 years)
 - Anticipate a finding of not likely to jeopardize the continued existence



Woodland caribou (Photo: USFWS, via Wikimedia Commons)



- Sensitive Species:
 - Bald eagles
 - Use Brush Lake and Robinson Lake
 - No recent active nests
 - Black-backed woodpeckers
 - Use burned areas and bark beetle damaged areas
 - Limited suitable habitat exists on both project areas
 - Expect current distribution to remain the same
 - Coeur d'Alene salamander
 - Use springs and seeps, stream edges, waterfall areas
 - RHCAs provide protection
 - Low risk that aspen treatments could impact individuals
 - Common loon
 - Observed at Brush, Dawson, and Robinson lake; no successful nesting
 - Treatments near lakes could disturb nesting were it to occur



Black-backed woodpecker (Photo: USFWS, via Wikimedia Commons)



- Sensitive Species:
 - Flammulated owl
 - Habitat documented in both areas; Presence documented in Robin Hood
 - No long term habitat effects
 - Short term disturbance and reduction of prey moths due to understory impacts
 - Fisher
 - Suitable habitat exists in both project areas
 - Mostly dry site habitat not preferred by fisher
 - Fringed Myotis
 - Suitable habitat exists in both project areas
 - Leave trees and RHCAs retain and provide habitat
 - Gray Wolf
 - Three known packs ma overlap the project areas
 - No known dens or rendezvous sites within either
 - Potential for disturbance by activities or displacement of prey species in short term
 - Improved ungulate forage in long term



Flammulated owl (Photo: USFWS, via Wikimedia Commons)

- Sensitive Species:
 - Pygmy nuthatch
 - Preferred mature ponderosa habitat exists in small pockets
 - Limited observations of individuals in Camp Dawson project area
 - Townsend's big-eared bat
 - Two known hibernacula in project area (mines)
 - Seasonal disturbance buffer and harvest buffer (see design features)
 - Western toad
 - RHCA will protect breeding habitat
 - Individuals may be impacted by activities in upland areas
 - No loss of quality habitat





- Aspen enhancement
 - Remove existing conifers within 75 feet of aspen clones (primarily units 20 and 50)
 - Use on-site materials to create ungulate barriers
 - Prescribed burn where possible to enhance sprouting
 - No planting in aspen treatment areas





- Snag retention varies by habitat type, from 2-12.5 per acre
- Live tree retention (snag recruitment) varies by habitat type, from 0.5 to 47 per acre
- Coarse woody debris retention varies by habitat type, from ~6-30 logs per acre
- Maintain old growth characteristics
- Lynx: no increase in open roads
- Grizzly bear
 - No activity April1 June 15 in Mission-Moyie BORZ
 - No net increase in open road miles
 - No net increase in total roads
- Gray wolf
 - Buffer any discovered den or rendezvous site by one mile



- Townsend's big-eared bat
 - November 1 April 1 activity restriction within ¼ mile of mines
 - Exclusion area around American Girl mine to prevent microclimate changes
- Goshawk
 - 40 acre no activity nest buffer
 - No mechanized activity within ½ mile of active nests from April 15 to August 15
- Big game: No timber hauling or mechanized project activity along seasonally restricted roads October 1 - 31
- Retain all aspen and birch trees within units, where possible





Log truck near Camp Dawson project area (USFS Photo)

BOTANY

Extraordinary Circumstance and Resource Considerations

- Threatened, Endangered, and Proposed Species: There are no threatened, endangered or proposed species in the project areas, and no critical habitat
- <u>Sensitive Species</u>:
 - Multiple sensitive plant species locations within the project area
 - Some S2 species with less than 20 occurrences in the state
- Wetlands
 - Throughout the project areas and will require careful layout and implementation.
 - Some are peatlands, which require even more consideration.
 - Wetlands and peatlands provide high quality habitat for many rare plant species.

- Documented rare plant occurrences will be buffered from project activities to ensure population viability
- PACFISH/INFISH Buffers will be applied unless unit- or stand-specific prescriptions state otherwise
- The IPNF Forest Plan (Land Management Plan) peatland buffer of 660 feet will be applied, unless unit- or stand-specific prescriptions state otherwise

HERITAGE RESOURCES

Extraordinary Circumstance and Resource Considerations

- Fifty-one (51) heritage properties are known to exist within the Camp Dawson and Robin Hood project area boundaries. Of these 51, those sites that are both eligible for the National Register of Historic Places (NRHP) and within areas of potential impact include
 - Eleven (11) historic era sites
 - Three (3) pre-contact era sites
 - One (1) Traditional Cultural Property

- All sites eligible for the NRHP will be protected through project design:
 - Distance buffering each site at a level appropriate for the site type and the project activity
 - Banning all project activities within the sites' buffered boundaries, including staging, slash piling, etc.
 - Implementation of the Region 1 "Unanticipated Discovery Plan and Discovery of Human Remains Protocols" if needed.



SCENIC RESOURCES

- <u>Viewpoints of concern</u> (Scenic Integrity Objectives are High for foreground, and Moderate for middle and background distances):
 - Highways 2 and 95
 - Proposed Bike Trail
 - Dawson Lake, Brush Lake, Smith Lake, Robinson Lake day use areas, boat ramps and campgrounds
 - Moyie River and Moyie River Road
- Harvest units with potential scenic impacts due to size and visibility of harvest effects and roads:
 - Dawson units, 3, 7, 9, 36, 40, 48, 50 and 57
 - Robin Hood units 5, 12, 14, 15, 16, 17, 61, 62, 65, 66, 67, and 68

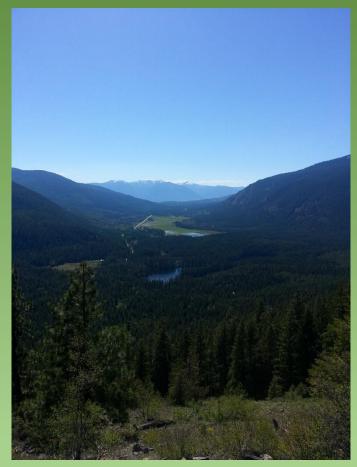




Dawson Unit 57 from Highway 95

SCENIC RESOURCES

- Make post-harvest treatment boundaries as natural as possible.
- Cut stumps as low as possible, generally less than 8" in height.
- Locate roads, landings, and slash piles out of sight from viewing platforms; recontour and reseed after harvest.
- Use multiple skylines in units and limit the width of the corridors
- Retain groups of leave trees and snags to emulate structure after a natural mixedseverity wildfire; screen views from highways and recreation sites; and break up views of temporary roads.



View overlooking Robinson lake



FIRE AND FUELS

Extraordinary Circumstance and Resource Considerations

Several treatment units border private land

Anticipated Design Features

 Utilize mechanical piling and pile burning in areas of PCT units adjacent to private land to minimize short-term fire risk



Precommercial thinning:

No commercial product yield
Targets lodgepole pine and Douglas-fir
Ponderosa pine, western larch, and white pine favored
Cut trees would be limbed and left
Boundary units piled and burned w/in 130 feet of the NFS boundary.
Not replanted

Commercial thinning:

Larger trees than precommercial thin units
Yields a merchantable product
Targets Douglas-fir, grand fir, and lodgepole pine
Ponderosa pine, larch, and white pine left
Basal area reduced by 20-50% in most units
Slash mechanically piled and burned
Not replanted.



A commercial thinning unit near the Camp Dawson unit 57 (USFS Photo)



Single tree selection

Removal of select individual trees of various ages and sizes Targeted trees are dead, dying, or unlikely to reach potential Approximately 25% of basal area may be removed No need for replanting



Model depiction of Single Tree Selection

Improvement cut

Removes ladder fuels to reduce fire risk
Increases quality and stand integrity on dry site old growth stands
Targets Douglas-fir and grand fir
Favors large ponderosa pine and larch for future old growth
Underburning will occur post harvest in most units
No need for replanting



Variable density thin

Creates a mosaic of stand densities and tree species across the unit Most areas receive moderate thinning Some areas receive heavy thinning, others light thinning

Basal area reduction of ~30% across the unit on average (17-44%)

Canopy reduction of ~20% across the unit
Helicopter or ground-based logging
Underburn following harvest
Natural regeneration in Robin Hood
Interplant larch and ponderosa pine on Dawson



Area near Camp Dawson Unit 50 that approximates the outcome of Variable Density Thinning, a few year after harvest (USFS Photo)



Shelterwood

Regeneration harvest to change age and species structure of the stand

Lodgepole pine, Douglas-fir, and western larch dominate; some "off-site" ponderosa pine

Removes up to 75% of canopy, 80% of basal area Favors large ponderosa pine, larch, and white pine Mix of clumped and dispersed retained trees Skyline and ground-based harvest Pile and under burning Replant with larch, ponderosa and white pine

Seedtree

Regeneration harvest
Lodgepole pine, Douglas-fir, hemlock dominate
Removes up to 90% of canopy, 95% of basal area
Favors large ponderosa pine, larch, and white pine
Retained trees are generally scattered across the unit
Helicopter, skyline and ground-based harvest
Pile and under burning
Replant with larch, ponderosa and white pine



Example of a regeneration harvest area replanted to larch, near Brush Lake (USFS Photo)

Rehabilitation

Removes most of the trees in an area to address severe insect and disease mortality Leaves very few trees

Prescribed burn after harvest

Replant ponderosa and white pine and western larch

Prescribed burn

Reduces and/or removes accumulated fuel
May be used post-harvest or in unharvested units
May kill most seedling and sapling sized trees
May kill some pole and saw log sized trees

Aspen Enhancement

Reduces conifer competition Encourage root sprouting

Special Cut

Roadside treatment Reduce shading on Hwy 95





Example of an underburn fire without harvest, during and after, in an area near the Camp Dawson project area





COLLABORATIVE PROCESS TIMELINE

Subject to change based on needs and issues that arise

- Preliminary Project Development: August December 2017
- Public Collaboration meeting: May, November 2017.
- Scoping and Public Input: Mid December Mid March, 2018
- Effects Analysis: February June 2018
- Objection Period (abbreviated): July 16 August 13, 2018
- Decision Notice / Finding of No Significant Impact: September 26, 2018



Questions?

Comments?

