Beaver Creek Planning Area

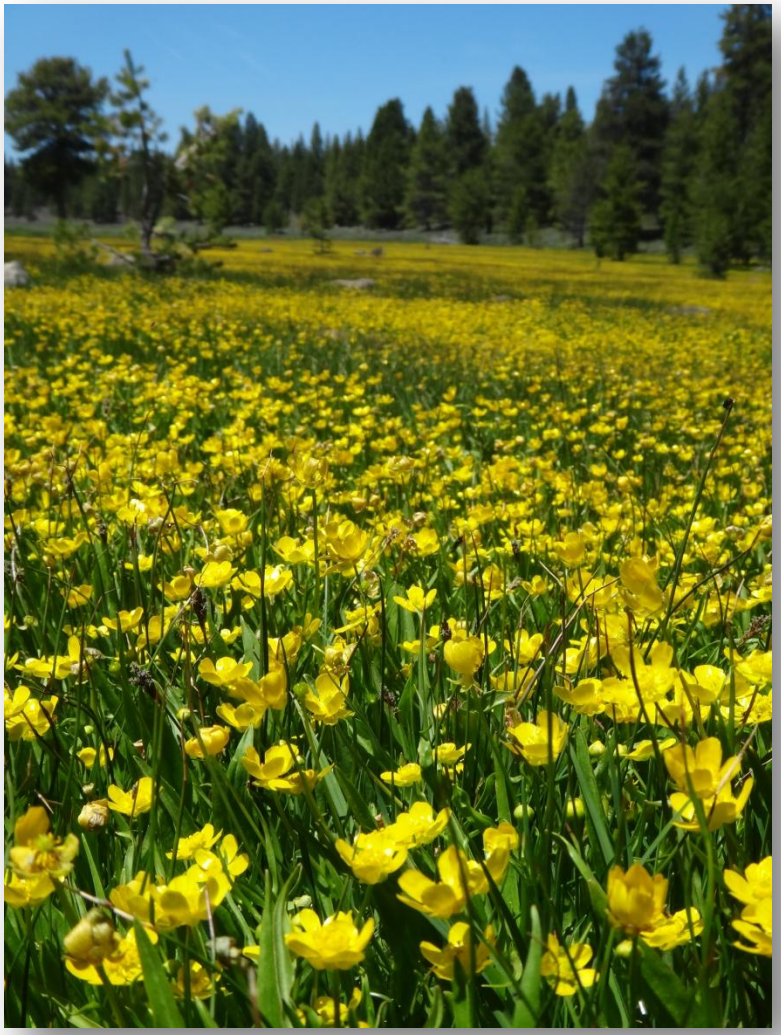
U.S. Forest Service

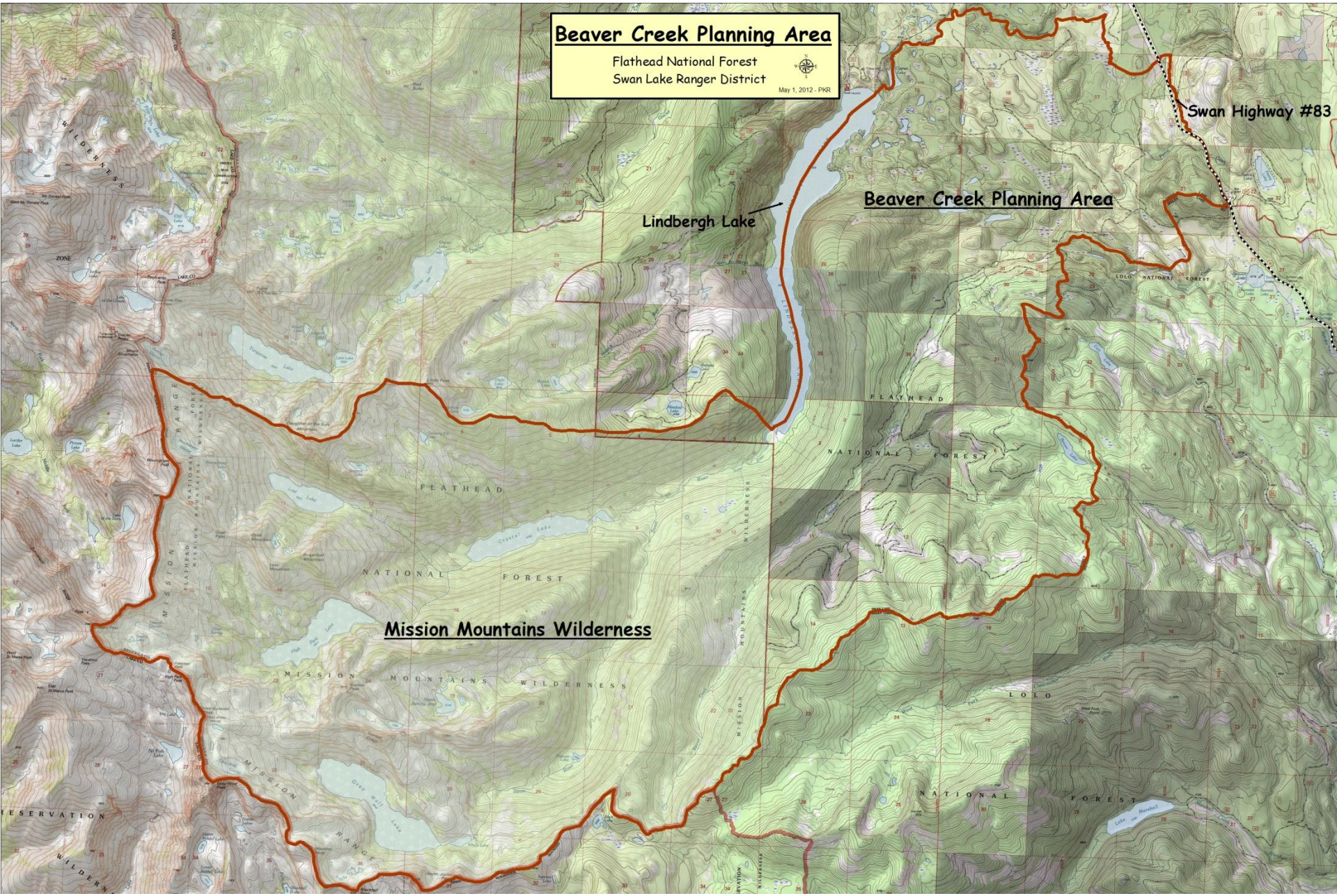
Flathead National Forest

Swan Lake Ranger District

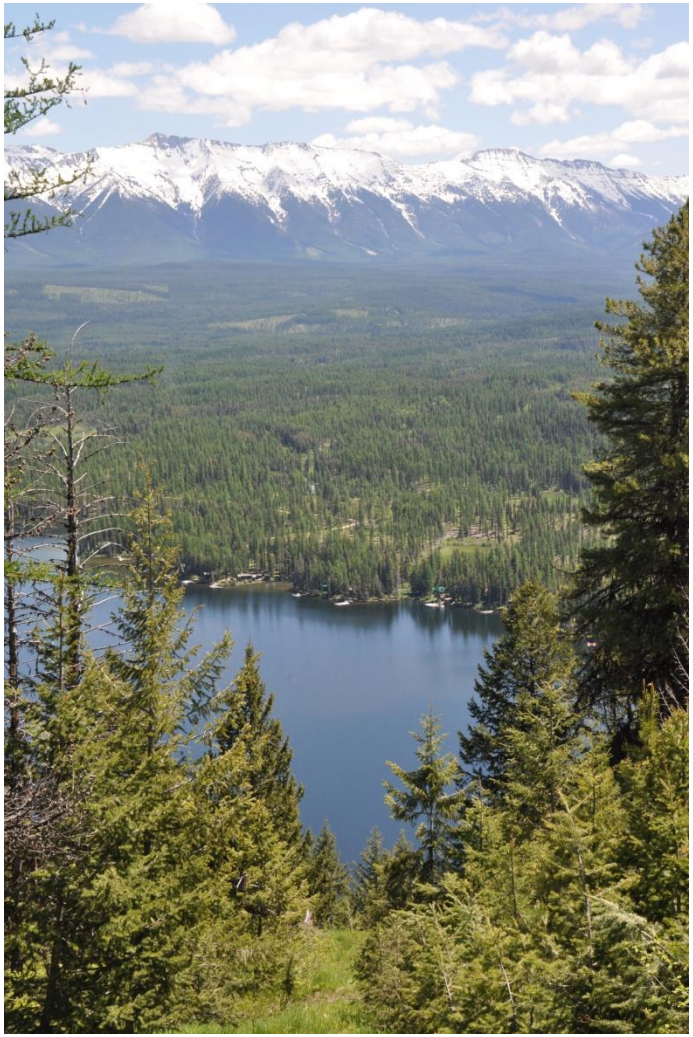
Tonight's Schedule:

- Project Overview
- Vegetation Management
- Fuels Reduction
- Wildlife
- Aquatics
- Recreation
- Visual Resources
- Transportation
- Economic Activity
- Your Input




Beaver Creek Planning Area
Flathead National Forest
Swan Lake Ranger District
May 1, 2012 - PKR
Swan Highway #83
Beaver Creek Planning Area
Lindbergh Lake
Mission Mountains Wilderness
FLATHEAD
NATIONAL FOREST
MISSION MOUNTAINS WILDERNESS
LOLO NATIONAL FOREST

Overview



Planning Area: 35,351 acres

Forest Service	**33,134 acres**
Private	**1,800 acres**
Lindbergh Lake	**417 acres**
TOTAL	**35,351 acres**

Primary Management Areas:

- Mission Mtns. Wilderness — MA22 = 20,012 acres
- Timberlands with emphasis on a secure grizzly bear travel route — MA11C = 5,492 acres
- Roaded Timberlands — MA15 = 2,726 acres
- Timberlands with emphasis on whitetailed deer summer range — MA15C = 1,632 acres

Overview


Thinning


Stand Regeneration


Recreation


Visual Resources


Burning


Riparian , Wetland &
Aquatics Restoration


Noxious Weeds


Wildlife Habitat

Overview

Multiple Use Sustained Yield Act

Collaborative Forest Restoration Act

National Forest Management Act

Endangered Species Act

FNF Land and Resource Management Plan

National Historic Preservation Act

National Environmental Policy Act

National Fire Plan

Swan Valley Grizzly Bear Conservation Agreement

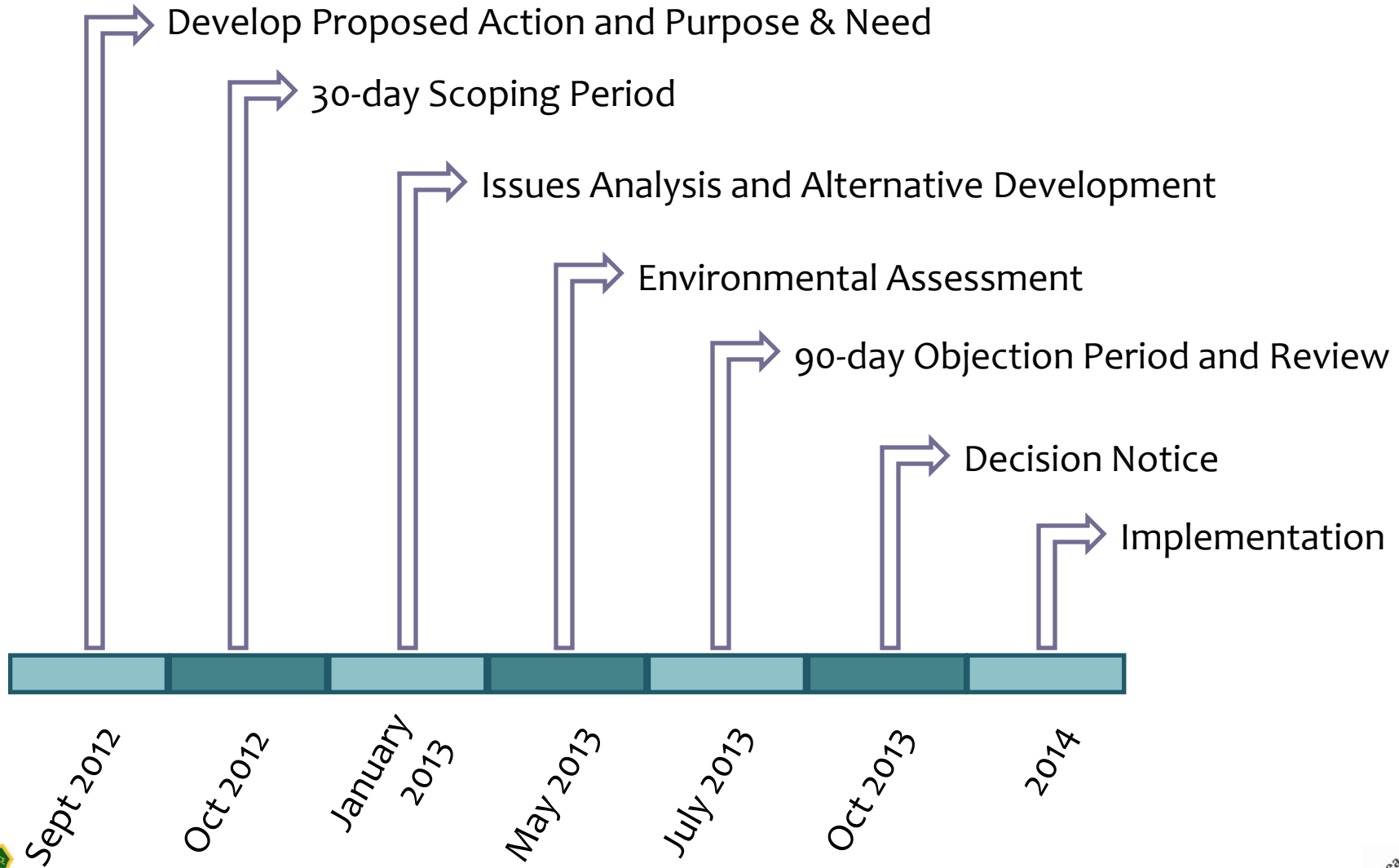
Northern Rockies Lynx Management Direction

Forest Service Projects

Clean Water Act

Clean Air Act

Overview


Develop Proposed Action and Purpose & Need
30-day Scoping Period
Issues Analysis and Alternative Development
Environmental Assessment
90-day Objection Period and Review
Decision Notice
Implementation
Sept 2012
Oct 2012
January 2013
May 2013
July 2013
Oct 2013
2014

Overview

Aims of Forest Service Ecological Restoration:

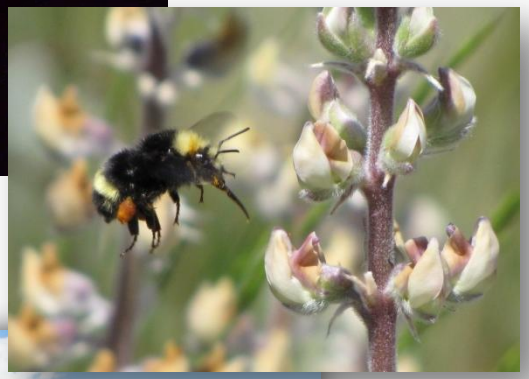
Ecosystem Health

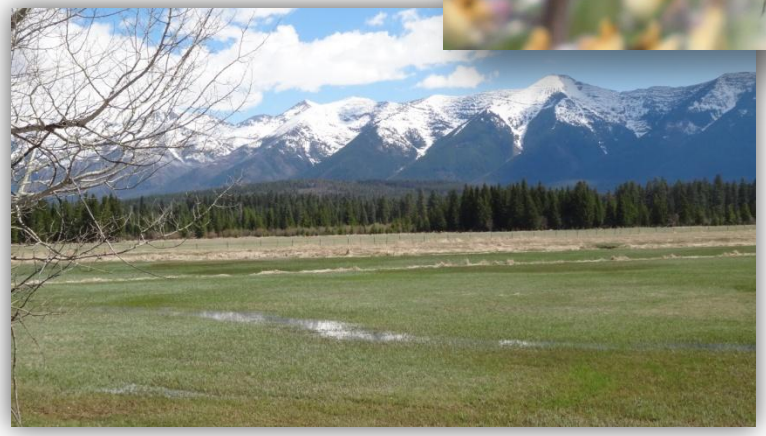
- Resilience
- Vigor
- Organization

Ecosystem Services

- Provisioning Services
- Regulating Services
- Supporting Services
- Cultural Services

Sustainability





Vegetation

Forest Health and Resiliency

Major Elements of Disturbance in Forest Ecosystems

- Insects
- Disease
- Fire
- Wind

- Important to ecosystem function when at low levels
  - Regulate composition, structure, pattern & process
- Can be problem when inherent disturbance regimes altered

Vegetation

Inherent disturbance regimes have been altered in the Beaver Creek Area

- Overstocking in many stands
- High stand densities result in stress
- Stress results in increased susceptibility to insect and disease attack

Vegetation

Insects

- Mountain Pine Beetle
- Western Pine Beetle
- Douglas-fir Beetle

Disease

- White Pine Blister Rust
- Dwarf Mistletoe
- Root disease

Vegetation

Thinning relieves environmental stress

- Reduces stand densities
- Increases tree health and vigor by freeing necessary site resources
- Removes damaged and diseased trees to prevent spread of pest attack
- Increases ecological resiliency

Vegetation

Regeneration

- Restoration of whitebark pine communities decimated by mountain pine beetle and blister rust
- Replace substantially unhealthy stands with young, more vigorous stands that have greater resiliency to stress
- Fosters sustainability

Vegetation

Creating resiliency through spatial heterogeneity

- composition • structure • pattern • process

Vegetation

Existing Condition of Weeds

Latin Name	Common Name	Infested Acres
Achillea nobilis	Noble yarrow	0.09
Artemisia absinthium	Common wormwood	0.05
Centaurea biebersteinii	Spotted knapweed	59.82
Cirsium arvense	Canada thistle	17.65
Cirsium vulgare	Bull thistle	3.53
Cynoglossum officinale	Houndstongue	0.35
Hieracium	Hawkweed	1.18
Hieracium aurantiacum	Orange hawkweed	5.17
Hieracium floribundum	Yellow hawkweed	27.47
Hypericum perforatum	St. John's wort	8.20
Leucanthemum vulgare	Ox-eye daisy	67.69
Phalaris arundinacea	Reed canarygrass	0.03
Potentilla argentea	Silver cinquefoil	0.13
Potentilla recta	Sulfur cinquefoil	2.29
Ranunculus acris	Tall buttercup	0.03
Tanacetum vulgare	Common tansy	0.08
Grand Total		**193.76**

- Currently 194 infested acres known in the project area, all on roads.
- Many roads are infested with a variety of weeds such as:

Vegetation

Weed Treatments in the Beaver Creek Planning Area

Roads

- One road currently under contract - CFLRP
- Other infested roads
  - Red lock gates
  - Barriers
  - Rare plant surveys

Not all areas have been inventoried

- If other areas are found to be infested, they can be targeted for specific treatments
  - Meadows, old growth stands, trails into wilderness, etc.
  - Herbicide, mowing, pulling, biocontrol, revegetation

Weed treatment works! But to be effective, it needs:

- Education
- Time - Commitment to the long term
- Funding
- Personnel

Vegetation

Reed canarygrass and water howellia

Water howellia

- Threatened plant species
- Limited to ephemeral ponds
- Threatened by reed canarygrass in much of Swan Valley

Experimental treatments for large and small patches of reed canarygrass

- Combination of methods
  - Burning, mowing, spraying, mulching
  - Revegetation

Reed canarygrass

Fuels

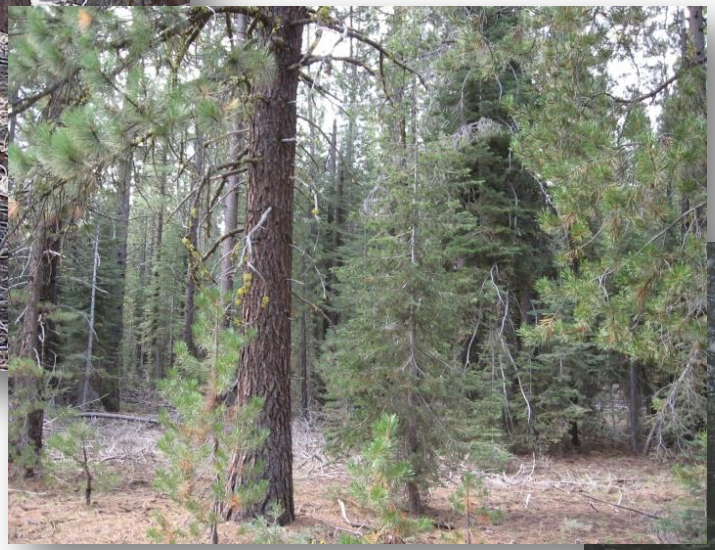
WUI-Wildland Urban Interface -A line, area, or zone where structures and other human development meet, or intermingle, with undeveloped wildland or vegetative fuels.

PLOD-Primary Line of Defense. A place where fire fighters could defend or engage a wildfire with pre-determined tactical advantages, such as roads, thinned areas, or natural fuels breaks.

Fuels

Fuel types

Surface fuels - composed of grass, herbs, low-lying shrubs, litter, and dead and down woody material

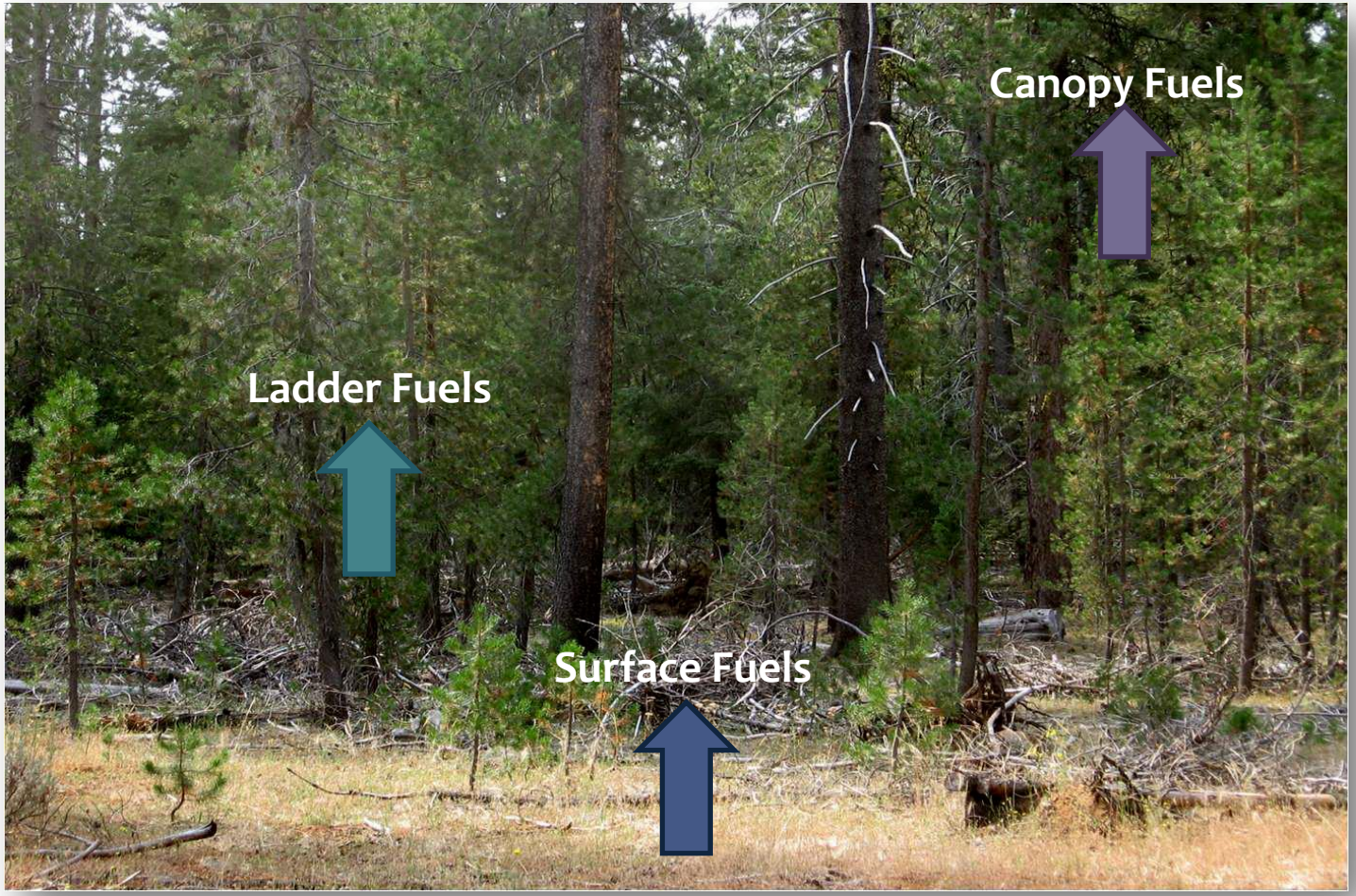


Ladder fuels - composed of live and dead shrubs and understory trees

Canopy fuels –composed of the live and dead material in the canopy of trees

Fuels

Example of typical stand structure in the Beaver Creek Planning Area



Fuels

Fire behavior

- Fire behavior is influenced by:
  - Fuels
  - Weather
  - Topography
- A change in any of these components results in a change in fire behavior
- Available fuel is the only factor that can be readily changed by management action
- Historical Fire Regimes have changed, resulting in increased wildfire intensity

Fuels

Pre-treatment

Pre-burn

Thinning and Piling

Post burn

Fuels

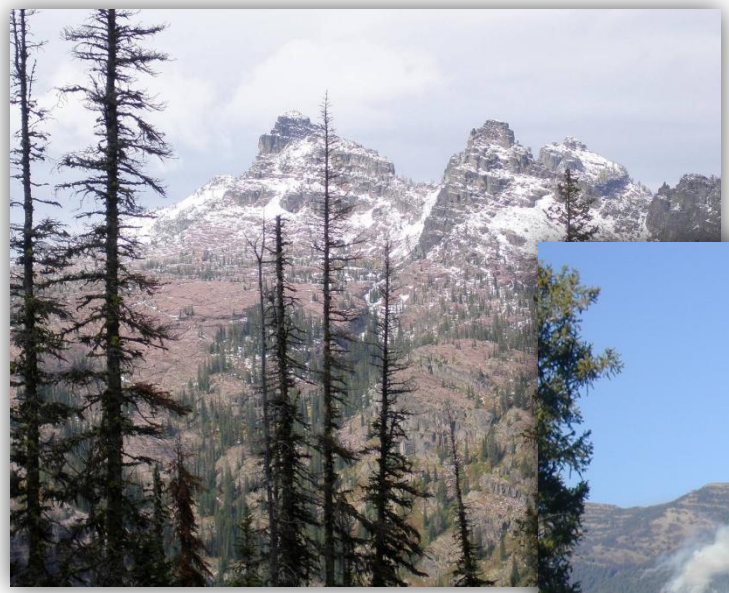
Prescribed Fire

Pile Burning

Understory Burning

Fuels

Wilderness Burning

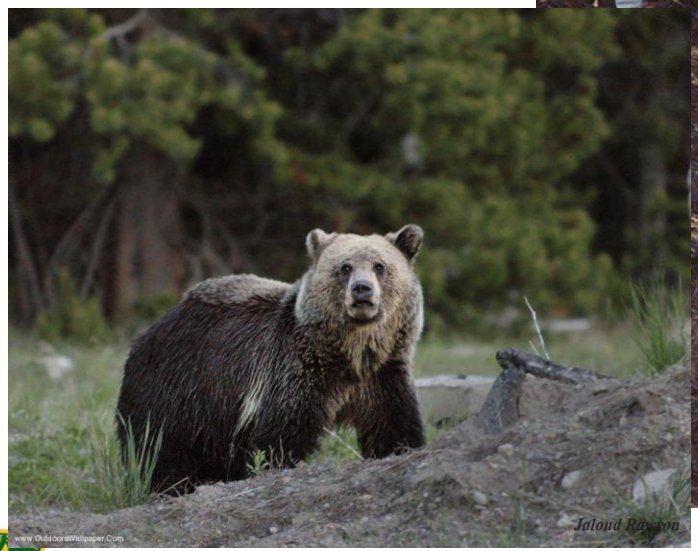


"The ability to address the wildfire risks contained within the wilderness cannot be achieved strictly through treatments to areas outside of wilderness."

Wildlife

Wildlife Values in the Beaver Creek Area Include:

- Natural, relatively undisturbed areas
- Lands with a good potential for cover and abundant forage opportunities
- Good potential for secure travel route between the Mission and Swan Mountain Ranges



Wildlife

How can we maintain and improve habitat quality and security for grizzly bear, lynx, large carnivores, and other wildlife species in this area?

- Maintain hiding cover on Management Area 11C lands over the short term

Wildlife

- Improve hiding cover connectivity in the Beaver Creek Area, specifically across older NFS lands and newer Legacy Land acquisition parcels over the long term

Wildlife

- Improve grizzly bear security through road management decisions that bring the Grizzly Bear Subunit into compliance with Forest Plan Amendment 19.

Aquatics

Lindbergh Lake Watershed

- Bull trout critical habitat in lake and upstream.
- Valuable, 99% pure Cutthroat trout population between Lindbergh and Gray Wolf Lake

Aquatics

Beaver Creek Watershed

- Watershed dominated by non-native species

- Potentially pure cutthroat trout population in outlet stream of Beaver Lake.

  May be desirable to install a barrier?

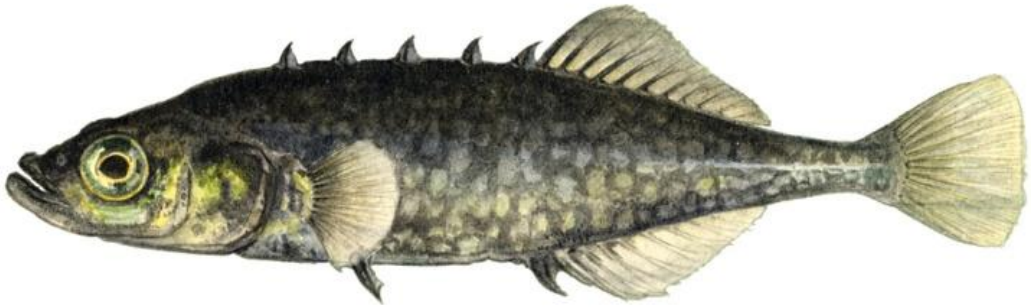
Aquatics

Beaver Creek Watershed

- Fish habitat seems limited by shallow pools.
  - Likely caused by indirect effect of forest roads.
  - Surface erosion not really of concern but rather intersection of groundwater movement.
  - Opportunity to decommission or modify the biggest offenders?

Aquatics

Wetlands



May be desirable to isolate wetlands so as to prevent further spread of non-native brook stickleback and central mudminnows.

…if that can even be done

Recreation & Trails

Wilderness:

- 20,012 acres of the 76,246 acre Mission Mountains Wilderness (MMW)

Trails:

- 351 Crystal Lake Trail : 5.76 miles in the project area, 3.96 miles in MMW
- 490 Lindbergh-Crystal Trail: 2.53 miles, 2.28 miles in MMW
- 34 Jocko Trail: 9.46 miles long, 3.89 miles in MMW.

Recreation & Trails

Developed Recreation Sites:

- Beaver Creek Trailhead located off NFSR 906.
- Parking for 10 vehicles, hitch rail, and information kiosk.

Dispersed Recreation:

- Trail use.
- Auto touring.
- Little camping.

Visual Resources

Sensitive Viewsheds in the Beaver Creek Area

- Highway 83 corridor viewsheds
- Lindbergh Lake viewsheds
- Other sensitive use-areas and travelways:
  - Recreational trails,
  - use areas within the planning area
- Viewsheds of residences with views into forest

View from Lindbergh Lake Campground

Beaver Existing Transportation

NATIONAL FOREST SYSTEM ROADS		
TRAVEL MANAGEMENT	**MILES OF ROAD**	**ROAD DENSITY (MI/MI^2)**
OPEN YEARLONG	8.8	.17
CLOSED YEARLONG	55.3	---
TOTAL ROAD MILEAGE	**64.1**	**1.21**

- MT LEGACY ROADS = 11.6 MILES
- PRIVATE ROADS = 9.0 MILES

ROAD MAINTENANCE LEVELS	
OPERATING MAINTENANCE LEVEL	**MILES OF ROAD**
ML 1	55.3
ML 2	0.7
ML 3	8.1

Economic Activity

Provide Opportunities that Benefit the Economy

1. Provide Forest Products
   - Provide wood products including: saw timber, pulp, house logs, post and pole and rail material
   - Result from prescriptions that meet other project objectives
   - Capture value of wood products affected by insects and disease
   - Create feasible projects benefiting local contractors and wood processors

Economic Activity

Provide Opportunities that Benefit the Economy

2. Utilize Stewardship Contracting Authorities
   - Trade goods (forest product value) for services (fuels reduction, weeds control, restoration work, etc.)
   - Best Value contract award
   - Reduce Forest Service overhead costs
3. System Roads
   - Maintenance and improvements
   - Road decommissioning
4. Others???

Your Input

- Questions?
- Comments?
- Concerns?
- Feedback?
- Ideas?

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