Buckhorn Burn Project

General Description of Resource Area

- Deer Creek Watershed: Canuck Pass south to Keno Creek with Buckhorn Ridge as the eastern boundary and Deer Creek as the western boundary.
- Resource Area: 11,000 acres
- Prescribed Burn Areas: 4,000 acres
- Inventoried Roadless Area – Buckhorn Ridge
- Primarily south and west aspects: Burn Unit elevations from 3400-6000' on LP and SAF forest types
- Current Forest Plan Management Areas:

  MA2: grizzly bear habitat and timber production

  MA9: lands not suitable for timber production
- Keno BMU & Deer-Skin LAU
- Last Fire in 1931: burned over 15K acres & nearly all of the Resource Area, much as a high-severity fire.

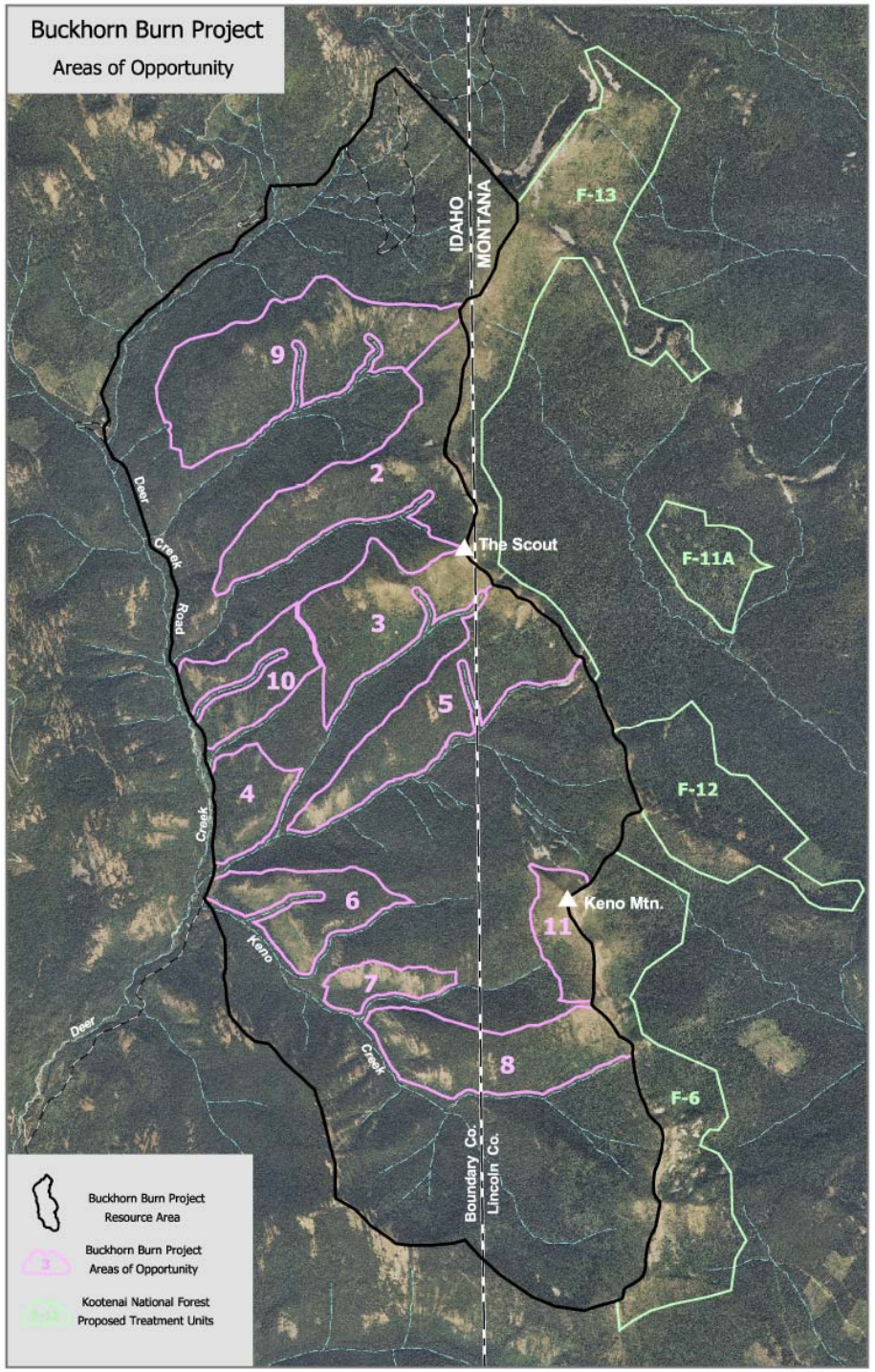
Purpose and Need

- Improve wildlife habitat by increasing and improving forage for big game species and grizzly bears
- Reduce natural fuel accumulations
- Provide restoration opportunities for whitebark pine

Categorical Exclusion:

(6) Timber stand and/or wildlife habitat improvement activities that do not include the use of herbicides or do not require more than 1 mile of low standard road construction. This includes but is not limited to:

(iv) Prescribed burning to reduce natural fuel build- up and improve plant vigor.



Draft Proposed Action

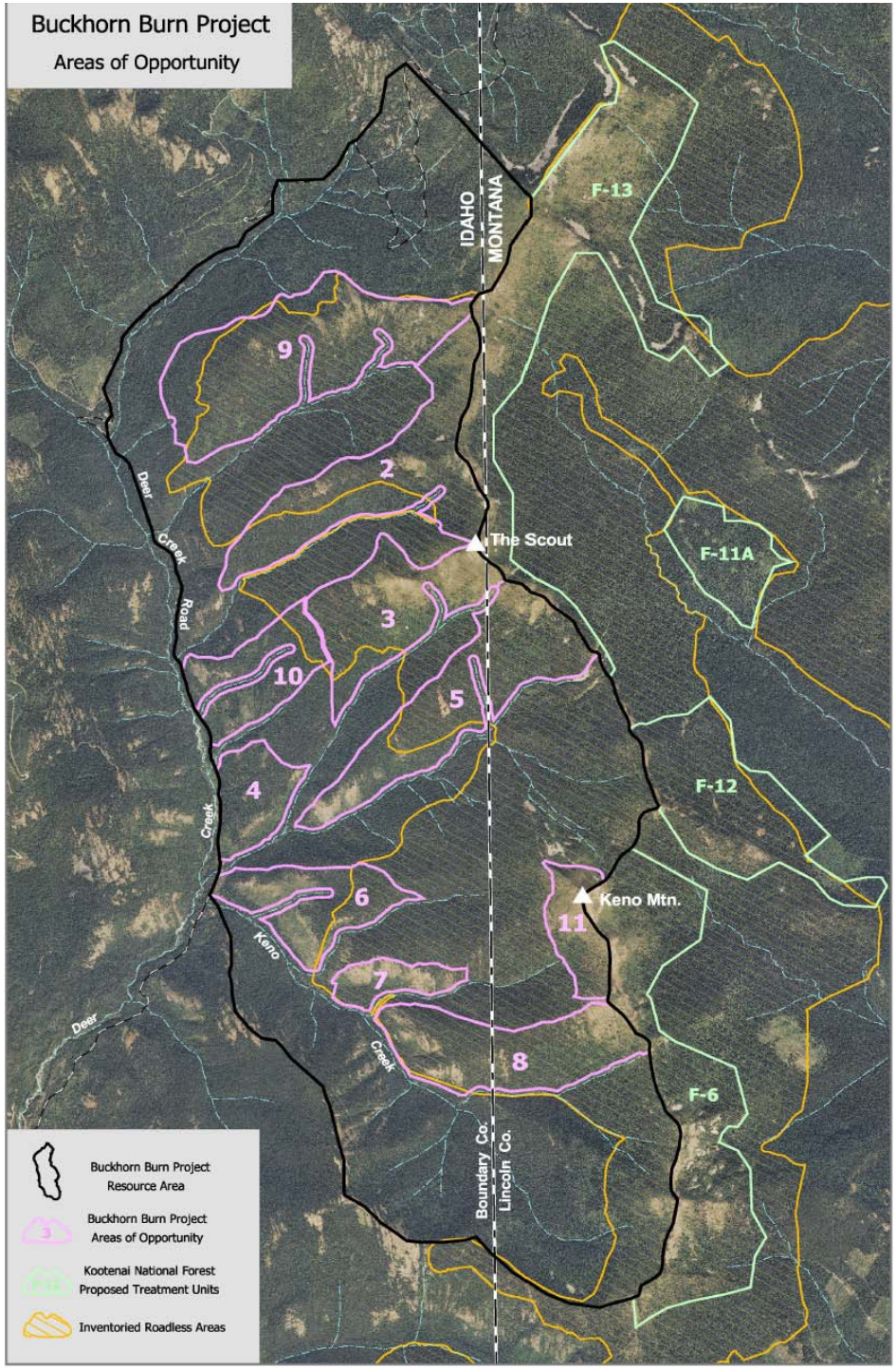
Unit	Acres
2	610
3	425
4	190
5	570
6	300
7	115
8	460
9	760
10	260
11	160

Approximately 4000 acres

Buckhorn Ridge IRA

- Approximately 5700 acres in Resource Area: 3500 acres in Boundary County, ID. & 2200 acres in Lincoln County, MT

- 74% of areas proposed for burning are in IRA



Draft Proposed Action

Mixed severity fire effects: Areas of low-severity and some areas of high-severity where mortality occurs in the overstory. Overall, a mosaic of effects with some unburned patches as well.

<u>Prescribed Fire would be expected to</u>:

- Consume surface fuels such as grasses, brush, timber litter and jackpots of down wood
  - Percent black within the unit area should be approx. 50-80%
- Reduce ladder fuels from brush, small conifers and lower branches of larger conifers by consumption or by scorching lower branches
- Provide openings that would:
  - Allow for increased sunlight to the forest floor to stimulate new growth
  - Reduce spread potential, intensity, and severity of future fires within the project area

Draft PA (continued)

- Maintain or enlarge grass/brush openings by killing encroaching conifers

- Maintain and improve quality and quantity of big-game browse
  - Top kill brush onsite to stimulate basal crown resprout and to aid brush seedling establishment
  - Stimulate forage plants to regenerate from seeds stored in the seed bank

- Reduce competition for whitebark pine, as well as potentially improve success of natural regeneration and/or provide areas for interplanting of the species, through prescribed burning and slashing of subalpine fir and Engelmann spruce.

- No road construction or changes to the existing roads
- No commercial products would be removed, however, activities would include incidental slashing for pre-treatment of fuels around whitebark pine in Units 8 and 11
- Snags would be felled for safety reasons only

Unit 2 in the foreground – grass and shrub understory with scattered subalpine fir
Unit 9 in the background – conifer encroachment on brushfields

Looking down into Unit 6 – conifer encroachment on brushfields

Another view of Unit 6 – lighter surface fuels with low shrubs, ladder fuels consist of low branches and smaller conifers in the understory

Dead and dying lodgepole pine in Unit 2 with moderate brush understory

Burn Area Considerations

- Public Safety
- Recreation – Kootenai Tribe Special Use Permit, Hunting, Outfitter/Guides, Pend Oreille Pedalers, Backcountry Horsemen, dispersed camping
- Whitebark pine
- Riparian Habitat, Cultural Resources, Old Growth
- Short-term reduction in huckleberry production
- Grizzly bear habitat
- Potential Smoke Impacts
- Inventoried Roadless Area – explore opportunities for utilization of wood products where there is road access – personal use wood permits.

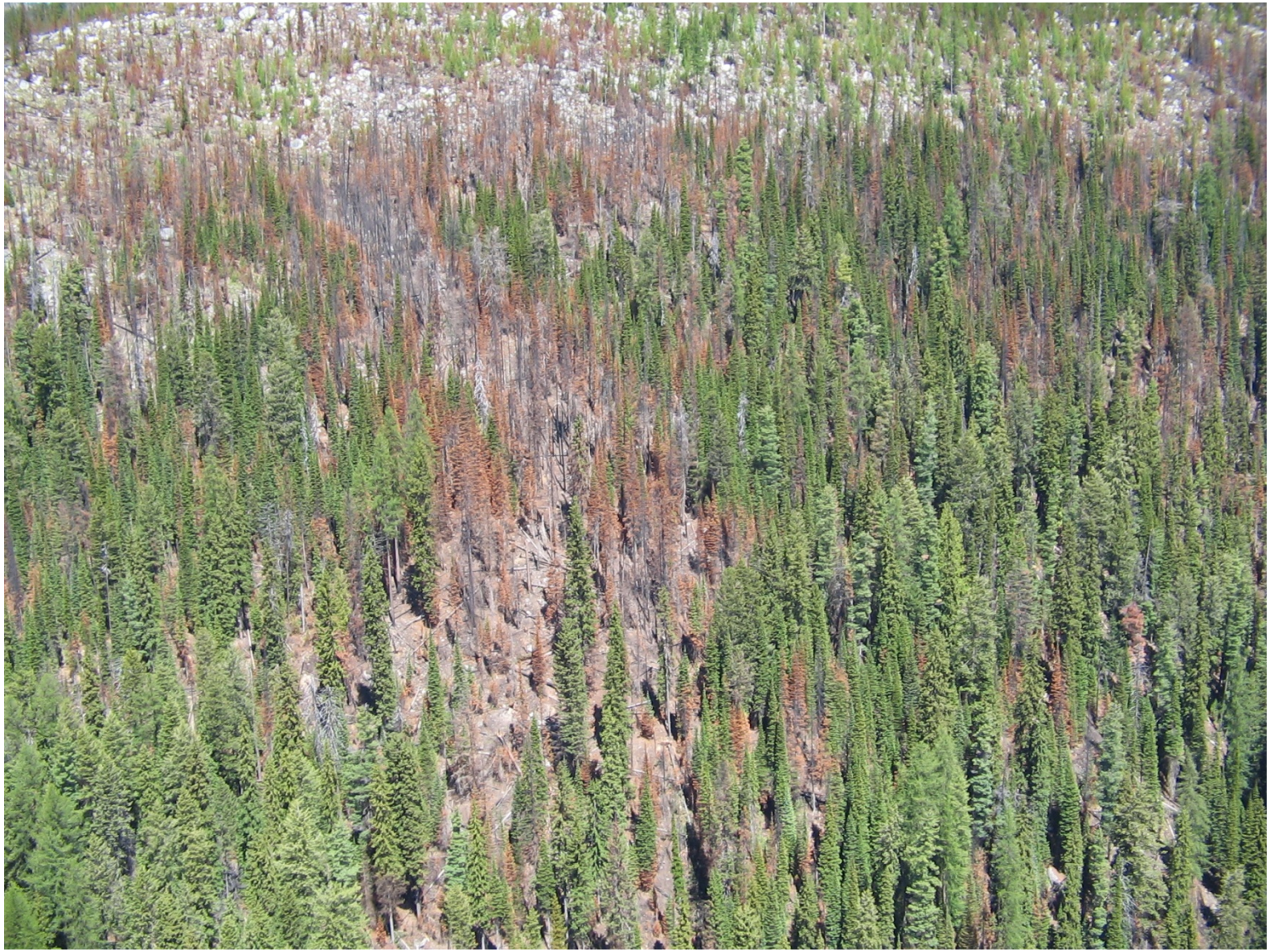
St. Joe RD: Heller-Cascade Lodgepole Unit, burned September 2011, observation flight June 2012. Foreground was unburned, and shows vegetation cover typical of the area, lodgepole pine. Red trees in the center of the photo show the affected burn area. A mosaic has been created within the unit with a variety of burn intensity and severity. Some areas burned as stand replacement, others as an underburn, and other areas didn't burn at all.

St. Joe Ranger District: Post-burn in Heller-Cascade Project. This picture clearly shows riparian vegetation post-fire. On the ground surveys indicate that riparian buffers served as effective for protecting riparian habitat conservation areas.

Heller-Cascade Project:

Example of top-killed brush with resprout the following spring

Mosaic Fire Effects



Whitebark pine project - BFRD

Timing and Implementation

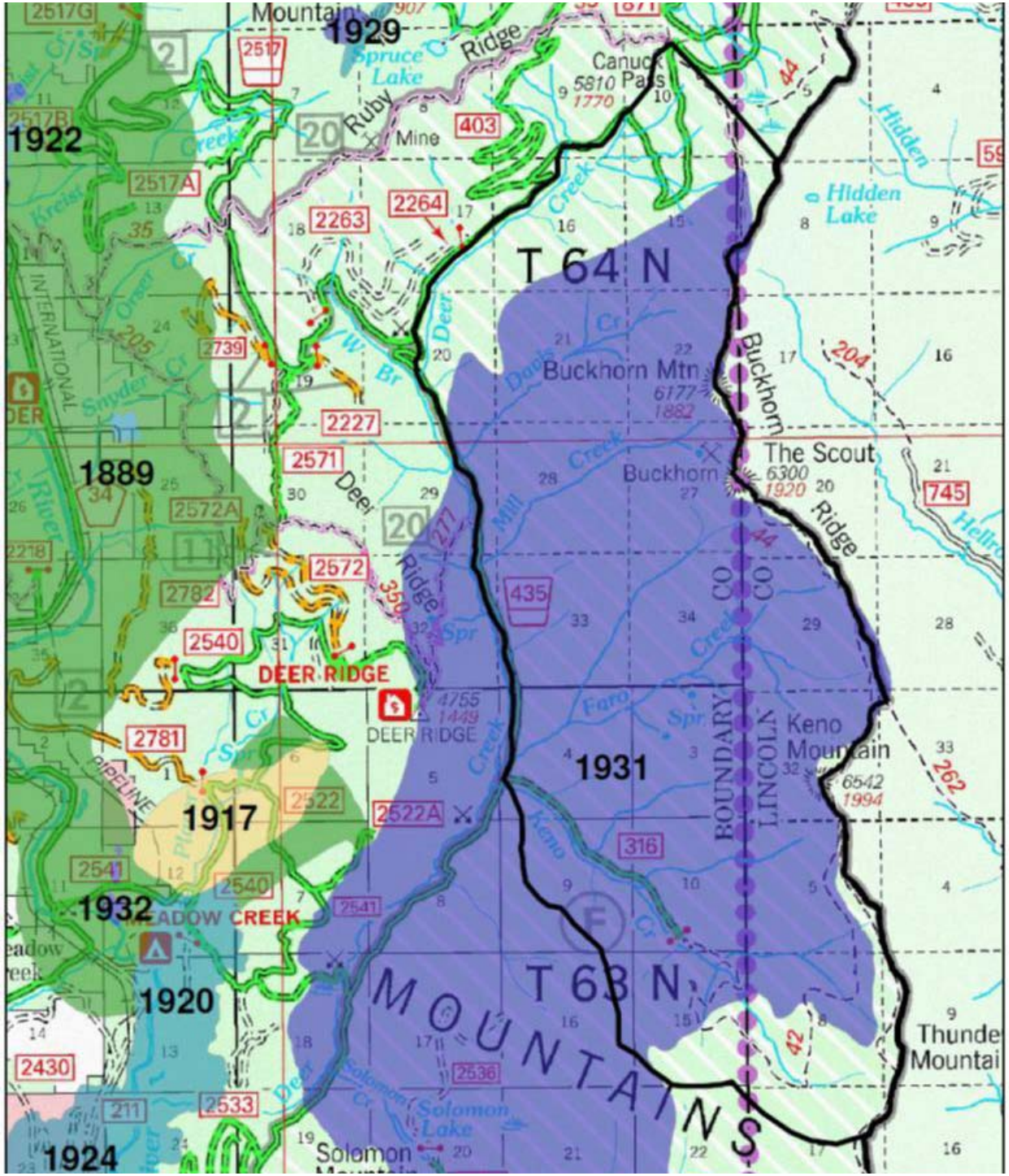
- **<u>Aerial ignition</u>** with a helicopter would be the primary method of ignition.
- **<u>Fireline is not being *proposed* to contain burns</u>**
  - Containment methods include ignition patterns, timing with forecasted weather and natural barriers
  - Design criteria would be utilized to limit spread and fire intensity where it is undesired
  - Monitoring by fire personnel: fuel breaks or hand fireline could be used for point protection of resources

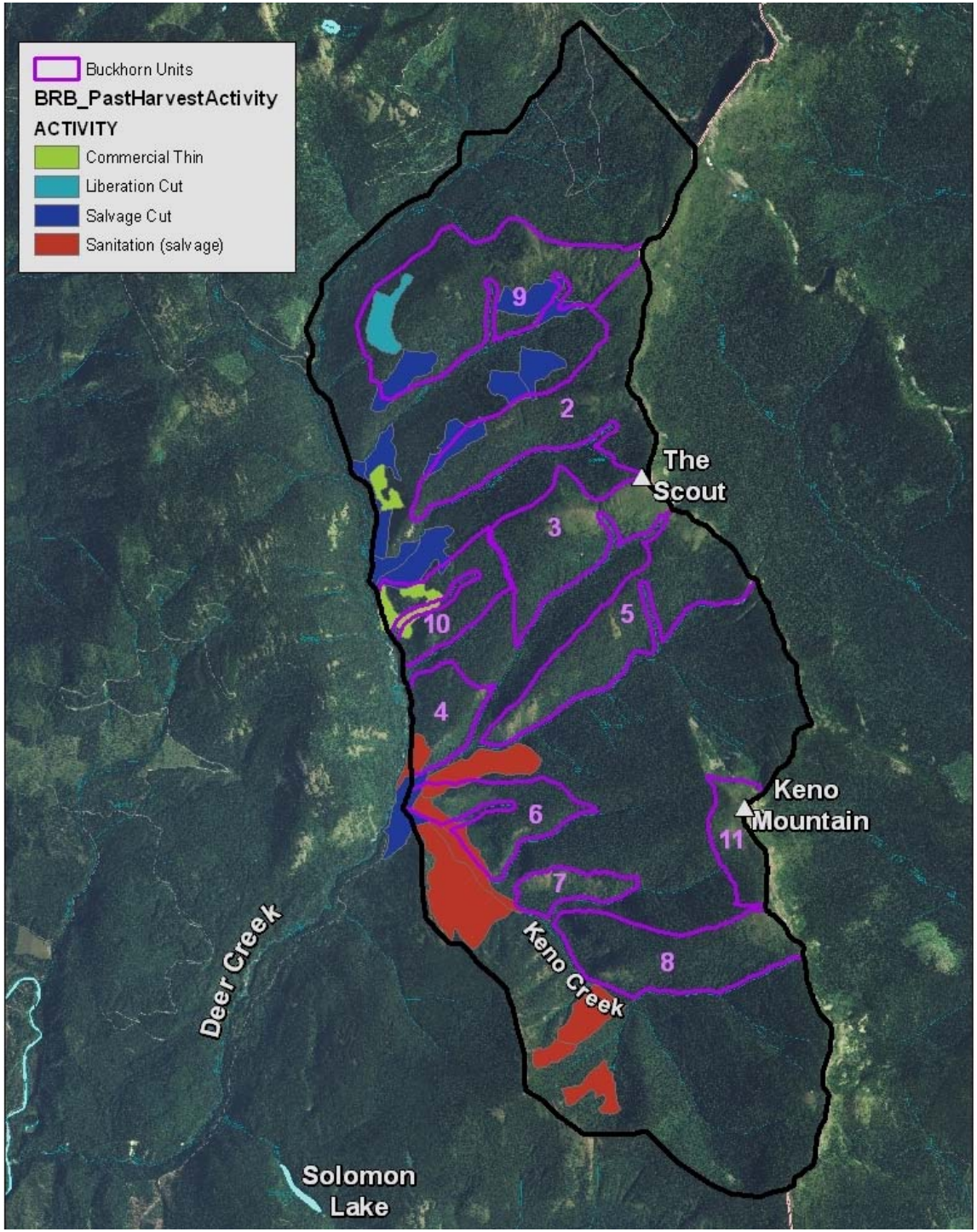
Timing and Implementation

- **Fall would be the preferred burn season:**
  - Fall burning would occur following fire season
  - Burning could occur in the spring during a burn window conducive to meeting objectives as well as for design criteria in some of the lower elevation units.

- **Fire managers would have flexibility in regards to acreage burned at a given time, provided for weather and conditions favorable to meeting objectives**
  - Multiple burn seasons and years
  - Burning will be conducted within the parameters outlined in an approved burn plan
  - Ultimate goal is to achieve project objectives – we would not burn just to achieve a target accomplishment

Discussion/Questions


1929
1922
1889
1917
1932
1920
1924
1931
T 64 N
T 63 N
MOUNTAINS
Buckhorn Mtn
6177
1882
The Scout
6300
1920
Keno Mountain
6542
1994
Canuck Pass
5810
1770
Spruce Lake
Ruby Mine
Hidden Lake
Solomon Lake
DEER RIDGE
MEADOW CREEK
Deer Ridge
Buckhorn Ridge
BOUNDARY CO
LINCOLN CO
INTERNATIONAL
PIPELINE
Thunder Mountain


Buckhorn Units
BRB_PastHarvestActivity
ACTIVITY
Commercial Thin
Liberation Cut
Salvage Cut
Sanitation (salvage)
9
2
The Scout
3
5
10
4
6
Keno Mountain
11
7
8
Keno Creek
Deer Creek
Solomon Lake