

SEVEN BASINS COMMUNITY WILDFIRE PROTECTION PLAN STRATEGIC FUELS TREATMENTS (1/26/09)

Note: This addendum updates the January 2006 CWPP with respect to strategic fuels treatments.

Background

To date implementation of the Seven Basins CWPP has focused on promoting measures to reduce home ignitability and fuels reduction projects in priority neighborhoods. Since 2002 more than 1,500 acres of grant-funded fuels treatments have occurred on private lands in the watershed, and an unknown, but potentially large number of acres have been treated outside of the grant program. The bulk of these treatments, both grant funded and otherwise, have been 1-5 acres projects around home-sites, but some projects have covered larger acreages. At the same time, the Bureau of Land Management has completed several thousand acres of fuels treatments within the watershed, mostly in close proximity to WUI neighborhoods. In total, these treatments provide substantial protection to homes and other values at risk.

In the next phase of CWPP implementation, the Seven Basins Community Wildfire Project will broaden its focus to “strategic” fuels treatments that address the threat of large, high intensity wildfires. Such fires can cause severe damage to watersheds, destroy wildlife habitat, and damage timber values. Focusing fuels treatments only on areas relatively close to structures (i.e., “tactical fuels reduction”) may reduce structural ignitability but is unlikely to reduce the spread, or extent of, these large-scale events.

Specific objectives of the strategic fuels treatments include:

- Minimizing the number of acres burned in high intensity wildfires to reduce damage to watersheds, habitat, and other resource values, including timber;
- “Compartmentalizing” fires, i.e., preventing their spread beyond sub-watershed boundaries; and
- Providing additional protection to neighborhoods by reducing the size and spread of large-scale, high intensity wildfires.

The Bureau of Land Management has completed more than 4,000 acres of fuels reduction treatments in the Evans Creek watershed to date and plans to treat substantial additional acres during the 2009-2012 period, many in strategic locations such as ridgelines. BLM’s plans provide an opportunity to implement complementary strategic treatments on private lands adjacent to, or near the BLM treatments.

Identification and prioritization of strategic treatments

We evaluated opportunities for strategic fuels treatments in the Lower Evans, Pleasant Creek, and Evans-Sykes subwatersheds using the following process:

Map the pathways that a large-scale fire would be likely to take through the subwatersheds, based prevailing winds during periods of highest fire danger. This was accomplished using the FLAM-MAP software, which among other outputs provides predictions of major fire pathways from a given ignition location based on fuels, topography, aspect, windspeed and wind direction. RAWS weather data from a nearby station showed that for the hours 1300-1800, from July 1 through August 31, and during periods when the ERC (a measure of fire danger) was greater than 50, there was a consistent pattern of northwesterly to northerly (315-360 degrees) winds. Accordingly, FLAM-MAP was used to model major fire pathways using these wind patterns, and assuming a 15 mph wind speed. Three scenarios were modeled: 1) A fire initiating just west of the major westerly divide of the Seven Basins watershed, pushed by northwesterly winds; 2) a fire initiating in the northern part of the Pleasant Creek and Evans-Sykes subwatersheds, pushed by northerly winds, and 3) a fire initiating in these same two subwatersheds, but beginning from a point further south, also pushed by northerly winds. These scenarios produced the fire pathways shown in Figure 1 below. The modeled pathways included effects of completed BLM fuels treatments but not the proposed treatments.

Identify locations with a high density of major pathways, or at “nodes” where multiple pathways diverge, where fuels could potentially be treated to reduce fire spread.

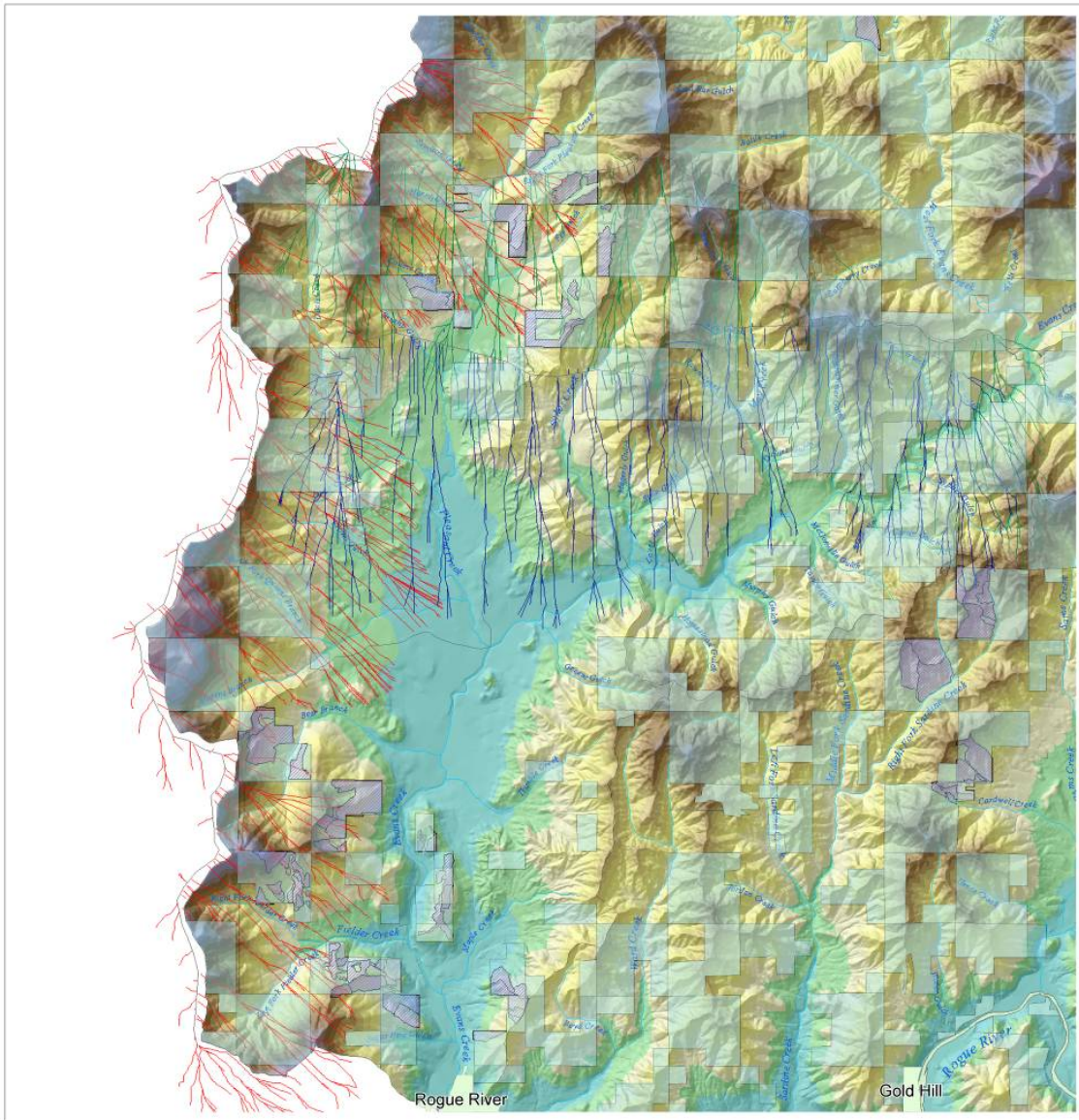
Identify locations from the above step where there appears to be road access. Map these as locations for potential strategic fuels treatments. Strategic fuels treatments may include area-wide thinning, defensible fuel profile zones, shaded fuel breaks, roadside treatments, and the like. Generally, potential treatments were mapped on strategic locations such as ridges, but did not try to create a continuous ridgetop fuelbreak.

We noted locations that appeared to be well-suited for shaded fuelbreaks or other area treatments, as well as locations for roadside treatments, based on professional judgement. Total acreage of proposed shaded fuelbreaks was 777. Total acreage of proposed roadside treatments was 531, based on a 150’ width on each side of the road. Road treatments could be wider or narrower depending on slope, fuels, available funding and labor, other logistical concerns, etc.

We noted locations for treatments on both BLM and private lands. Much of the private land is managed by industrial forest companies or other large land holding companies; a few treatment locations may include small acreage owners.

The potential locations for treatments have not been ground-truthed. The next step in developing a strategic project would be to field check and adjust treatment locations, and to contact potential landowner cooperators.

Figure 1. Major fire pathways for three scenarios generated by FLAM-MAP



- west-side_MP_315
- north-side_MP_359
- north-interior_MP_359
- Completed BLM fuels treatments
- Public lands

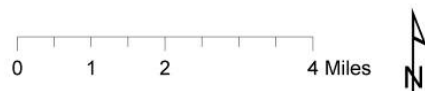
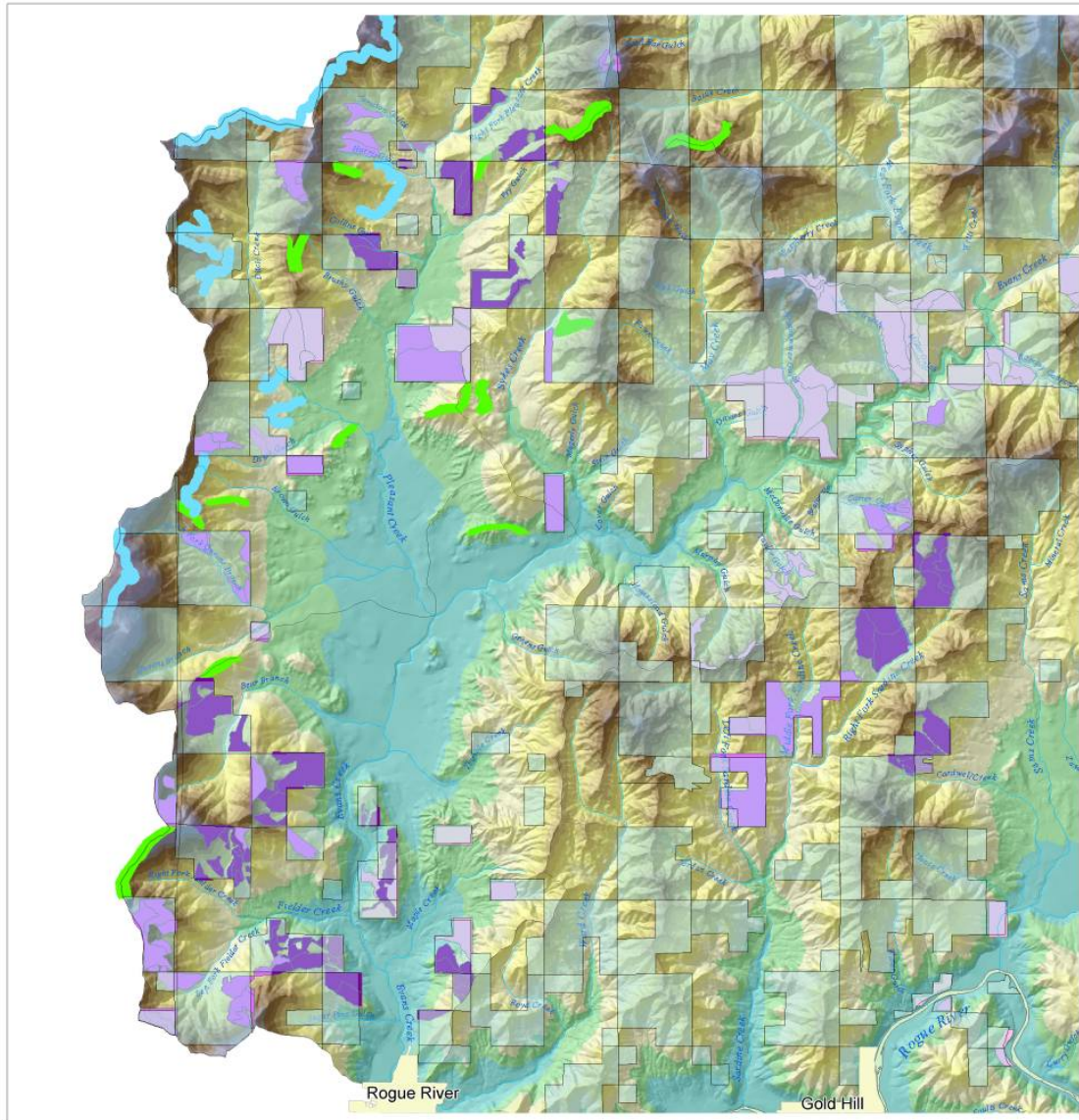


Figure 2. Proposed and Completed Fuels Treatments



- Proposed roadside treatments
- Proposed shaded fuelbreaks
- BLM fuels treatments 2009-10
- BLM fuels treatments 2011-12
- Completed BLM fuels treatments
- Public lands

