

Comments from MMG Meeting Notes

- Look into shifting northeastern patch-cut in Unit One to Northwest to mitigate erosion.
- Evaluate erosion potential on treatment areas.
- Two group members discussed concerns about runoff stemming from the treatments. This area flows into Barker Reservoir and some neighbors are experiencing serious runoff on these slopes even without clear-cuts. The DAT recommended that treatments should be irregularly shaped to reduce impacts to viewsheds and potential for windfall. It should also recommend that erosion be prevented, particularly for Unit One. As the polygons are currently drawn, they do not look irregular; they look like chutes for wind and water. Flashfloods are common in this area and these cuts could make them more dangerous. The group members recommended cutting in irregular shapes running parallel to one another to block the wind and reduce erosion. The group members recommended that USFS and Boulder County hydrologists examine the runoff issue, especially because it impacts drinking water from Barker Reservoir.
- The USFS responded to these concerns about runoff by noting that the current polygons are just general locations designed to provide an idea of forest composition. The exact shape of the cuts can be changed. If the two landowners allow their buffers to be cut the polygon will be elongated. The USFS is open to putting “turns” into the cuts. The proposed cuts currently run north to south because the westward wind is less intense that way. The aspen, ponderosa, and mixed conifer treatments are going to be more exact, but there is flexibility for the lodgepole cuts, which will probably be modified in some ways.
- Another participant noted that “j-shaped” cuts were discussed for Unit Two to avoid creating any square edges in the treatment areas. The DAT recommended that all of the polygons be irregular. The USFS will not disturb drainages and has leeway to tailor the cuts depending on conditions on the ground.
- A group member stated that the winds on the slopes that the Forsythe II project will treat are fast. The USFS is underestimating the erosive potential of the winds in this area. The Town does not want to address such details, but the USFS did not receive information about erosion as a result. The Town should work with the Colorado State Forest Service (CSFS) to create a fuel-break around the town. The USFS is not equipped for this kind of work because it is accustomed to operating on a much larger scale. The USFS should partner with Boulder County and the CSFS to conduct fire mitigation around Nederland.
- In response, the USFS said that it would examine windthrow and wind-scour. Wind-scour can be minimized by shaping units that run north to south and making the units smaller. Additionally, the USFS stated that CSFS prescriptions are designed to be implemented around houses. Every part of the treatment area is at least 300 feet away from the nearest house. Individual homeowners can choose to collaborate with the CSFS to create defensible space around their houses, but not many people have done that so far.

Forest Service Responses

On 06/04/2018, BRD personnel (Forester, Silviculturist, Hydrologist and Soil Scientist) visited the site.

Field Observations and Discussions Related to Soil Erosion and Runoff.

- Manual cutting, piling and burning is proposed.

- Existing effective ground cover within the treatments units is very high. Some areas of bare soil were observed and these were usually associated with trails or other historic impacts.
- Based on high rates of ground cover within the unit, we did not observe sheet, rill or gully erosion associated with lack of ground cover or other soil disturbance within the unit. The proposed treatments are not likely to generate ground conditions which would increase the risk for off-site erosion.
- One significant gully erosion feature was observed. The gully originated at the outlet of a ditch relief culvert on a road at the top of the unit. It appeared that, in past runoff events, the gully would have channeled water and sediment to the road below the unit and possibly down-slope onto private land.
- Identifying and addressing the root causes of existing accelerated erosion and runoff on a site specific basis may address down-slope issues. Changing the location of the manually treated areas would not necessarily address those concerns.
- As mentioned above, a USFS Soil Scientist and Hydrologist determined that the existing conditions/ground conditions within the proposed treatment units do not appear to be the source of accelerated runoff and erosion. If impacts related to run-off and erosion on private land below the proposed treatment units are believed to be hydrologically connected to existing impacts on NFS lands, a USFS Soil Scientist and/or Hydrologist can review the issue in the field with the USFS project manager and landowner on a site specific basis.
- In unburned watershed conditions, flash flooding and/or debris flows can occur in response to extreme rainfall events. These process are far more common following wildfires and often occur in response to typical high intensity thundershowers. It is unlikely that the proposed treatments would significantly exacerbate these processes.