COMMENTS ON DRAFT REPORT UPPER COLORADO HEADWATERS WILDFIRE/WATERSHED ASSESSMENT

US FOREST SERVICE BY MATT PACIOREK

Comment - I looked through the draft and I think it captured the comments from the in-person meeting well. One thing to update would be Indian Peaks Wilderness Boundary along the northeast portion of Lake Granby. It looks like you have the old version that doesn't include Knight Ridge. I believe as a part of the wilderness designation in Rocky Mountain NP they added some acres to the Indian Peaks and the boundary now comes down almost to the lake shore. Other than that I didn't see any red flags.

Response - We have updated the wilderness data and revised the maps that show the Indian Peaks Wilderness.

BUREAU OF LAND MANAGEMENT BY KEVIN THOMPSON

Comment - After seeing this "I reviewed the Fire Regime Condition Class (FRCC) data. The FRCC does reduce the hazard posed by high elevation spruce-fir, as expected. However, my suggestion is to keep the FlamMap wildfire hazard modeling that we have been using. The reason is that spruce-fir does pose a significant wildfire hazard, even though the probability of wildfires in spruce-fir is low. This analysis is designed to assess hazards and not probabilities. Looking at the probability of wildfires in each ZoC is very useful as part of the next step in assessing what watershed protection measures are appropriate."

I would recommend not using anything and say something to the effect of "worst case scenario fire was used" (moon scape) for this reason. Under the current system using flame length if you had two identical watersheds and the only difference was one was treed and the other was sagebrush or grass. If a high severity fire went through and completely burn all vegetation and then the next day it rain 15 inches on both watersheds, according to this the watershed with sagebrush or grass would be less effected because the sagebrush or grass wasn't 70 feet tall. I don't think that is a correct statement I would think if all the vegetation was removed it would depended on soil type and % slope. I might be missing something here so feel free to let me know.

I would think Fire regime Condition Class would be fine in sage because it would show the fuel loadings and the areas that are out of the norm. I guess my biggest concern is still using Flame length, in the BLM it is policy to use FRCC because It is the best ecological way to describe what changes have to the vegetative community and surrounding. If areas are FRCC 1 they tend to have low intensity low severity fire, which on the fire management is what we want, we know we will never get rid of fire. Also it shows if projects are effective, another concern with flame length is that in order to show that are treatments are effective they most be clear cuts. If we do a treatment and make it to historical conditions with large trees spaced 30-50 feet apart under flame length it still shows it as high, but under FRCC it would lower it. I would like to see a way that represents all fuel types and that is consist through the document. I believe FRCC is the best way to do

that, or if you are wanting worst case scenario then use something to show the high potential areas, but do use it to factor in since all veg would be removed. Let me know this might just be an agree to disagree type of thing.

Response - The assessment identifies hazards to water supplies. The FRCC is a useful tool and might be valuable during specific ZoC planning. However, flame length was chosen because it estimates fire severity. Sagebrush fires can be quite intense but usually don't result in the removal of organic components of the soil that can happen in intense fires in forested areas. Spruce-fir forests do present a high hazard to watersheds because when they burn, they usually burn very intensely. The FRCC would not identify spruce-fir forests as hazards because they are likely not outside of their natural disturbance regime which is about 250 years. We are trying to identify the magnitude of hazards and not their probability in this assessment.

NORTHERN COLORADO WATER CONSERVANCY DISTRICT BY JERRY GIBBENS

Comment - Page 1 - Seems like this intro section should mention the previous UC watershed assessment, and what has been updated from that effort.

Response - Page 1 has been revised.

Comment - Page 1 - I think that we only had one stakeholder meeting.

Response - This report is a revision of the previous report which included four stakeholder meetings. The text has been updated to show that there have been five total meetings but only one for this revision.

Comment - Page 2 - Add the Colorado Headwaters Watershed description

Response - Page has been revised.

Comment - Page 2 - Which watersheds and be more descriptive as to why they were eliminated.

Response - The watersheds have been listed and described better.

Comment - Page 3 - Figure 1 - Can we show the watersheds that were eliminated?

Response - Figure 1 has been revised to show the dropped watersheds

Comment - Page 5 - Not sure "closed" is the right word. Perhaps "severely affected"?

Response - Page 5 has been revised

Comment - Page 5 - Should we mention High Park, Hewlett Gulch and Waldo Canyon fires here?

Response - Those fires have been added to the discussion.

Comment - Page 6 - Again, not sure 5 meetings is the right number.

Response - This report is a revision of the previous report which included four stakeholder meetings. Five total meetings have been held but only one for this revision.

Comment - Page 22 - Should include the Willow Creek watersheds (at least middle and possibly upper) in Water Supply Map.

Response - The criteria for including watersheds in the Water Supply classification is that they need to have a physical water supply infrastructure component in that watershed. Although those Willow Creek Watersheds are important for water supply they do not have any water supply structures.

Comment - Page 27 - Would it be worthwhile to say here why the C-BT ZoC were not extended beyond 11 miles? I think the answer is that the main channels would have the ability to absorb some of the debris flow (i.e. Willow Creek and North Fork).

Response - We have not extended any ZoC beyond 11 miles in the assessments. However, we have seen some water quality impacts from greater than 11 miles away in the Cache La Poudre from the High Park Fire. Thise considerations should be taken into account in the next level of watershed planning.

Comment - Page 35 - A map showing general land ownership would be helpful.

Response - An ownership map has been added to the report.

Comment - Page 36 - A general map showing wilderness, roadless and other protected areas would be helpful (would help to show the overall limitations that these pose within the study area).

Response - A map showing wilderness, roadless, and other special areas has been added to the report.

Comment - Page 36 - Roadless Areas - Not clear what adjustments are being discussed here.

Response - Page 36 has been revised. That sentence was unclear and has been removed.

Comment - Page 37 - Interesting that the James Creek protection area allows fuels reduction, whereas Bowen Gulch does not. Would be worthwhile pointing out this difference in the introductory paragraph.

Response - Text has been added to the report.

Comment - Page 39 - Does this paragraph need to be updated? Seems like the MPB has completed its work in the UC watersheds.

Response - Portions of the text have been updated.

Comment - Page 40 - What is a "major project fire"?

Response - Page 40 has been revised. Major project fires have been removed.

Comment - Page 42 - I've heard/read that untreated lodgepole forests may come back more diverse than treated lodgepole. Should that be mentioned here?

Response - An additional bullet point has been added to the list on page 46.

Comment - Page 77 - Figure 49 - Describe treatments in text and provide acreages (maybe in a table).

Response - The treatment data is somewhat inconsistent because it comes form different agencies. Some of the treatments would require additional research to document as suggested. This task fits better in the next level of investigations into what can be accomplished with forest management within each ZoC.

Comment - Page 78 - Throughout these sections, are the "Opportunities" polygons all inclusive, or just examples of what might be treatable? Should be clear in the text.

Response - These polygons are examples of how to look for opportunities within the ZoC. The text has been modified.

Comment - Page 79 - Would it be possible in these sections to estimate the total acreage of treatment opportunities in each ZoC (Maybe the same table as acreage of the completed treatments)?

Response - It is possible to estimate opportunity acres. However, a listing of those acres may give a false impression of the opportunities in each ZoC. Some watershed protection activities within ZoC, such as fuel breaks and pre-planning sediment basins are important but would not show up in a table of acres.

Comment - Page 87 - Indicate in text that the Bowen Gulch protection area covers this area and limits the amount of treatment that can be done.

Response - The opportunity polygons shown in the maps on this page do not overlap the Bowen Gulch Protection Area.

Comment - Page 95 - I think that it would be good to mention here that the Bowen Gulch Protection area limits the amount of treatment that can be done in this area.

Response - The opportunity polygons shown in the maps on this page do not overlap the Bowen Gulch Protection Area.

Comment - Page 100 - Isn't most of RMNP a wilderness area? May want to explain that here. It looks to me like there was an area surrounding Grand Lake that was excluded from the Wilderness Area as the "Grand Lake Fire Buffer".

Response - All the national park is also designated as Rocky Mountain National Park Wilderness Area. That text has been added to the document where is applies.

Comment - Page 101 - Looks to be fairly evenly split between lodgepole and spruce-fir.

Response - The text has been changed.

Comment - Page 103 - It would be good to mention that even if treatments could be done in RMNP, in general, the terrain is too steep to allow much treatment.

Response - The text has been changed.

Comment - Page 103 - Should we mention here that due to the limited access and steep slopes, the tributary drainages in this area would be a good place to target post-wildfire planning?

Response - The text has been changed.

Comment - Page 111 - Its also important due to its proximity to the West Portal of the Adams Tunnel.

Response - The text has been changed.

Comment - Page 111 - Why isn't this area to the east and south included in the polygon?

Response - The opportunity polygon has been revised.

Comment - Page 111 - Same comments as Grand Lake - North. Should we include a statement indicating the importance of post-wildfire response in this area?

Response - The text has been changed.

Comment - Page 118 - I think the USFS is doing some roadside treatments in this area, but it doesn't show up on the map.

Response - We do not have any information on those treatments at this time.