

## Response To Questions Received

### Glen Alpine Creek Watershed Restoration Project

1. Does the RCD anticipate that the wilderness dams mentioned in Task 1.1 and 2.2 will be those included in the small dam assessment PDF (Gilmore Lake, Heather Lake, Susie Lake)? Or is the intent for the consultant to identify other wilderness dams in addition to Gilmore/Heather/Susie?

*The intention is for the contractor to use the information provided on known wilderness dams (Gilmore/Heather/Susie) but also locate/access potential dams on other "named" lakes in the project area using USGS National Hydrologic Dataset (NHD).*

2. Regarding the milkweed/monarch survey extents, could the LTBMU existing data, survey locations, or a polygon be provided to help better define the area along Cathedral Road where the assessment should be conducted?

*We will provide shapefiles to the selected contractors; however, we estimate approximately 1000 acres needing surveys. These are expected to be walking surveys to identify milkweed (and/or Monarch's). This effort, for example, would take a 3-person crew approximately 3-4 days. We expect the surveys to be completed July or August. Additionally, we would like the selected contractor to use our milkweed and monarch survey 123 data collection form.*

3. Are there particular reaches where the RCD anticipates that detailed geomorphic mapping would be most useful to future planning efforts?

*There are not specific areas; however, we are also not looking for a "detailed" geomorphic assessment but rather evidence of channel degradation in the project area (e.g. incised channels, head-cuts, excessive bank erosion...). Geomorphic mapping should include mainstem Glen Alpine Creek and all perennial streams that flow out of named lakes (using NHD) in the project area to Fallen Leaf Lake. Taylor Creek is not included in this task.*

4. Would the in-lake fish management structure be located near the mouth of Glen Alpine Creek (i.e. south end of Fallen Leaf Lake) or near the dams at the north end of Fallen Leaf Lake?

*Near Glen Alpine Creek.*

5. What is the motive for the hydrologic assessment to be able to act as a standalone document?

*We anticipate that this document will be needed for other projects or management actions and would like it to be in a useable format.*

6. Since payments will be quarterly, would the RCD consider allowing quarterly invoices if alternate methods were proposed to provide the monthly activity summaries requested by the RFP?

*Quarterly Invoices are fine.*

7. Is the final project report referenced in Task 3.2 an administrative progress report or does it refer to the final technical report of Objective 2? If the former, would the RCD like to see the contractor's budget for developing the Objective 2 technical report spread over the tasks within Objective 2?

*Task 3.2 refers to a final administrative report. Following a summary of findings the contractor may include, by reference, additional findings information if they so choose. The budget for developing the Technical Report referenced as an Objective 2 deliverable should be contained within Objective 2 tasks.*

8. For Task 2.6, is there an upstream limit for the probable locations of the SCI reaches?

*No SCI reach would not be above any named lake and specific locations will be in coordination with LTBMU staff. However, we will likely establish three reaches in representative reaches within the project area. Although we do not have specifics, when anticipate SCI reaches will be located where stream channels would respond (and show change) with land management actions (e.g. so not a reach in bedrock formation). We anticipate that contractor might need one overnight trip to accommodate a higher elevation SCI reach (although access behind locked gates will be provided to the selected contractor for vehicle use). FYI: Access behind the gate is allowable for other tasks.*

9. Will the Objective 2 technical report be used to identify restoration actions on Taylor Creek? Or is Taylor Creek only included in the study area to account for study of flow regime impacts under Task 2.4?

*Taylor Creek is included to accommodate the assessment and associated impacts of Anita and Lucky Baldwin dams and to disclose impacts of downstream water uses based on the results from the updated hydrograph and existing dam management.*

10. How many dams are within the project area?

*The intention is for the contractor to use the information provided on known wilderness dams (Gilmore/Heather/Susie) but also locate/access potential dams on other "named" lakes in the project area using USGS National Hydrologic Dataset (NHD).*

11. Is a historical analysis needed for each structure, some may be degrading, but may also be considered historic?

*We want the contractor to determine historic value, habitat impacts, stability/integrity, aquatic organism passage (AOP) issues, downstream effects, and water rights. Historic value means why the dam was installed, what was it used for, who built it... USFS will use data to determine historical significance (not the contractor).*

12. Would you also like a full evaluation of the historic era dam in the plan area as part of this proposal effort?

*No – see above.*

13. It seems that there are competing ideas in the RFP in terms of the function of the barrier between creek and lake, what is the function of the weirs and the objective they are trying to reach?

*We are trying to provide spawning habitat for LCT recovery. Meaning, in the future, Glen Alpine would need to be managed for LCT (e.g. LCT can migrate to Glen Alpine but rainbow trout cannot). The objective is to prevent non-target species from entering Glen Alpine Creek.*

14. Can you please clarify cultural resources level of review you would like for this effort? For example, would you like constraints level analysis for this plan area that provides a summary of previously recorded archaeology and historic built environment sites?

*We are not clear on this request. We are not asking for historical significance or consultation with SHPO. All data/assessments are to determine either historical condition/use or existing conditions. We are not asking for a constraints level analysis.*

15. Please provide clarification on what documentation is necessary and you would like presented as part of this proposal.

*This is unclear please provide clarification.*

16. Can you provide more information about the location and type of existing structures for the Anita and Lucky Baldwin dam(s). Also, please clarify if these are two different structures, or a single structure. Are they also distinct from the Taylor Creek Dam / Fallen Leaf Dam?

*Anita Baldwin dam is also known as the Fallen Leaf Lake dam where Taylor Creek flows out of Fallen Leaf Lake. The Lucky Baldwin dam is approximately 200 meters upstream of the Fallen Leaf Lake Dam and is an older rock dam that is somewhat dilapidated.*

17. Can you share more details about the available LiDAR data. Is this raw data, post-processed point cloud data, LiDAR-generated DEM, or other form? Can you also provide the format for that data ( is it in \*.las, \*.laz, \*.xyz, \*.dem, etc). And finally, can you share the source of this data (e.g., USGS 3DEP program, or other).

*The available data is 1-meter, hydro enforced, bare earth DEM derived from LiDAR. It is formatted as a series of .img rasters. We might have raw point cloud data LiDAR data and can confirm with the selected contractor. There are multiple sources of available data. All spatial data will be shared with selected contractor.*

18. Is the expectation that this study will complete specific technical studies required by NEPA clearance (under a future contract)?

*This study is expected to guide and inform a future contract that will complete NEPA. The results of this study are expected to provide sufficient information to develop proposed actions that will move system towards desired conditions.*

19. Task 2.2: Dam Assessment

Is the number of small dams to be assessed limited to the 3 that are described in the 1964 *Small Dam Assessment* document or do more structures occur in the watershed?

*The intention is for the contractor to use the information provided on known wilderness dams (Gilmore/Heather/Susie) but also locate/access potential dams on other "named" lakes in the project area using USGS National Hydrologic Dataset (NHD).*

20. Will you please confirm that Anita Baldwin Dam is also known as Glen Alpine Dam?

*Anita Baldwin dam is also known as the Fallen Leaf Lake dam where Taylor Creek flows out of Fallen Leaf Lake. The Lucky Baldwin dam is approximately 200 meters upstream of the Fallen Leaf Lake Dam and is an older rock dam that is somewhat dilapidated.*

21. What other aquatic organisms, in addition to LCT, would be impacted by aquatic organism passage (AOP) issues?

*All native aquatic species*

22. Also, is the AOP assessment intended to be based on the Forest Service's FishXing software?

*Yes*

23. Is there a specific safety methodology or standard that needs to be followed for the dam stability assessment or is California Dam Safety sufficient?

*The stability/integrity evaluation of wilderness dams is expected to be qualitative. Additional specifications have been requested from LTBMU specialists. That answer will be provided if possible.*

24. Task 2.4: Hydrological assessment

For the flow model a hydrograph is requested but flood frequency return intervals are mentioned. Typically, the analyses would be focused on peak discharges if using FFC quantiles and not hydrographs that incorporate snowmelt hydrology. Is there a preference for the hydrologic approach, peak discharge or hydrograph? The level of effort is different.

*We are a little unclear on this question. Taking a stab at answering, we need a hydrograph that includes snowmelt hydrology in various climate scenarios (per RFP). We also need flood frequency return intervals at Taylor Creek to inform future projects.*

25. Task 2.5: Fire model / current condition

Will the LTBMU provide the different fire weather behavior scenarios to be used with IFTDSS or will the consultant develop the various condition scenarios?

*LTBMU will provide.*

26. Task 2.6: Detailed habitat assessment of Glen Alpine Creek

What is the approximate area of milkweed mapped by LTBMU near Cathedral Road?

*We estimate approximately 1000 acres needing surveys.*

27. According to the SCI protocol, macroinvertebrate samples are to be shipped to the lab at Utah State University. Does this lab perform the calculations for the relevant biological indices or is that a requirement of the contractor?

*This was an over-site, we DO NOT need macro-invertebrate analysis.*

28. Are there specific biological indices required for habitat assessment?

*See above*

29. Will you please elaborate on the long-term stream temperature monitoring that is mentioned in the RFP?

*LTBMU is conducting a stream temperature monitoring program to determine trend. This data will inform land managers on restoration actions needed or areas of concern. We are not asking the contractor to conduct stream temperature work but will share data with the selected contractor.*

30. Where are the monitoring locations?

*See above, mostly to be determined*

31. Is temperature data currently being collected?

*Yes*

32. Regarding the Fish Management Structure Feasibility Study, what life stages is the structure intended to contain (prevent downstream movement)?

*All-life stages*

33. Is the intent behind such a structure to prevent the spread of specific species, or is to trap/sample juvenile/adult fishes?

*It would be utilized for LCT recovery (only pure LCT (or other native species)) would be allowed in Glen Alpine.*

34. What will determine the need for the structure to operate?

*The downstream structure is intended to be permanent. The upstream structure is needed until the threat of downstream movement in the upper watershed is eliminated (e.g. the upstream watershed is cleared of non-native species that hybridize and/or compete with LCT).*