

Data Submitted (UTC 11): 8/15/2022 7:00:00 AM

First name: Barbara

Last name: Brydolf

Organization: Alta Peak Chapter, California Native Plant Society

Title: President, Conservation Chair

Comments: Comments on Proposed Sequoia NF Plan Revision- Objection Phase

Thank you for the opportunity to comment on the proposed Sequoia NF Plan Revision. In my previous letter I commented on species rejected from the Species of Conservation Concern list. I continue my comments here, offer additional arguments for some species to be included, argue for expanded criteria of risk assessment, and offer an alternative for species that don't qualify for conservation status. Namely:

1. A CNPS ranking of 1B is sufficient evidence that the threats to any such ranked species is substantial. Therefore, a CNPS Rare Plant Rank of 1B that occurs in the Sequoia National Forest and is listed in the Plant Species Considered for Species of Conservation Concern Sequoia National Forest should be included in the final list.
2. The Plan should make Changes for how species are assessed for inclusion as Species of Conservation Concern.
3. Risks to the entirety of a plant species should be considered risks to the species' capability to persist over the long term in the plan area.
4. Plants that don't meet the USFS SCC standard for inclusion should be monitored.
5. A watch list established by the Sequoia NF would meet the needs of those concerned about native plants not making the SCC being simply ignored, risking the decline of the species on forest land. Additionally, there is an opportunity for collaboration with CNPS, both at the state and local levels, to work on monitoring populations and trying to relocate historical occurrences.

Below is a critique of the Rationale:

Rationales for Plant Species Considered for Species of Conservation Concern (SCC) for Sequoia National Forest

-with my comments in italics

If sensitive species are not carried forward as species of conservation concern, it is for one or more of the following reasons, as documented in the project record, including this document:

1. It is a candidate species for listing under US Fish and Wildlife Endangered Species Act (e.g., white bark pine, *Pinus albicaulis*)
2. The species does not occur in the national forest plan area (e.g. species that have occurrences in the Giant Sequoia National Monument but not in the Sequoia National Forest plan area).
3. Previous occurrence records were determined to be incorrect identifications of the species and/or could not be re - located.

-[ldquo]could not be re-located[rdquo] presupposes that a meaningful effort to re-locate the plant species has been unsuccessful, and that multiple surveys have been done at the appropriate time of year in more than one year. One cannot conclude that a rare plant population has been extirpated based upon one or a few surveys because with changed circumstances such populations may resurface. Plant surveys are based upon visual evidence of a plant's presence and do not take into account any underground dormant plants or seeds.

Fire or rain can easily change conditions for plants and some plants have recently appeared in the Forest that we haven't seen in decades or perhaps ever.

4. NatureServe, California Natural Diversity Database, CA Native Plant Society Rare plant inventory, or other local data sources indicated the threats to the species were not substantial.

-a CNPS Rare Plant Ranking of 1B: Plants rare, threatened, or endangered in California and elsewhere is defined as follows:

[Idquo]Plants with a California Rare Plant Rank of 1B are rare throughout their range with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century. California Rare Plant Rank 1B plants constitute the majority of taxa in the CNPS Inventory, with more than 1,000 plants assigned to this category of rarity.

All of the plants constituting California Rare Plant Rank 1B meet the definitions of the California Endangered Species Act of the California Fish and Game Code, and are eligible for state listing. Impacts to these species or their habitat must be analyzed during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, as they meet the definition of Rare or Endangered under CEQA Guidelines [sect]15125; (c) and/or [sect]15380.[rdquo]

A CNPS ranking of 1B is sufficient evidence that the threats to any such ranked species is substantial. Therefore, a CNPS Rare Plant Rank of 1B that occurs in the Sequoia National Forest and is listed in the Plant Species Considered for Species of Conservation Concern Sequoia National Forest should be included in the final list. Species excluded from the SCC list that are ranked 1B and confirmed on Sequoia NF land are as follows:

Calochortus pameri var. *palmeri*

Cryptantha incana

Monardella linoides ssp. *oblonga*

Sequoia NF should include these plants in the Species of Conservation Concern list.

5. Recent surveys indicated the species is more common than originally thought.

While it is gratifying that recent surveys have successfully recorded a rare species, listed species are still rare and should be considered as such. Plants with CNPS 1B ranking need to be included in the Species of Conservation Concern list.

6. There was no information about threats to the species. This was a relatively uncommon circumstance, because information about threats could be inferred from threats to the ecosystems upon which the species depend. Lack of information generally only limited species inclusion on the list if the species had not been observed for decades or more, leading to uncertainty about the condition of its specific habitat.

[Idquo]No information about threats to species[rsquo] was used differently in the Rationale document than the way it is explained here. Threats have not been [Idquo]inferred from threats to the ecosystem[rdquo], nor was this a [Idquo]relatively uncommon circumstance[rdquo]. Also it was not the case that [Idquo]lack of information generally only limited species inclusion on the list if the species had not been observed for decades or more[rdquo], rather it was used as a rationale for excluding an otherwise eligible species. In FS 1909.12 Chapter 10 12.53 - Evaluating Relevant Information for At-Risk Species, the document states relevant information to consider when evaluating species for inclusion in the SCC list includes: Uncharacteristic natural events like

severe wildfire or insect epidemics, and effects of climate change and susceptibility to stressors caused by human disturbances or activities like air and water pollution, invasive species, trails, roads, and dams.

Changed conditions on the forest and climate change as threats were rarely assessed or considered in evaluating species. In the CNPS Rare Plant Ranking, plants considered to need more information to classify are ranked separately as Rare Plant Rank 3 and not included in other rankings.

Information about threats to a species from other factors was not analyzed. In-

FSH 1909.12 - LAND MANAGEMENT PLANNING HANDBOOK CHAPTER 10 [ndash] THE ASSESSMENT, planners are instructed:

When developing the list of potential SCCs, consideration must also be given to:

5. Species where valid available information indicates the species are of local conservation concern due to:

- a. Significant threats to populations or habitat from stressors on and off the plan area.
- b. Declining trends in populations or habitat.
- c. Restricted ranges (for example, narrow endemics, disjunct populations, or species at the edge of their range).
- d. Low population numbers or restricted habitat within the plan area.

Restricted range is a particularly important factor in assessing risks to a plant species. Narrow endemics, disjunct populations, and species at the edge of their range greatly increase the risk of extinction for a given species or population. These risks were not assessed.

In addition, lack of information for a rare species may itself be considered a warning sign of imminent threat. In a recent paper analyzing IUCN species labeled Data Deficient (DD), such species were found to have a higher Probability of Extinction (PE) than Data Sufficient (DS) species:

[ldquo]Data deficient species are more threatened by extinction than data-sufficient species. On average we obtained higher PE* scores for DD species (43%) than for DS* species (26%), resulting in 56% of DD species (n = 4336) predicted to be threatened by extinction (Supplementary Table 1) versus 28% of DS species.[rdquo] (Borgelt et. al., 2022)

Risks to the entirety of a plant species should be considered risks to the species[rsquo] capability to persist over the long term in the plan area.

Plants that don[rsquo]t meet the USFS SCC standard for inclusion should be monitored.

Plants not ranked 1B in the CNPS Rare Plant Ranking are by definition not as rare or imperiled:

[ldquo]Plants with a California Rare Plant Rank of 4 are of limited distribution or infrequent throughout a broader area in California, and their status should be monitored regularly. Should the degree of endangerment or rarity of a California Rare Plant Rank 4 plant change, we will transfer it to a more appropriate rank.

Some of the plants constituting California Rare Plant Rank 4 meet the definitions of the California Endangered Species Act of the California Fish and Game Code, and few, if any, are eligible for state listing. Nevertheless, many of them are significant locally, and we strongly recommend that California Rare Plant Rank 4 plants be evaluated for impact significance during preparation of environmental documents relating to CEQA, or those considered to be functionally equivalent to CEQA, based on CEQA Guidelines [sect]15125 (c) and/or [sect]15380.[rdquo]

While such plants often may not rise to the level of risk required by the USFS to be included in Species of Conservation Concern, they should not be ignored altogether. In the CNPS Inventory of Rare and Endangered Plants of California, 6th Edition, Bradley E. Powell, (then) Regional Forester, Pacific Southwest Region discusses the creation of a watch list:

Watch List Species

[ldquo]A number of plant species do not meet all the criteria to be included on the Regional Forester[rsquo]s Sensitive List, but are of sufficient concern that we need to consider them in the planning process. These include species that are locally rare (as opposed to declining throughout their range), are of public concern, occur as disjunct populations, are newly described taxa, or lack sufficient information on population size, threats, trend, or distribution. Such species make an important contribution to forest biodiversity and are addressed as appropriate through the NEPA process. To better identify these species, forests have been encouraged to develop [ldquo]watch lists[rdquo] of species. These watch lists are dynamic and updated as the need arises to reflect changing conditions and new information. The creation of the sensitive species and watch lists are key steps to meeting our commitment as an agency to maintain biologically diverse and healthy ecosystems.[rdquo]

A watch list established by the Sequoia NF would meet the needs of those concerned about native plants not making the SCC being simply ignored and risking the decline of the species on forest land. Tulare County is an under-sampled/reported area with local botanists doing a lot of the work. Sequoia NF does not currently have a botanist, and the cited surveys were performed several years ago when Fletcher Linton was in that position. Considering the lack of recent information, it is unwise to ignore a species because the NF doesn't have enough information. Also Sequoia NF is high fire-risk and has been ignited consistently within the last few years alone with no expectation that the trend will reverse. The Plan should take this factor into account as needing to use caution when addressing these rare or under-sampled species within the shifted paradigm under climate change.

Additionally, there is an opportunity for collaboration with CNPS, both at the state and local levels, to work on monitoring populations and trying to relocate historical occurrences.

1. Species to be included in the Species of Conservation Concern List

Calochortus palmeri var. *palmeri* (Palmer[rsquo]s mariposa lily)

CNPS Rare Plant Rank 1B.2: Rare, threatened

[rdquo]Site visit monitoring information shows continued presence in the following locations with no threats identified: Weldon Meadow (CNDDDB) 1994; Moreland Mill Area (CNDDDB) 2009; Bright Star Mine Area (CNDDDB) 2009; Piute Mountains (Travel Management Crew/Linton) 2004 - 2005, and (Salvage Crew/Linton) 2009.[rdquo]

This statement is misleading. While I could not find the exact observations cited, many of the CNDDDB records for this species identify threats, including recreational trail use, fuel treatments, road proximity, mining, grazing, drought, general recreational use, and ground disturbance (bulldozer use and underground power line maintenance).

Based upon this species classification as 1B, the numerous threats identified in CNDDDB records, and the likelihood of increasing drought, I believe this species should be classified as a species of conservation concern.

Cryptantha incana(Tulare cryptantha)

CNPS Rare Plant Rank 1B.3: Rare, threatened

Monardella linoides ssp. *oblonga* (Flax like monardella)

CNPS Rare Plant Rank 1B.3: Rare, threatened

1. Species to be included in a Sequoia National Forest Watch List

Canbya candida(Pygmy poppy)

CNPS Rare Plant Rank 4.2: Limited distribution

Causes for concern- limited distribution, Seq. NF is at the northern end of its range

Delphinium inopinum (Unexpected larkspur)

CNPS Rare Plant Rank 4.3: Limited distribution

Hulsea vestita ssp. *pygmaea* (Pygmy alpengold, Pygmy hulsea)

CNPS Rare Plant Rank 1B.3: Rare, threatened

This species needs more surveys to establish presence. A record by Alison Sheehey in Calflora in 2008 in the Ernest C. Twisselmann Botanical Area should be confirmed. A 2019 CNPS checklist nearby in Sequoia National Park indicates that this plant[rsquo]s presence in the area is current. If confirmed, its rarity and highly disjunct

occurrences require that it be elevated to the Species of Conservation Concern list.

Leptosiphon serrulatus (Madera leptosiphon)

CNPS Rare Plant Rank 1B.2: Rare, threatened

This plant needs more investigation to confirm presence in Sequoia NF.

Mielichhoferia elongata (Elongate copper moss)

CNPS Rare Plant Rank 4.3: Limited distribution

3 records in Sequoia NF in Kings River gorge need confirmation and monitoring.

Peltigera gowardii (Western waterfan lichen)

CNPS Rare Plant Rank 4.2: Limited distribution

This species needs more investigation to confirm presence in Sequoia NF.

CNPS checklists from Dinkey Creek, Patterson Mtn. quads should be revisited.

Sidotheca caryophylloides (Chickweed oxytheca)

CNPS Rare Plant Rank 4.3: Limited distribution

5 CCH specimens from Kern Plateau from the 70[rsquo]s and 80[rsquo]s need confirmation.

The species is at the northern end of range in a disjunct population.

References

Borgelt, J., Dorber, M., H[oslash]berg, M.A. et al. More than half of data deficient species predicted to be threatened by extinction. *Commun Biol*5, 679 (2022). <https://doi.org/10.1038/s42003-022-03638-9>

Calflora <https://www.calflora.org/>

CNPS Inventory of Rare and Endangered Plants of California, 6th Edition (2001) https://www.cnps.org/wp-content/uploads/2018/03/CNPS_Inventory_6th_ed_OCR.pdf