



CALIFORNIA
NATIVE PLANT SOCIETY

November 17, 2016

Ms. Catherine Darst
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003

Sent by electronic mail to: cat_darst@fws.gov

RE: Comments from California Native Plant Society on the Federal Register notice for the *Chorizanthe parryi* ssp. *fernandina* proposed rule

Dear Ms. Darst:

The California Native Plant Society (CNPS) has reviewed the proposed listing rule for *Chorizanthe parryi* ssp. *fernandina*, or San Fernando Valley spineflower (SFV spineflower, or SFVS), and provide the following comments.

We find the species occurrence information presented in the SFVS Species Report for the Laskey Mesa and Santa Clarita (Newhall Ranch) populations is complete. However we do not agree with the US Fish and Wildlife Service's (USFWS, or Service) conclusion that this species qualifies for listing as Threatened. Rather, based on all available information and existing conditions, we believe this species meets the requirements for listing as Endangered, and we recommend the Service list it as Endangered for the reasons described below.

SFVS should be listed as Endangered not Threatened

The proposed rule clearly describes the only two populations known for SFVS, one with an approved development that will significantly diminish its survival potential, and the very real potential for random stochastic events such a modified climate to alter the habitat suitability of both. Based on our review of the information presented in the proposed rule, we believe there is clear evidence of imminent threats of high magnitude for the extinction potential of *Chorizanthe parryi* ssp. *fernandina*.

The species report states,

"At this time, we conclude that there may not be sufficient resiliency, representation, or redundancy to sustain SFVS over the long term, given current and future stressors acting upon the taxon". [Species Report pp. 4, 84, and 89]

The USFWS also designated the listing priority number for the taxon as 6, meaning it has a nonimminent threat of high magnitude and low recovery potential. The low recovery potential

means the plant has very low probability to be delisted once placed on the list. Even if the Newhall development is not implemented the fact that there are only two populations with highly modified ecosystem functions (agriculture, non-native plant competition, and climate change) should lead to the conclusion that *Chorizanthe parryi* ssp. *fernandina* should be listed as Endangered as this would conform to the threat status for most of the species that are on the federal endangered species list as Endangered. Together these factors equate to a level of an Endangered status, not Threatened. Listing *Chorizanthe parryi* ssp. *fernandina* as Threatened would be contrary to existing determinations and a deviation from that could be considered arbitrary and capricious.

Dismissing Newhall Ranch as an active threat creates an incomplete analysis of active threats

The Service provided a considerable amount of information that describes the threats of the approved urban development at the Newhall site where the California Department of Fish and Wildlife has issued a take permit for this plant. These factors are stated to likely contribute to loss of habitat and individuals and are described as active threats. Threats to its continued existence listed in the Executive Summary in the Species Report for *Chorizanthe parryi* ssp. *fernandina*, and discussed in the proposed rule include; development (the habitat of fifty percent of the plant is proposed to be permanently fragmented into poorly designed, small rare plant preserves), small isolated populations (two), nonnative plant competition (introduced annual grasses), nonnative animals (specifically Argentine ants), adverse land use including recreation and trampling, and increased fire frequency.

Missing in the analysis of threats is the current land use at the Newhall site, which includes irrigated agriculture, non-native animals, including Argentine ants, in occupied habitat, grazing, and oil fields.

Currently there are active agricultural operations including irrigated agriculture (Argentine ant facilitator), crop management with large equipment, and ongoing grazing. What percentage of the habitat is contaminated by the Argentine ant? Any loss or habitat degradation of existing subpopulations should be considered significant. Also, there seems to be an old oil field or evidence that well operations were part of the land use patterns. Oil-related activities could result in future soil remediation with attendant large scale hydraulic modification to the drainage patterns. Lastly, the landscape is heavily modified with an extensive network of roads and trails with the high potential to facilitate introduction of invasive, competitive non-native plants. Additional effects analysis is needed for this current habitat degradation and the future stability of the Newhall population.

Furthermore, Newhall Land and Farming Company has intentionally destroyed subpopulations on Newhall Ranch lands and criminal investigations were instigated by CDFW. This resulted with an agreement by Newhall to actively manage and restore SFVS habitat, none of which has been initiated even after several years. Newhall's failure to abide by such an agreement should be an indicator of the serious threat to the continued existence of the Newhall Ranch population.

The Proposed Rule creates a double standard by relying on the Newhall development's reserve design and adaptive management to lower listing status without considering development as an active threat.

The intent of the Endangered Species Act is to protect the taxon and its natural habitat from extinction. There are only two known populations of for *Chorizanthe parryi* ssp. *fernandina*, San Fernando Valley Spineflower (SFVS), one with eminent potential for population and habitat modification as a result of the Newhall Ranch development.

Throughout the proposed rule, the Service argues that the development has not happened yet and therefore does not represent an active threat. This is misleading. The development proposal has been approved by Los Angeles County and the California Department of Fish and Wildlife has issued a take permit for *Chorizanthe parryi* ssp. *fernandina*. This information invalidates the Service's conclusion that the development is not an active threat. On the contrary, the Service provides convincing evidence that the development represents an active threat by incorporating consideration of the Newhall Ranch development plan's adverse effects into the proposed rule.

The Proposed Rule utilizes the approved Newhall Ranch development to describe the threats to the plant and then attempts to justify adopting a Threatened over Endangered status by dismissing the development as an active threat.

In the analysis of threats, the Federal Register and supporting documents state that active preserve management will be required as part of the preserve design. After the authorized take occurs through the loss of twenty-five percent of the occupied *Chorizanthe parryi* ssp. *fernandina* habitat the remaining seventy five percent of the Newhall Ranch population is hypothesized to persist into the future in rare plant preserves. The proposed rule describes that these preserves are designed with inadequate buffer distance and includes bordering land use that is expected to be occupied by the Argentine ant, probably the largest threat to the spineflower. The implementation of the preserve design requires immediate need for threat control of an invasive species that is an urban pest. Functionally, one half of the known distribution will be compromised.

The rare plant preserve design for SFVS forms the foundation of the spineflower conservation plan (SCP). The approved development will place hostile ecologic functions in close proximity to all portions of the existing occupied habitat of the SFVS Newhall population, eliminating the natural functioning of the rare plant habitat. These post-development functions will require intensive, questionably successful on-site management in perpetuity to prevent the adverse influences that are anticipated by the adaptive management program. CNPS does not believe that the preserve design that is directly connected to proposed open spaces can support landscape-level ecological functions and processes as stated in the Proposed Rule.

Preserve design problems include the concept of population fluctuations within the preserve areas. This species has been observed for such a short amount of time that the ability to truly understand the footprint requirements of the plant remain largely unknown. Creating such small rare plant preserves has the potential to reduce long term success to maintain a viable population into the future by eliminating connectivity to adjacent habitats where populations could have migrated beyond the borders of the preserve boundaries. Future needs of the plant might not be

available because the loss and modification of immediate adjacent habitats that would elevate the potential for extirpation and likely extinction.

Further, the preserve designs are faulty in that they do not provide a large enough buffer to include the requirements for persistence of native ants or other ground nesting arthropods that might be critical to the functioning ecosystem needed for the SFVS. Pollinators of spineflower include at least six arthropod taxa, with two native ant species responsible as primary propagators for the plant.¹

The entire rare plant reserve design proposed requires that there will be an Argentine ant control program. Argentine ants around homes are a constant problem that homeowners have yet to successfully control. Almost all home invasions are modified through the use of chemicals and the scale of invasions needing controls will undoubtedly result in the application of some sort of chemicals at an unspecified scale that will have an unknown affect on the native species. What is more, there will likely be challenges to chemical controls from adjacent residential neighborhoods as broadcast spraying is often controversial in and adjacent to residential settings. These proposed long-term management actions are proposed for fifty percent of SVFS's distribution.

The Proposed Rule states,

"According to the best scientific information, the varying widths of the buffers around the spineflower preserves in the SCP are less than what is recommended to preclude Argentine ant invasion at urban edges..." [Proposed Rule, Federal Register p. 63460]

followed by a discussion of proposed actions to mitigate these effects. These proposals, meant to mitigate impacts to fifty percent of the plants occupation in nature, have never been tried. The Argentine ant is listed as the most significant threat to the plant and yet the rare plant reserve design will place that threat in immediate proximity to SVFS, requiring experimental attempts at potential control. This situation further underscores how clearly SFVS must be listed as Endangered, not Threatened.

CNPS disagrees with the statement that Argentine ants can be effectively managed within and adjacent to the preserves through the use of adaptive management. There is no possible way to understand how the proposed severe habitat alteration will affect the biota into the future especially where such large ecosystem modifications will occur with the scale of development proposed for the immediate vicinity of the SFVS. The inevitability of large scale ecosystem modification is a major threat, and the dismissal of the threat is premature.

The reliance on adaptive management with such a small population as what is know for SFVS is problematic because there is no room for error correction in this case. Therefore, if the

¹ Jones, C. Eugene et al. "Reproductive Biology of the San Fernando Valley Spineflower, *Chorizanthe parryi* var. *fernandina* (Polygonaceae)." *Madroño*, vol. 56, no. 1, 2009, pp. 23–42. www.jstor.org/stable/41425796.

attempted adaptive management strategies fail at Newhall Ranch, half of SVFS's population will fail.

The SFVS Enhancement and Introduction Plan (Plan) is more appropriately addressed under an SVFS recovery plan than as part of its listing rule. The Proposed Rule presents potential outcomes from this plan that might take place between the authoring of the proposed and final rules. Yet the success or failure of the proposed Plan will likely require decades to determine. The use of positive outcomes of the Plan (enhancement and introduction) can only occur after a measured success. Since the effectiveness of proposed conservation measures cannot be evaluated for many years, it is premature to rely on potential future success of these measures when determining the vulnerability of SFVS.

The reliance of adaptive management to successfully address severe habitat modification is also premature, and not a reasonable condition upon which to dismiss Endangered status in favor of Threatened. Deliberately placing potential avenues for Argentine ant invasions adjacent to half the SFVS population is inviting a high potential for failure, especially when the adaptive management objectives include statements of 'to the extent feasible,' which is a mitigation condition at the heart of biodiversity decline worldwide.

The use of potential future actions cannot be used to make a determination of current fact. The rule includes justification terms like *anticipate* that threats will be addressed and *proposed* habitat restoration will be implemented, neither of which has any guarantee of success and are more appropriate to include in a recovery plan than as justification for adopting a listing of Threatened rather than Endangered.

Additional factors need to be considered within analysis of effects

Wildfire

Within the introduction to the five factors is the statement that wildfire is a threat to the spineflower. This statement appears to have no justification. It is possible that the elimination of periodic fires, a normal function of the landscape level ecologic function, might be a threat that should be analyzed. Landscape level periodic wildfires and high functioning predator prey interactions within preserves will not be possible so close to residential development. The rare plant preserves must have a large buffer surrounding the population footprint otherwise the long term natural survival of the spineflower is highly doubtful.

Trespass

Adverse recreation through trespass into the rare plant reserves is highly likely, neighborhood dogs and cats are also a highly potential influence on landscape level ecosystem functions. This is a potential threat that should be analyzed.

Changes in predator populations

The isolation by urban development will change predator populations and control of rodents that could modify the functions of the rare plant reserve, through burrowing and grazing/browsing and type converting the ecosystem. This needs to be included in the analysis of effects to the plant.

Effects of hydro-geological modifications inherent in the proposed development of Newhall Ranch

The earth-moving activities, changes in hydrology, in the contributing sub-watershed that services the existing habitat and spineflower population may have both short and longterm effects. This is a potential threat that should be analyzed.

Pollinator sustainability

The proposed Argentine ant control program is diametric to the protections of the populations of existing documented arthropods responsible for servicing the viability of the spineflower. This is a potential threat that should be analyzed.

Conclusion

The Service lays the foundation for the justification of Endangered status not Threatened in factor E,

"...we conclude that having small, isolated populations is a current and future population-level threat to the plant." [Proposed Rule, Federal Register p. 63459]

The proposed rule established several factors that indicate a high potential for the loss of the species and documents the high likelihood for the elimination of the Newhall Ranch population through inadequate rare plant reserve design. Twenty-five percent of the Newhall Ranch population is a significant portion of the spineflower range, and therefore satisfy's the requirement of the definition of Endangered as it is in danger of extinction throughout all or a *significant* portion of its range. The ESA requires that the habitat is considered as a crucial survival element for the listing and here we have the functional proposal to modify half of the plants range. Even without the development of Newhall Ranch the proposed rule has justified that the plant is in danger of extinction and fits the definition of Endangered. The Service attempts to dismiss the use of "significant portion of the range" to list as threatened totally contrary to the evidence presented in the factors section of the proposed rule. The Service fails to provide a compelling argument to list SFVS as Threatened rather than Endangered, and indeed a decision to do so would seem to be an arbitrary determination given the evidence presented in the Proposed Rule and Species Report.

There are only two populations of SFV spineflower. By that very fact stochastic threats to very small populations elevate the threat of extinction and therefore the status of Endangered is the most appropriate determination. There are six other Federally Endangered members of the genus in California that all have more populations than *Chorizanthe parryi* ssp. *fernandina*.

| Federally Endangered | extant populations |
|--|--------------------|
| <i>Chorizanthe howellii</i> | 8 |
| <i>Chorizanthe orcuttiana</i> | 4 |
| <i>Chorizanthe pungens hartwigii</i> | 17 |
| <i>Chorizanthe robusta hartwigiana</i> | 4 |
| <i>Chorizanthe robusta robusta</i> | 15 |
| <i>Chorizanthe vallida</i> | 3 |

The Service's listing of other plants as Endangered has established a standard of legal determinations for the qualifiers of Endangered status. Based on the information in the proposed rule and supporting documents the attempt of the USFWS to list this plant as Threatened rather than Endangered is an arbitrary and capricious determination.

CNPS appreciates the opportunity to provide our input on the proposed rule and recommend that the USFWS adopt a listing of Endangered for this species.

Sincerely,
Tim Thomas
CNPS Rare Plant Program Committee

A handwritten signature in black ink that reads "Greg Suba". The signature is written in a cursive, slightly slanted style.

Greg Suba
CNPS Conservation Program Director

Protecting California's native flora since 1965

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