



CALIFORNIA
NATIVE PLANT SOCIETY

2707 K Street, Suite 1, Sacramento, CA 95816-5130 (916) 447.2677 www.cnps.org

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California's native
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January 20, 2025

Golden State Finance Authority
Attn: Terrance Rodgers
1215 K Street, Suite 1650
Sacramento, CA, 95814

Submitted via email to: ceqacomment@gsfahome.org, trodgers@rcrcnet.org

Re: California Native Plant Society Comments on Golden State Natural Resources Forest Resiliency Demonstration Project SCH #2022110466

Dear Mr. Rodgers:

Thank you for the opportunity to comment on the Golden State Natural Resources Forest Resiliency Demonstration Project. The following comments are submitted on behalf of the California Native Plant Society (CNPS) state conservation program, the CNPS Shasta Chapter, the CNPS North Coast Chapter, and the CNPS Orange County Chapter. CNPS is a non-profit environmental organization with over 13,000 members in 36 Chapters across California and Baja California, Mexico. CNPS's mission is to protect California's native plants and their natural habitats, today and into the future, through science, education, stewardship, gardening, and advocacy. We work closely with decision-makers, scientists, and local planners to advocate for well-informed policies, regulations, and land management practices.

We are concerned that given the scale and scope of this project there are countless opportunities for significant impacts from this proposal that have not been adequately addressed in the DEIR. Our comments and recommendations will focus on carbon emissions, concerns that the project includes multiple elements across multiple jurisdictions, many of which require documentation other than CEQA, and evaluation, impacts, avoidance and mitigation of botanical resources.

Carbon Emissions

While fuel reduction and ecosystem resilience projects are needed to restore the natural ecological function and fire regimes of our western forests, these efforts should not come at the cost of the massive additional impacts of carbon emissions that would be associated with this project. While some material could be left on site to naturally decompose or be burned in prescribed fires much of the materials produced as a byproduct of these thinning and recovery projects need to be disposed of, each step in the procedure of removing

carbon sequestering live vegetation, transporting these materials to a processing facility, processing the materials, transporting the processed materials to a distribution facility, shipping them internationally, and finally burning them in potentially outdated, under regulated, and environmentally unfriendly foreign power plants has the potential to greatly increase the carbon emissions associated with disposing of biomass. Simply piling and burning materials on site would greatly reduce the environmental impacts and contributions to climate change compared to the proposed project. Much of the “biomass” could be used as timber or used to produce mulch products that are in demand for restoration projects, both of which would further reduce the carbon impacts of piling and burning project byproducts. The global scope of the carbon impacts associated with this project are not adequately addressed in the DEIR.

Process

We request clarification as to how Golden State Finance Authority (GSFA) became the lead agency for this project and how GSFA has the authority to approve a project with multiple components across multiple jurisdictions. We have reviewed the Master Stewardship Agreement (MSA) between GSFA and the United States Forest Service (USFS). This agreement is intended to apply to fuel reduction projects conducted on USFS land that would be subject to the NEPA process, but we are unaware of any agreements that would delegate CEQA authority for the types of projects described in the DEIR to GSFA. We have been unable to find any examples of previous CEQA projects for which GSFA has been a lead agency, and we have concerns with an agency with no previous CEQA experience being the lead agency in a very complicated project with multiple components. This project consists of three individual development projects that would typically be approved by the local city or county under the CEQA process, as well as an unknown number of treatments that would occur on private land, lands of three different states, as well as federal land, and this mix of projects has been combined into a single CEQA approval. If the GSNR Biomass Only Thinning Projects are intended to be tiered off of this environmental review then a Programmatic EIR (PEIR) should be produced; if this document is intended to be a PEIR it should be called a PEIR, and include all of the components required by CEQA to be evaluated in a PEIR. The EIR should clearly define what additional documentation would be required for any biomass thinning projects tiered from the EIR based on the ownership and/or management agency of the land where the project would occur and who would be the lead agency for each type of land ownership and/or management agency. This appears to be a very atypical process involving multiple project components across multiple jurisdictions and clarification of GSFA’s authority to approve each portion of this project should be clearly outlined.

Project Description – 2

GSNR Biomass Only Thinning Projects - Hazardous Fuel Reduction Projects

The DEIR does not mention if any of the proposed fuel reduction projects would occur in chaparral habitat or if they would be limited to forest type habitat. If treatments in chaparral are anticipated this should be clearly stated in the DEIR along with the desired conditions for chaparral habitat. Chaparral has evolved to recover from infrequent high severity fires, the type of fire regime that is trying to be mitigated in forest ecosystems. These infrequent stands replacing fires are essential to the long-term health and maintaining the biodiversity of chaparral. Any treatments in these areas should be designed to encourage this fire regime and the desired conditions for chaparral habitat should be included in the DEIR.

GSNR Biomass Only Thinning Projects - Construction of Shaded Fuel Breaks

The project description states that ridgelines would be used for the placement of fuel breaks. These areas are often home to exposed rock outcrops and barrens that are easily eroded and are often home to special status plant taxa. As such, special care needs to be taken while conducting treatments in these areas. Fuel breaks have also been shown to be a vector for the introduction of invasive species and fuel breaks should be prioritized for post implementation monitoring to ensure that project activities have not inadvertently introduced or spread non-native plant populations.

GSNR Biomass Only Thinning Projects - Project Permitting and Implementation and Project Oversight

The project description should expressly disclose how contractor compliance with the provisions of the DEIR will be overseen, and what remedies for violations would consist of, and how these remedies would be enforced.

Project Design Features – Biological Resources

PDF-BIO-1 – This design feature states that information in Appendix X of the DEIR would be used as part of the data review for each treatment project, however Appendix X is not available on the project website or CEQAnet. We recommend that this information be made available for public review.

PDF-BIO-4 - This design feature does not include sufficient measures to prevent the spread of invasive species or pathogens within or when exiting the project site. It does not include any measures to identify or remediate any non-native plant species or pathogens inadvertently introduced through project activities. Project Design Feature BIO-4 should be amended as follows:

GSNR will require that the following actions be taken ~~as applicable~~ to prevent the spread of invasive plants, noxious weeds, **invasive plant pathogens**, and invasive wildlife that could result from project activities:

- Clean clothing, footwear, and equipment used during treatments of soil, seeds, vegetative matter, or other debris or seed-bearing material, before entering the treatment area or when leaving an area with infestations of invasive plants, noxious weeds, or invasive wildlife;
- For all heavy equipment and vehicles traveling off road, pressure wash, if feasible, or otherwise appropriately decontaminate equipment at a designated weed-cleaning station prior to entering the treatment area, **or when leaving an area with infestations of non-native plants. ~~Anti-fungal wash~~ Treatment with appropriate sanitizing** agents will be specified if the equipment has been exposed to any pathogen that could affect native species. **All potentially contaminated soil washed from equipment at a site should be contained and treated to kill weeds seeds and pathogens or transported for offsite disposal at an appropriate facility;**
- Track/document decontamination efforts for each piece of equipment or vehicle using a wash log with the date and service type (e.g., pressure wash, **anti-fungal wash treatment with appropriate sanitizing agents**, other decontamination solutions); the log will be stored in said vehicle or equipment and may be inspected by the qualified RPF, biologist, or biological technician prior to entering the treatment area;
- Inspect all heavy equipment, vehicles, tools, or other treatment-related materials for sand, mud, or other signs that weed seeds or propagules could be present prior to use in the work area. If the equipment is not clean, the equipment shall be denied entry to the treatment area;
- Stage equipment in areas free of invasive plant infestations, ~~if unless~~ there are no uninfested areas present within a reasonable proximity to the treatment area **an area shall be cleared of invasive propagules to the extent feasible prior to staging equipment, these areas shall be prioritized for post implementation monitoring and management;**
- Implement applicable BMPs outlined in the most current version of Cal-IPC's Preventing the Spread of Invasive Plants: Best Management Practices for Land Managers **and the Guidelines for Restoration and Fieldwork from the Phytophthoras in Native Habitats Work Group (Calphytos.org).**
- **Post implementation monitoring shall occur at the earliest appropriate time of year to identify any new populations of non-native species, any newly identified populations of non-native species shall be actively managed and monitored until they are eliminated.**

PDF-BIO-5 - This design feature should require the consideration of plants given protections as required by CEQA § 15380 and CEQA § 15125 (c). Project Design Feature BIO-5 should be amended as follows:

...

If potentially occurring special-status plants are listed under CESA or FESA, **listed as Rank 1 or 2 on the CNPS Rare Plant Inventory, or species that are considered to be rare or unique to the specific region where project activities would occur as defined in CEQA § 15125 (c)**, protocol-level surveys of the listed species will be conducted in all circumstances, unless determined otherwise by CDFW or USFWS.

~~-For other special-status plants not listed under CESA or FESA, surveys will not be required under the following circumstances:~~

~~-If protocol-level surveys, consisting of at least two survey visits (e.g., early blooming season and later blooming season) during a normal weather year, have been completed in the 5 years before implementation of the treatment project and no special-status plants were found, and no treatment activity has occurred following the protocol-level survey, treatment may proceed without additional plant surveys:~~

~~-If the target special-status plant species is an herbaceous annual, stump-sprouting, or geophyte species, the treatment may be carried out during the dormant season for that species or when the species has completed its annual lifecycle without conducting surveys provided the treatment will not alter habitat or destroy seeds, stumps, or roots, rhizomes, bulbs and other underground parts in a way that would make it unsuitable for the target species to reestablish following treatment.~~

Project Design Features – Geology and Soils

There is no design feature that requires the avoidance of unique or sensitive soil types. Serpentine and calcareous soils are easily erodible and are often home to rare plant species that have adapted to the challenging chemistry present in these soils. Rock outcrops, alpine fell fields and barrens are also easily degraded by machinery and tend to foster a higher proportion of rare plants than other habitat types. We would recommend the addition of PDF-GEO-7 as follows:

PDF-GEO-7: GSNR will require the avoidance of serpentine, calcareous, alpine fell fields, barrens, biological soil crusts, and other sensitive soil types that are easily eroded or degraded, as determined by a qualified biologist and licensed geologist for staging areas, road construction or any other project activities.

Biological Resources – 3.3

Sensitive Natural Communities

The DEIR does not clearly define what would qualify as a sensitive natural community and the listed information and data sources that were used for the desktop review would be insufficient to determine if these sensitive natural communities have the potential to be present in the project areas. The DEIR should include analysis of any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service that could be impacted by project activities as described in the CEQA Environmental Checklist Form. This form also lists what may qualify as what the DEIR refers to as an “aquatic feature” as state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.). The DEIR should clarify what communities and features qualify for these designations and include analysis of these resources.

Special Status Species

The DEIR states on page 3.3-12 that list 1 and 2 plant species may meet the definitions provided in CEQA; however list 1 and 2 taxa do qualify as endangered threatened or rare as defined by CEQA § 15380, and list 3 and 4 species may meet the qualifications of CEQA and should be evaluated on a case-by-case basis. Species not listed as rare, threatened, or endangered by The U.S Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), or by the California Native Plant Society are required to be analyzed if they are rare or unique regionally and could be impacted by project activities as described in CEQA § 15125 (c). This requires knowledge of each regional setting of each area where project activities would occur and investigation and discussion of significant effects of all project components in the full environmental context.

Mitigation Measures

MM BIO-1 - This mitigation measure should require the evaluation and mitigation of impacts to species considered rare by the state of California as defined in CEQA § 15380 and rare or unique regionally as described in CEQA § 15125 (c). Compensatory mitigation has been shown to be largely unsuccessful, a review of mitigation-related transplantation, relocation, and reintroduction attempts showed that only 8% of these attempts were successful (Fiedler 1991), and avoidance should be prioritized over compensatory mitigation wherever possible. If compensatory mitigation is implemented the current language is insufficient to ensure that it would not have impacts to the receiver site or result in an outcome that meets success criteria. Mitigation Measure BIO-1 should be amended as follows:

Compensate for Mortality, Injury, Disturbance, or Unavoidable Loss of Special-Status Plants.

Prior to project implementation a qualified RPF or botanist will conduct protocol-level surveys for special-status plants that U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), U.S. Forest Service (USFS), and/or the State of California as defined in CEQA § 15380 consider to be rare, endangered, threatened, or candidate species, as well as species that are considered to be rare or unique to the specific region where project activities would occur as defined in CEQA § 15125 (c). The protocol surveys will be conducted in suitable habitat that could be affected by the project and timed to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF or botanist, and verified by visiting reference populations), or all species in the same genus as the target species will be assumed to be special-status.

Avoidance of special status plant populations should be prioritized over any form of compensatory mitigation. If avoidance of take of plants species that U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), ~~and/or~~ U.S. Forest Service (USFS) ~~list, and/or the State of California as defined in CEQA 15380 consider to be~~ rare, endangered, threatened, ~~or~~ candidate, ~~or species that are considered to be rare or unique to the specific region where project activities would occur as defined in CEQA § 15125 (c)~~ is not possible, GSNR will sufficiently compensate for such impacts.

...

Non-Listed Rare Species: For rare species that are not listed by the USFWS or CDFW, **or species that are considered to be rare or unique to the specific region where project activities would occur as defined in CEQA § 15125 (c)** GSNR will implement a Compensatory Mitigation Plan (Plan), prepared by a qualified botanist **and approved by CDFW**, that outlines at least one or a combination of the following:

- The protection, through land acquisition or a conservation easement, of land that supports an equal or greater number of plants of similar health; and/or,
- The creation of a new population on suitable unoccupied habitat through the salvage and relocation or propagation of impacted plants, or acquisition of similar plants/seed from local genetic stock, at no less than **1:2** mitigation ratio. **Any propagated or translocated plant materials used for restoration must be free of invasive soilborne Phytophthora pathogens and other pathogens or insect pests not present in the restoration site. Nursery stock, if used, must be produced by nurseries accredited by the Accreditation to Improve Restoration (AIR) program**

(<https://airnursery.ucdavis.edu/>). Plant relocation, propagation, or establishment will be subject to the following requirements:

- The Plan will be prepared by a qualified biologist and include at a minimum: (1) seed/propagule collection methods, (2) identification of receiver sites or locations for relocated or propagated plants and rationale for their selection, **and environmental analysis of the receiver site to ensure that mitigation activities would not impact existing resources** (3) success criteria for population establishment, including a not-to-exceed threshold for invasive species cover, (4) **a minimum of 5 years of maintenance and monitoring, followed by 5 years of monitoring to ensure that populations are meeting success criteria without maintenance, returning to 5 years of maintenance and monitoring if monitoring shows that populations are not meeting success criteria without maintenance, mitigation requirements would be met when populations are shown to be stable for five consecutive years post maintenance**, (5) the adaptive management approaches that would be used to evaluate monitoring results and adjust management actions, if necessary, and (6) financial assurances for the funding of special-status plant mitigation, **management, and monitoring.**

MM-BIO-3 - This mitigation measure may be ineffective without properly defining what qualifies as a sensitive natural community. This mitigation measure does not account for other biotic factors that are often essential for ecosystem function, including fungal communities and soil microbes. As described for special status plant species in the comments regarding MM-BIO-1, efforts to recreate sensitive natural communities is very unlikely to be successful and any impacts to these communities will likely lead to a net loss of these unique assemblages. Mitigation Measure BIO-3 should be amended as follows:

Compensate for Unavoidable Loss of Sensitive Natural Communities and Oak Woodlands.

Prior to project implementation a qualified RPF or botanist will conduct protocol-level surveys for any riparian habitat or other sensitive natural community, or oak woodland, as identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Avoidance of sensitive natural communities should be prioritized over any form of compensatory mitigation. If significant impacts to sensitive natural communities or oak woodlands cannot feasibly be avoided, GSNR will sufficiently compensate for such impacts. Compensation shall include:

- A qualified botanist will conduct a pre-construction survey to identify and quantify the number of plants **of each species** that could be potentially removed or disturbed within the sensitive natural community or oak woodland. The botanist will prepare a mitigation plan to address implementation and monitoring requirements to ensure that project activities would result in no net loss of habitat functions and values and to offset the loss of any vegetation/plants to be removed or disturbed, **in compliance with applicable local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service regulations**. The plan will contain, at a minimum: goals and objectives; a description of the extent of plants/vegetation to be removed or disturbed; plant collection, propagation, and planting methods; locations on site in which the plants will be transplanted, **environmental analysis of the site to ensure that mitigation activities would not adversely affect existing resources**; monitoring methods and timing; invasive species eradication methods; interim and final success criteria/performance standards; measures to be taken in the event that the propagation and planting is not successful; identification of responsible entities; **financial assurances for the funding of sensitive natural community mitigation, management, and monitoring, including a minimum of 5 years of maintenance and monitoring, followed by 5 years of monitoring to ensure that communities are meeting success criteria without maintenance, returning to 5 years of maintenance and monitoring if monitoring shows that communities are not meeting success criteria without maintenance, mitigation requirements would be met when populations are shown to be stable for five consecutive years post maintenance**; and reporting requirements. The plan will be approved by the appropriate County. Propagation and planting will occur at a minimum **1**:1 basis to ensure no net loss of the sensitive natural community or oak woodland.

▪ Natural areas temporarily impacted by project activities will be restored with appropriate native vegetation. Restored areas will be identified and determined to feasibly support the proposed native revegetation to adequately mitigate project impacts. Feasibility of native revegetation is primarily based on suitable soils, **hydrology, micro biome**, slopes, and aspect as well as the presence of similar native vegetation adjacent to the proposed mitigation areas.

MM-BIO-9 - This mitigation measure does not include the Stanislaus monkeyflower, known to be present on the project site, as well as the two state and federally listed species flagged by CDFW, Chinese Camp brodiaea and Red Hills vervain. Compensatory mitigation has been shown to be largely unsuccessful, a review of mitigation-related transplantation, relocation, and reintroduction attempts showed that only 8% of these attempts were successful (Fiedler 1991), and avoidance should be prioritized over compensatory mitigation wherever possible. If compensatory mitigation is implemented the current language is insufficient to ensure that it

would not have impacts to the receiver site or result in an outcome that meets success criteria. Mitigation Measure BIO-9 should be amended as follows:

...

A qualified RPF or botanist will conduct protocol-level surveys for special-status plant species prior to initiation of ground-disturbance. ~~Six~~**Seven** non-listed special-status plant species ~~will be targeted during the survey~~: Beaked clarkia (*Clarkia rostrata*), Tuolumne button-celery (*Eryngium pinnatisectum*), spiny-sepaed button-celery (*Eryngium spinosepalum*), **Stanislaus monkeyflower (*Erythranthe marmorata*)**, forked hareleaf (*Lagophylla dichotoma*), veiny monardella (*Monardella venosa*), and Patterson's navarretia (*Navarretia paradoxiclara*) **and two state and federally listed species Chinese Camp brodiaea (*Brodiaea pallida*) FT SE and Red Hills vervain (*Verbena californica*) FT ST will be targeted during the survey**. The survey will follow the most current and relevant agency survey protocols and guidelines for special-status plants (e.g., CDFW 2018; USFWS 2000; CNPS 2001). The protocol surveys will be conducted in suitable habitat that could be affected by the project and timed to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF or botanist, **and verified by visiting reference populations**), or all species in the same genus as the target species will be assumed to be special-status.

...

Avoidance of special status plant populations should be prioritized over any form of compensatory mitigation. If avoidance of rare plants is not feasible, a Rare Plant Salvage and Translocation Plan will be prepared by a qualified botanist prior to implementation. The Rare Plant Salvage and Translocation Plan will be approved by the County and/or CDFW and will include, at a minimum, the following components: identification of occupied habitat to be preserved and removed; identification of on-site or off-site preservation, restoration, enhancement, or translocation locations; methods for preservation, restoration, enhancement, and/or translocation **and environmental analysis of the receiver site to ensure that mitigation activities would not impact existing resources**; goals and objectives; replacement ratio and success standard of ~~12~~**1**:1 for impacted to established acreage; a **maintenance and** monitoring program to ensure mitigation success, **including a minimum of 5 years of maintenance and monitoring, followed by 5 years of monitoring to ensure that populations are meeting success criteria without maintenance, returning to 5 years of maintenance and monitoring if monitoring shows that populations are not meeting success criteria without maintenance, mitigation requirements would be met when populations are shown to be stable for five consecutive years post maintenance**; adaptive management and

remedial measures in the event that the performance standards are not achieved; and financial assurances and a mechanism for conservation of any mitigation lands required in perpetuity.

MM-BIO-16 - This mitigation measure should require, not suggest, the use of weed free materials. Any revegetation should be limited to locally sourced native plant materials and should not allow the use of non-native species. This mitigation measure should include monitoring and control of any non-native plant species introduced through project activities. Mitigation Measure BIO-16 should be amended as follows:

Rock, sand, and any other material used for erosion control purposes will originate from a ~~weed-free~~ source **free of weeds and soil-borne pathogens if available**. Refer to the following sources for more information:

- <https://www.cal-ipc.org/solutions/prevention/weedfreeforage/>

- <https://www.cal-ipc.org/solutions/prevention/weedfreegravel/>

http://phytosphere.com/publications/Phytosphere_GGNPC_Soil_Phytophthora_B_MPs_Jan2018.pdf

Areas temporarily disturbed by construction will be revegetated and reseeded.

Revegetation will incorporate local native species ~~to the extent practicable or sterile non-native species~~ to reduce the spread of invasive plants in the project area. Seed collection source and species diversity will be selected to maintain the genetic integrity and diversity of native plants used for revegetation.

Post implementation monitoring shall occur at the earliest appropriate time of year to identify any new populations of non-native species, any newly identified populations of non-native species shall be actively managed and monitored until they are eliminated.

In conclusion, we ask that this project not be approved due to the global carbon impacts associated with ongoing project activities, we ask for clarification as to GSFA's authority to approve a project of this scope and scale, we ask that that project design features and mitigation measures be amended to ensure that avoidance of natural resources is prioritized, we ask that mitigation measures be strengthened to improve the likelihood that they would be successful, and we ask that that considerations for the control of invasive species are incorporated into the design features and mitigation measures. Thank you for the opportunity to comment on this project and please contact me if you have any questions.

Sincerely,



Brendan Wilce
Conservation Program Coordinator
California Native Plant Society
bwilce@cnps.org

David Ledger
Conservation Chair
CNPS Shasta Chapter
dsledger49@gmail.com

Joann Kerns
Conservation Chair
CNPS North Coast Chapter
jkerns56@gmail.com

Elizabeth Wallace
President
CNPS Orange County Chapter
eltwallace@gmail.com

Elizabeth Taylor
Conservation Chair
CNPS Orange County Chapter
etaylor7@gmail.com

References -

Fiedler, P.L., 1991. Mitigation-related transplantation, relocation and reintroduction projects involving endangered and threatened, and rare plant species in California. Final report submitted to Department of Fish & Game Endangered Plant Program.