



GOLDEN STATE
NATURAL RESOURCES

Board of Directors Meeting

**Wednesday
February 28, 2024
9:00 A.M.**

**Redding City Hall - Community Room
777 Cypress Ave., Redding, CA 96001**

**Golden State Natural Resources (GSNR)
Board of Directors Meeting
February 28, 2024 – 9:00 a.m.
Redding City Hall - Community Room
777 Cypress Ave., Redding, CA 96001**

GSNR Board Members:

Supervisor Matt Kingsley, Inyo County
Supervisor Michael Kobseff, Siskiyou County
Supervisor Geri Byrne, Modoc County
Supervisor Rex Bohn, Humboldt County
Supervisor Doug Teeter, Butte County

AGENDA

1. Call to Order and Determination of Quorum

*Chair, Supervisor Matt Kingsley, Inyo County
Vice Chair, Supervisor Michael Kobseff, Siskiyou County*

2. Pledge of Allegiance

3. Public Comment

At this time any member of the public may address the Board. Comments are usually limited to no more than 3 minutes per speaker.

4. Consent Agenda – ACTION

a. January 24, 2024 Board of Directors Meeting Minutes

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5. GSNR Chair's Report

Chair, Supervisor Matt Kingsley, Inyo County

6. Business and Administrative Matters *(Discussion and possible action relative to)*

a. Ratification of Memorandum of Understanding between GSNR and Drax US BECCS Development, LLC Regarding Exploration of Sustainable Biomass Development Opportunities - ACTION

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Patrick Blacklock, President

b. Informational Presentation: Draft GSNR Feedstock Supply Environmental Resource Protection Minimum Requirements

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Arthur J Wylene, General Counsel

7. Project Status Updates *(Discussion and possible action relative to)*

Patrick Blacklock

Project Development Team

a. Project Coordination Update

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Anthony Rahill, RCRC Director of Data Management

b. CEQA and Permitting Update

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Arthur J. Wylene

Sarah Bolnik, RCRC Economic Development Officer

c. Governmental Affairs Update

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Staci Heaton, RCRC Senior Policy Advocate

d. Communications Update <i>Carolyn Jhaji, RCRC Communications Director</i>	Page 73
e. Forest Treatment Project Development Update <i>Terrance Rodgers, RCRC Economic Development Officer</i>	Page 75
f. Project Investment Update <i>Craig Ferguson, RCRC Senior Vice President</i>	Page 77
g. Finance/Administration Update <i>Milena De Melo, RCRC Finance Director</i>	Page 79

8. Adjournment

Meeting facilities are accessible to persons with disabilities. By request, alternative agenda document formats are available to persons with disabilities. To arrange an alternative agenda document format or to arrange aid or services to modify or accommodate persons with a disability to participate in a public meeting, please call (916) 447-4806 at least 48 hours before the meeting.

Agenda items will be taken as close as possible to the schedule indicated. Any member of the general public may comment on agenda items during the public comment period. To facilitate public comment, please let staff know if you would like to speak on an agenda item. The agenda for this meeting of the Board of Directors of Golden State Natural Resources was duly posted at its offices, 1215 K Street, Suite 1650, Sacramento, California, at least 72 hours prior to the meeting.

Any written materials related to an open session item on this agenda that are submitted less than 24 hours prior to the meeting, and that are not exempt from disclosure under the Public Records Act, will promptly be made available for public inspection at GSNR's principal office, 1215 K Street, Suite 1650, Sacramento, CA 95814, (916) 447-4806, during normal business hours, and on the GSNR website, GSNR website, <https://goldenstatenaturalresources.com/meetings/>.

GSNR Board of Directors Meeting

March 27, 2024 (Sacramento)
May 15, 2024 (Sacramento)
June 26, 2024 (Lassen County)
August 14, 2024 (Sacramento)
October 16, 2024 (Sacramento)
December 18, 2024 (Tuolumne County)

**Golden State Natural Resources (GSNR)
Board of Directors Meeting
January 24, 2024 - 9:00 a.m.
1215 K Street, Suite 1650
Sacramento, CA 95814**

GSNR Board Members:

Supervisor Matt Kingsley, Inyo County
Supervisor Michael Kobseff, Siskiyou County
Supervisor Geri Byrne, Modoc County
Supervisor Rex Bohn, Humboldt County
Supervisor Doug Teeter, Butte County

Call to Order and Determination of Quorum

GSNR Chair, Supervisor Matt Kingsley, Inyo County, presided. Present were President Patrick Blacklock, General Counsel Arthur J. Wylene, and RCRC Director of Board Operations Maggie Chui, clerk. GSNR Chair Kingsley called the meeting to order at 9:14 a.m. A quorum was determined at that time. Those members present:

<u>Supervisor</u>	<u>County</u>
Matt Kingsley	Inyo County
Michael Kobseff	Siskiyou County
Geri Byrne	Modoc County
Rex Bohn	Humboldt County
Doug Teeter	Butte County

Absent

None

Public Comment

None

Consent Agenda

- a. **December 6, 2023 Board of Directors Meeting Minutes**
- b. **GSNR Resolution 24-01: GSNR Board Travel Policy**
- c. **2024 Appointments**
 - I. **Recognition of the 2024 GSNR Board of Directors**
 - II. **Election of the 2024 GSNR Chair and Vice Chair**

GSNR Chair, Supervisor Matt Kingsley, Inyo County, called for approval of the above-listed consent agenda items.

Supervisor Michael Kobseff, Siskiyou County, motioned to approve the consent agenda. Supervisor Geri Byrne, Modoc County, seconded the motion. Motion passed with all Supervisors present voting “Aye.”

GSNR Chair’s Report

GSNR Chair, Supervisor Matt Kingsley, Inyo County, welcomed supervisors to the January 2024 GSNR Board of Directors meeting.

Project Status Updates

Patrick Blacklock provided an update on the overall GSNR project, including its ongoing strategy and status on the environmental review under the California Environmental Quality Act (CEQA), and continued discussions with potential private partners. Individual members of the Project Development Team provided further updates on the following:

- **Project Coordination Update**

Anthony Rahill, RCRC Director of Data Management, presented a brief update on recent project successes and outlined upcoming milestone timelines.

- **CEQA and Permitting Update**

Arthur J. Wylene, General Counsel, provided an update on the progress of the CEQA environmental review and permitting processes. Ongoing efforts are focused on finalizing the Environmental Impact Report (EIR), with the Draft EIR expected to be released to the public in Quarter 1 of 2024, and completion of the Final EIR anticipated in the first half of 2024. The entitlement process for the three sites (Lassen and Tuolumne Counties and the Port of Stockton) is progressing according to schedule.

- **Governmental Affairs Update**

Staci Heaton, RCRC Senior Policy Advocate, presented on the project's governmental affairs efforts, ensuring alignment with federal and state forest resilience initiatives. These efforts involve recent meetings with key agencies such as the California Natural Resources Agency, Sierra Nevada Conservancy, Department of Conservation, California Department of Food and Agriculture, and USDA Forest Service. Ms. Heaton also provided updates on the Governor's 2024-25 proposed Budget, discussing its impact on funding opportunities for forest resilience projects.

- **Communications Update**

Carolyn Jhajj, RCRC Communications Director, provided an update on the status of communications and outreach efforts. Staff continues to engage in public outreach by meeting with local leaders, elected officials, various organizations, and other interested parties regarding GSNR's proposed project.

- **Forest Treatment Project Development Update**

Arthur J. Wylene and Terrance Rodgers, RCRC Economic Development Officer, provided a brief update on priority projects focused on restoring forest health and resilience. Staff are actively collaborating with the U.S. Forest Service on the Modoc National Forest Supplemental Project.

- **Project Investment Update**

Craig Ferguson, RCRC Senior Vice President, provided an update on communications and outreach efforts with private partners. This includes ongoing meetings with potential investment partners, offtake partners, and stakeholders.

- **Finance/Administration Update**

Milena De Melo, RCRC Finance Director, provided a finance and administration update, covering the loan status from the Golden State Finance Authority, progress on the federal assistance grant from the U.S. Forest Service, and the GSNR Statement of Revenues and Expenses that offered a summary of the budget vs. actual comparison for the period ending December 31, 2023.

Adjournment

GSNR Chair, Supervisor Matt Kingsley, Inyo County, adjourned the meeting of the GSNR Board of Directors at 9:48 a.m.



To: Members of the GSNR Board of Directors

From: Patrick Blacklock, President

Date: February 20, 2024

Re: Ratification of Memorandum of Understanding between GSNR and Drax US BECCS Development, LLC Regarding Exploration of Sustainable Biomass Development Opportunities - **ACTION**

SUMMARY

Ratify signature of GSNR President on the Memorandum of Understanding with DRAX US BECCS Development, LLC.

BACKGROUND

On January 18, 2024, GSNR President, Patrick Blacklock, signed a Memorandum of Understanding (MOU) with DRAX US BECCS Development, LLC. (DRAX), a prominent renewable energy company, for the joint exploration of sustainable biomass opportunities, with a focus on advancing forest resilience and promoting green energy initiatives worldwide.

The opportunities presented by the MOU are intended to advance and complement GSNR's proposed Forest Resiliency Demonstration Project in California, currently in the environmental review process, which aims to sustainably procure and process excess biomass from forests into a pelletized fuel source for renewable energy generation overseas.

Key short and long term objectives under this MOU include:

1. Vegetation Management Projects: Identifying and evaluating potential treatment projects on California's forest land that not only enhance resilience to wildfires but also yield usable biomass for sustainable purposes.
2. Utilization Opportunities: Evaluating possibilities for using sustainably procured biomass from California to contribute to global green energy initiatives.
3. GSNR's Demonstration Project: Supporting the planning and review of GSNR's Forest Resiliency Demonstration Project, including but not limited to sharing industry knowledge and providing technical assistance. Upon completion of the environmental review and entitlement process, the parties have agreed to meet and confer in good faith to discuss potential investment and/or other forms of engagement by DRAX in GSNR's Project

4. Technology Exploration: Identifying and exploring emerging technologies for carbon negative power generation through sustainable biomass use, including Bioenergy with Carbon Capture and Storage (BECCS).

This MOU provides a framework that allows GSNR and DRAX to assess opportunities for joint action and confirms each party's commitment to the vision of developing sustainable biomass initiatives that strengthen forest resilience and reduce the risk of catastrophic wildfire. This cooperative effort underscores the GSNR and DRAX shared vision for developing creative solutions that sustainably strengthen forests and advance carbon negative green power solutions to combat global climate change.

The action before the GSNR Board of Directors, is to formally confirm this cooperative effort with DRAX by affirming the signature of GSNR's Executive Director on the attached MOU.

STAFF RECOMMENDATION

Ratify signature of GSNR President on Memorandum of Understanding with DRAX US BECCS Development, LLC.

ATTACHMENT

- GSNR and DRAX Memorandum of Understanding

**MEMORANDUM OF UNDERSTANDING
BETWEEN
GOLDEN STATE NATURAL RESOURCES, INC.
AND
DRAX US BECCS DEVELOPMENT, LLC
REGARDING
EXPLORATION OF SUSTAINABLE BIOMASS
DEVELOPMENT OPPORTUNITIES**

THIS **MEMORANDUM OF UNDERSTANDING** (“**MOU**”) is dated 18 January 2024 and made between **GOLDEN STATE NATURAL RESOURCES, INC.** (“**GSNR**”) and **DRAX US BECCS DEVELOPMENT, LLC** (“**DRAX**”). This MOU is made in reference to the following facts:

RECITALS:

- (a) GSNR is a nonprofit public benefit corporation organized for the purpose of promoting public safety, forest resiliency, wildfire risk reduction, air quality improvement, organic waste reduction, rural economic development and public purposes related thereto.
- (b) Among other activities, GSNR has proposed a Forest Resiliency Demonstration Project (“**GSNR’s Project**”) to sustainably procure and process excess biomass into a pelletized fuel source for use in renewable energy generation overseas, which would include vegetation treatment activities, processing of the resulting feedstock at two pellet processing facilities located in rural California, and transportation of the finished product to a suitable deepwater port for export to international markets.
- (c) DRAX is a renewable energy company engaged in renewable power generation, the production of sustainable biomass, the sale of renewable electricity to businesses and the development of a global portfolio of Biomass Energy with Carbon Capture and Storage (“**BECCS**”) facilities.
- (d) DRAX has an expressed commitment to enabling a zero carbon, lower cost energy future through engineering, technology, and innovation.
- (e) GSNR and DRAX (collectively, “**the parties**”) have a shared interest in advancing forest health projects, which includes identifying a sustainable outlet for biomass produced as part of those efforts.
- (f) The parties mutually desire to establish a framework for exploring potential opportunities to advance the development of sustainable biomass resources in California and elsewhere, without making any legally binding commitments to proceed with any particular project or activity at this time, including GSNR’s Project.

- (g) The parties acknowledge that they have entered into a Non-Disclosure Agreement dated the same date as this MOU (“NDA”).

THEREFORE, THE PARTIES ENTER INTO THIS MOU ON THE TERMS AND CONDITIONS SET OUT HEREIN:

1. Objectives. During the twenty-four (24) months after the effective date of this MOU, the parties will work collaboratively and in good faith to explore opportunities for joint action in the following areas:
 - Identify potential sustainable vegetation management projects on forest land within California that meet the dual goals of promoting forest resilience and producing sustainable biomass fuel. This may include:
 - collaborating with forest management agencies and forest land owners to identify areas suitable for treatment;
 - considering regulatory, financial, and practical barriers to implementing such treatment with a view to resolving such barriers;
 - supporting any necessary environmental reviews; and/or
 - exploring offtake and other funding opportunities which may be necessary to make such projects viable.
 - Share biomass industry knowledge and provide technical assistance to support the development of GSNR's Project. This may include activities such as:
 - collaborative review of GSNR's operational plans, technical specifications, and financial projections, etc., with a view to improving the proposed performance, financeability, and overall viability of GSNR's Project;
 - exchanging non-confidential information regarding the current state of the biomass and wood pellet markets; and
 - assisting GSNR with identifying potential sources of financing and operational expertise for GSNR's Project.
 - Identify and evaluate other potential opportunities for export of sustainably procured biomass from California in the short term.
 - Upon completion of the environmental review and entitlement process for GSNR's Project (which will be carried out by GSNR), meet and confer in good faith to discuss potential investment and/or other forms of engagement by DRAX in GSNR's Project. This may include negotiation of one or more agreements providing for:
 - equity investment or other financing of project infrastructure,
 - offtake agreements for wood pellets produced by GSNR's Project,

- agreements relating to operations or staffing of project facilities, and/or
 - other types of agreement,
- as may be agreed by the parties.
- Work collaboratively to explore a longer term vision that will support the development of credible BECCS projects in California – providing a sustainable wood fibre market, renewable and flexible power and carbon emissions capture and storage. A successful GSNR Project (along with similar projects) could provide a reliable, secure and sustainable source of fibre supply for Drax BECCS projects
2. Party Representatives. The President of GSNR and the Chief Innovation Officer of DRAX (or their nominees) shall represent the parties in the foregoing discussions and negotiations. Negotiation, execution, and administration of any subsequent agreement between the parties must comply with all applicable statutes and regulations.
 3. Term and Termination.
 - a. This MOU shall become effective as of the date on page 1 and shall remain in effect for an initial period of two (2) years, and thereafter for further periods of two (2) years if the parties mutually agree that it should continue and formally amend the MOU accordingly. If the parties do agree to extend the term of this MOU, the parties will at the same time extend the term of the NDA, or enter into a new non-disclosure agreement.
 - b. Either party may terminate this MOU on 30 days written notice to the other party at any time.
 - c. In the event that this MOU is terminated prior to the expiry date of the NDA, the NDA will remain in effect in accordance with its terms until its expiry.
 4. Liability. To the extent permitted by law, no party shall be liable to the other party for any indirect or consequential losses or any loss of profits or loss of opportunity. The breaching party acknowledges that damages alone may not be an adequate remedy for the breach of any of the provisions of this MOU. Accordingly, without prejudice to any other rights and remedies it may have, the innocent party shall be entitled to the granting of equitable relief (including without limitation injunctive relief) concerning any threatened or actual breach of any of the provisions of this MOU.
 5. Non-Exclusive, Non-Binding, No Legal Obligation.
 - a. The parties acknowledge that this MOU is executed on a non-binding basis and that during the term of this MOU, the parties:

- i. shall not be under any commitment to each other with regards to future discussions or arrangements, whether exclusive or non-exclusive;
 - ii. shall have no obligation to withhold from negotiating, initiating or entering into discussions, contracts or covenants of any kind with third parties regarding similar opportunities to those described in this MOU;
 - iii. shall not be required or expected to notify each other of any discussions or potential arrangements with any third parties regarding similar or alternative opportunities to those described in this MOU.
- b. This MOU shall not result and in no matter implies:
 - i. the establishment of a joint venture or any other commercial relationship between the parties;
 - ii. the authorisation for either party to act as the agent or representative of the other party;
 - iii. an agreement or the expectation of any right, promise or compromise that either of the parties shall proceed with any project as a result of this MOU or that DRAX will become involved in GSNR's Project; or
 - iv. any right for either party not expressly granted in this MOU.
- c. Except for the provisions in regards to Clause 3 (Term and Termination), Clause 4 (Liability), Clause 5 (Non-Exclusive, Non-Binding, No Legal Obligation), Clause 7 (No Third Party Beneficiary), Clause 8 (Intellectual Property), Clause 9 (Confidentiality), Clause 10 (Compliance), Clause 11 (Governing Law & Jurisdiction), Clause 12 (Costs and Expenses) and Clause 13 (Publicity) which shall be legally binding for the parties and which shall survive termination of this MOU, the other terms and conditions of this MOU are not legally binding (and not subject to legal claim) and the implementation of any further actions resulting out of this MOU shall be subject to the agreement of the parties in writing, the execution of the definitive documents and any required internal consents and approvals within each party.
- d. The parties intend to explore the opportunities for joint action as set forth in this MOU, consistent with and subject to each parties' other responsibilities and legal authority. The intention of this MOU is to confirm each party's commitment to the vision of developing sustainable biomass recovery to the benefit of forest resilience and to secure environmentally benign or beneficial use for such fibre for power generation and/or combined with carbon capture and storage.
- e. Implementation of GSNR's Project, or any other joint action arising from this MOU that is subject to the California Environmental Quality Act

(CEQA), shall be conditioned upon compliance with CEQA. This MOU does not bind any party to any definite course of action before CEQA compliance, and does not restrict any party from declining any proposed action or from considering alternatives or mitigation measures.

6. Warranties of Authority.

- a. As further consideration, GSNR covenants and warrants to DRAX that it has the full right, power, and authority to execute this MOU and that the execution and performance thereof will not violate any applicable laws, ordinances or covenants, or the provisions of any binding agreement.
- b. As further consideration, DRAX covenants and warrants to GSNR that it has the full right, power, and authority to execute this MOU and that the execution and performance thereof will not violate any applicable laws, ordinances or covenants, or the provisions of any binding agreement.

7. No Third Party Beneficiary. Nothing in this MOU shall be construed to create any rights of any kind or nature in any other party not a named party to this Agreement.

8. Intellectual Property. No party shall acquire, in any way, any licence, title, rights of ownership, or interest in any intellectual property rights of whatever nature belonging to the other party, which may exist or are come into existence in relation to the activities of each party under this MOU and no intellectual property rights of any party are transferred or licensed as a result of this MOU. The parties may choose to enter into a separate agreement, or include in any subsequent agreement relevant provisions, to address the ownership and license of any specific intellectual property rights that the parties create (whether unilaterally or jointly) during the course of this MOU.

9. Confidentiality. The parties agree that all information disclosed in connection with this MOU constitutes Confidential Information as defined in the NDA and must be kept confidential in accordance with the terms of the NDA.

10. Compliance.

- a. The parties hereby agree to comply with all laws, rules, regulations and conventions applicable to this MOU, in particular any applicable anti-trust, anti-money laundering and anti-corruption legislation and to act with integrity and good faith in relation to this MOU.
- b. Additionally, each party warrants that it or its group or corporate group (as applicable) has, or will adopt prior to commencement of any proposed joint action, one or more codes of conduct, or any other similar policies, applicable to their own business, that include without limitation, the need to take ethical and sustainable actions when

conducting their business, the prohibition of any form of forced or child labour, the preservation of the environment, compliance with health and safety standards as well as respect for customers, employees, contractors and the communities established in places where that party carries out its activities.

- c. Subject to applicable law, the parties undertake not to give, offer, pay, promise or accept, and also not to ask for or authorise directly or indirectly, to anyone, any payment (in local or international currency) or any object/benefit of value, whether in donation, compensation, financial or non-financial benefits, or benefits from any other kind that constitutes an unlawful or illegal advantage under the anticorruption laws, to any governmental authority, consultants, representatives, partners or any third parties, with the intention to influence any act or decision of any public agent or the government, or, to obtain any other unlawful or illegal advantage, and/or to redirect any business to any other person/company/governmental entity violating the anti-corruption laws.
11. Governing Law and Jurisdiction. This MOU (and all obligations arising in connection with it) shall be governed by and construed in accordance with the laws of the State of California, without regard to choice of law principles, and each party irrevocably submits to the exclusive jurisdiction of the state and federal courts, as applicable, in Sacramento County, California.
 12. Costs and Expenses.
 - a. Each party will be responsible for any costs and expenses that it incurs during the discussions and negotiations in relation to this MOU, as well as the costs related to the execution of this MOU.
 - b. Any amendment to the principle set out above in relation to costs and expenses must be agreed in writing and signed by authorised representatives of each party.
 13. Publicity.
 - a. Neither party may, without the prior written consent of the other party, in compliance with clause 14, below use the names, logos or trademarks of the other party.
 - b. Each party may disclose to third parties the fact that they are working together and the general nature of the discussions between the parties in relation to the Purpose (as defined in the NDA), but neither party will make any proactive statement or announcement or disclosure to any third party about the details of the discussions and activities between the parties in relation to the Purpose, or actively promote the fact that discussions are taking place between the parties in relation to the Purpose, without the consent of the other party.

14. Notices.

- a. Any notice or other communication given under this MOU must be given in writing and delivered or sent by certified mail, return receipt requested, or email to the relevant party at its address as set out below (or such other address as may be notified by the relevant party to the other party from time to time):

Drax US BECCS Development, LLC
1500 N. 19th Street, Suite 501
Monroe, Louisiana 71201
E-mail: legal.notices@drax.com
Attention: Legal

Golden State Natural Resources, Inc.
1215 K Street, Suite 1650
Sacramento, California 95814
Attention: Patrick Blacklock
Email: pblacklock@rcrcnet.org

- b. Any notice sent under this clause 14 shall be deemed to have been duly received:
- i. if sent by certified mail, return receipt requested, at 9:00am Pacific Standard Time or Central Standard Time (as applicable given the location of the recipient of the notice) on the second Business Day after such mailing; or
 - ii. if sent by e-mail, on the date and time at which the sender receives a delivery receipt in respect thereof if on a Business Day and received by the sender before 5:00pm Pacific Standard Time or Central Standard Time (as applicable given the location of the sender of the notice), or otherwise at 9:00am Pacific Standard Time or Central Standard Time (as applicable given the location of the recipient of the notice) on the next Business Day.

15. General.

- a. Should any of the legally binding provisions of this MOU be or become void, invalid or unenforceable, the validity or enforceability of the remaining provisions shall not be affected thereby. The parties shall replace the void, invalid or unenforceable provision with a legally permissible provision which comes as close as possible to the economic purpose of the provision to be replaced.
- b. The failure of any party to insist upon strict performance of the legally binding provisions hereof shall not be construed as a waiver of future compliance and no waiver of the provisions hereof by such party shall be deemed to have been made unless expressed in writing and signed by such party.

- c. This MOU constitutes the entire agreement between the Parties with respect to the subject matter hereof, and replaces any and all prior understandings and agreements, either written or oral, with respect to the subject matter of this MoU.
- d. This MOU may be executed in two or more counterparts (including by electronic transmission), all of which when taken together shall constitute a single instrument. No counterpart shall be effective until each party has executed at least one counterpart
- e. This MOU may be executed using electronic signature (whatever form the electronic signature takes) and the parties agree that this method of execution is, and shall be deemed to be, as conclusive of their intention to be bound by the legally binding terms of this MOU as if executed by each party's handwritten signature.

IN WITNESS WHEREOF, GSNR and DRAX have executed this Memorandum of Understanding on the day and year set forth below.

18/1/2024
Date: _____

GOLDEN STATE NATURAL RESOURCES, INC.

By: DocuSigned by:
Patrick Blacklock
F3C868C5406F440...

President
Patrick Blacklock

18/1/2024
Date: _____

DRAX US BECCS DEVELOPMENT, LLC

By: DocuSigned by:

D8422CE5E18E4B0...

Jason Shipstone
Chief Innovation Officer



To: Members of the GSNR Board of Directors

From: Arthur J. Wylene, General Counsel

Date: February 23, 2024

Re: Informational Presentation: Draft GSNR Feedstock Supply Environmental Resource Protection Minimum Requirements

Background

GSNR's proposed project is intended to improve the resiliency of California's forestlands by sustainably procuring and processing excess biomass into a pelletized fuel source for use in renewable energy generation overseas. While attention is often focused on the pellet production and port facilities proposed by the project, the sustainable removal of excess biomass from forested land, thereby improving forest resiliency and decreasing wildfire risk, remains the project's most important goal.

During the ongoing environmental review process, GSNR staff have heard concerns regarding the anticipated feedstock acquisition activities that will supply biomass for the proposed pellet facilities. These concerns are largely premised upon significant misapprehensions regarding GSNR's proposed project and associated activities. Several commenters have suggested that these activities may involve "clear cutting" of forested lands, or likened GSNR's project to commercial biomass operations in the southern United States. However, that is not the intention of the proposed project, and it is anticipated that the project's lead agency, Golden State Finance Authority (GSFA), will mandate stringent "guardrails" – i.e., measures to ensure that GSNR's actual feedstock acquisition activities meet the highest environmental standards. These environmental resource protection requirements are expected to include all of the following:

- Explicitly ban "clear cutting" by GSNR.
- Prohibit acceptance or use of "harvest residuals" sourced from any activity that did not undergo environmental review under CEQA/NEPA or their equivalent.
- GSNR shall not source feedstock from (in any form) from operations that involve the conversion of forest land to non-forest use.
- GSNR shall not undertake operations within, or remove materials from, Nationally Designated Areas, including federally designated wilderness areas, Wild and

Scenic Rivers, or National Monuments, or from areas protected under the California Wild and Scenic Rivers Act.

- GSNR shall not undertake operations within, or remove materials from, Roadless Areas subject to the 2001 Roadless Rule.
- GSNR shall not undertake operations within, or remove materials from, spotted owl Protected Activity Centers.

The specific requirements for environmental resource protection are currently being developed as part of the California Environmental Quality Act (CEQA) process, and will be included in the Environmental Impact Report (EIR) being prepared for the project. These measures have not yet been finalized, and will continue to be refined during development of the Draft EIR and in response to any public comments received during the EIR's public review.

Attachment "A" sets forth an example of what these measures may include, based upon recent state-of-the-art environmental analyses of similar forest resiliency activities, including:

- *California Vegetation Treatment Program Final Program Environmental Impact Report*
- *University of California, Berkeley Final EIR for the Hill Campus Wildland Vegetative Fuel Management Plan*
- *Six Rivers Hazardous Fuels and Fire Management Project Environmental Assessment and Finding of No Significant Impact*

While the final measures identified in the EIR – and adopted by the GSFA Board of Directors – may ultimately differ from this example in some details, Attachment "A" provides a good general indication of the scope, thoroughness, and stringency of the environmental protection measures that may be expected for all of GSNR's feedstock acquisition activities.

Today's presentation is intended to acquaint the GSNR Board and public regarding the anticipated "guardrails" for GSNR's in-forest feedstock acquisition activities, and help alleviate some of the concerns that have previously been raised regarding the proposed project. The GSNR Board is requested to review the measures outlined in Attachment "A," and initial feedback will be welcome from any party.

Recommendation

No action is necessary at present as this is an informational item only.

Attachments

- Draft GSNR Feedstock Supply Environmental Resource Protection Minimum Requirements
- Draft “Working Area” Map

ATTACHMENT A

GSNR Feedstock Supply Environmental Resource Protection Minimum Requirements – DRAFT

Feedstock for manufacturing of wood pellets at GSNR's proposed pellet facilities will primarily be sourced from "GSNR Biomass Only Thinning Projects" and "Harvest Residuals," as described in greater detail below, each of which is subject to certain mandatory requirements to ensure protection of environmental resources. The requirements set forth below are minimums that will apply to all of GSNR's feedstock supplies. Individual feedstock acquisition activities may be subject to additional or stricter requirements as provided by applicable regulations or adopted by GSFA or GSNR in their discretion.

"GSNR Biomass Only Thinning Projects"

The Subject to the constraints set forth in this section. GSNR will perform, or cause to be performed, vegetation management activities on forested lands designed to reduce the risk and severity of wildfire occurrence. The goal of fuel treatment is not to remove all vegetation, but to minimize the potential for ignitions, crown fires, and extreme fire behavior by reducing fuel loads and managing the structure, composition, and spacing (horizontal and vertical) of retained vegetation.

The wildfire fuel reduction operations undertaken by GSNR will take place within the geographic area depicting in Attachment B, (the "Working Area"), and will generally include the following types of projects:

- **Hazardous Fuel Reduction Projects.** These projects are performed to reduce wildfire risk to forests, watersheds, wildlife habitat, communities, neighborhoods, or homes in Moderate, High and Very High Fire Hazard Severity Zones and in the Wildland-Urban Interface (WUI). They selectively thin the smaller (up to 16 inches DBH) trees to increase inter-tree spacing and remove brush that can act as a fire ladder that will allow a wildfire to move from ground level to the crowns of the larger trees making the wildfire much more difficult to control. Limbs on larger remaining trees will often be pruned 8-10' above the ground to further reduce the risk of a crown fire and make a wildfire easier to suppress. Feedstock obtained from these projects is generally derived from the small trees, limbs, and brush that are removed. Equipment that is used to cut and remove feedstock are chain saws and small rubber-tired or rubber-tracked tractors, and feedstock is processed through a whole tree chipper or large wood-grinding machine and loaded into chip vans to be trucked to a GSNR facility.

- Construction of Shaded Fuel Breaks.** These operations generally have a linear footprint that may be 100 to 500 feet wide located along a property line, strategic ridge line, or critical access road to allow access by emergency personnel to be used to fight an approaching wildfire. Shaded fuel breaks are created by removing small trees and brush that can act as ladder fuels and substantially increasing spacing between remaining trees using mastication equipment. Limbs on larger remaining trees will often be pruned 8 to 10 feet above the ground to further reduce the risk of a crown fire and provide a safety zone for fire managers to safely make a stand against an oncoming wildfire. Feedstock obtained from these projects is derived from the brush, small trees, tops and limbs and other bole wood that are unutilizable by traditional forest products facilities and chipped into large chip vans using a whole tree chipper or grinder and removed to GSNR's facility.
- Reforestation Site Preparation.** Reforestation site preparation activities remove dead hazardous fuels loading to desired levels following wildfires, post-fire salvage, or other forest treatment activities to allow for reforestation. Generally, all dead trees in severely burned areas, except snags specifically left for wildlife habitat, are cut and removed to reduce fuel loading prior to replanting trees to establish a new forest. Roundwood feedstock obtained from these projects will be loaded onto log trucks and removed to GSNR's facility for further processing. Dead trees will generally be cut with tracked feller bunchers or by hand with chain saws, removed to a landing using rubber-tired skidders, and further processed by hand before being loaded on log trucks. Other feedstock obtained from these projects is derived from the small trees, limbs, and brush that are removed and chipped into large chip vans using a whole tree chipper or grinder and removed to GSNR's facility.
- Fire, Insect, or Disease Salvage Harvests.** These types of operations are described in greater detail in Section 2.4.2.

GSNR Biomass Only Thinning Projects will be scheduled based on the following considerations:

- Normal Operating Season - Forest operations will generally be conducted between April 1 through November 15 when soil conditions are dry enough for heavy equipment operations to take place without long-term damage to forest soils and road systems. It is anticipated that approximately 90% of GSNR's feedstock will be acquired during the normal operating season.
- Winter Period Operations – Some forest operations may take place between November 16 and March 31 (the "Winter Period") during extended dry periods provided that a Registered Professional forester or Resource Specialist has provided a Winter Operating Plan that addresses limitations that will be placed on certain activities such as skid trail construction/maintenance, or watercourse crossings, based on ground conditions (soil moisture condition or frozen soil), form of precipitation (rain or snow), operations on unstable areas, required erosion control facilities, etc.). The Winter Operating Plan will

also ensure that roads, landings, watercourse crossings, skid trails can only be constructed or operated on during dry, rainless periods, or frozen soil conditions with snow covering, where necessary to avoid erosion or damage to the road surface. In addition, there is a requirement that erosion control structures be installed on skid trails when there is a significant chance of rain the following day and prior to weekends.

- Fire Hazard Shutdowns – Tree falling and heavy equipment operations between April 1 and November 15 may be curtailed or limited during Red Flag, or dry and windy weather conditions or during periods when there are active wildfires in the area.
- Limited Operating Periods (LOPs) for T&E Species – In many areas, forest operations will be curtailed for several months each year to keep equipment operations from negatively impacting Sensitive or Threatened or Endangered bird, mammal, or amphibian nesting or egg laying seasons or Threatened or Endangered plant blooming periods. The most common LOPs are for northern and spotted owls (March 1 to August 15), goshawks (February 15 to September 15), Yosemite toad (October 1 to May 15), red or yellow-legged frogs, Bald Eagles, Great Horned owls, and certain flowering plants.

GSNR Biomass Only Thinning Projects will be subject to the following constraints:

General Limitations

- All GSNR Biomass Only Thinning Projects will take place within the Working Area.
- GSNR Biomass Only Thinning Projects shall not involve the conversion of forest land to non-forest use.
- GSNR Biomass Only Thinning Projects shall not involve the clear cutting of any lands (as that term is used in Public Utilities Code section 399.20.3).
- GSNR Biomass Only Thinning Projects shall not occur within Nationally Designated Areas, including federally designated wilderness areas, Wild and Scenic Rivers, or National Monuments, or from areas protected under the California Wild and Scenic Rivers Act.
- GSNR Biomass Only Thinning Projects shall not occur within Roadless Areas subject to the 2001 Roadless Rule (36 CFR 294).
- Wildfire fuel reduction operations will not take place within riparian areas – i.e., areas within 75' of a perennial stream or body of water. (This limitation applies in addition to the requirements of PDF-BIO-13 and PDF-BIO-14, discussed below.)

- No GSNR Biomass Only Thinning Project shall require more than one mile of low standard road construction (as that term is used in 36 C.F.R. § 220.6).
- GSNR Biomass Only Thinning Projects shall not involve any activities where the capability of forests to produce a range of wood and non-wood forest products and services on a sustainable basis is not maintained or harvesting levels exceed a rate that can be sustained in the long term.
- GSNR Biomass Only Thinning Projects shall not involve any activities where forest management does not contribute to the maintenance, conservation or enhancement of biodiversity on landscape, ecosystem, species or genetic levels.
- GSNR Biomass Only Thinning Projects shall not involve activities where ecologically important forest areas are not identified, protected, conserved or set aside.
- Every GSNR Biomass Only Thinning Project shall have a well-described silvicultural treatment that includes regeneration and practices that enhance resiliency of the residual forest to excessive damage from fire, drought, insects, and disease. The project is designed to protect & enhance long-term sustained yield of forest and other products. All silvicultural prescriptions shall be reviewed and approved by a Certified Silviculturist.

Mandatory Treatment Prescription Criteria

- No tree with a Diameter at Breast Height (DBH) larger than 30" shall be removed, except in the case of Fire, Insect, or Disease Salvage operations, where a registered professional forester determines that the tree is unlikely to survive due to damage from the fire, insects, or disease.
- Minimum basal area retention of 70 square feet (averaged across the stand), except as part of a Shaded Fuel Break.
- No blue oak, tan oak, Pacific Madrone, valley oaks, designated heritage oaks, cottonwood, red alder, white bark pine, and coastal redwood trees shall be removed.
- Trees and shrubs shall be evaluated for vertical and horizontal spacing; remove unhealthy, structurally unsound or highly flammable trees that are likely to torch and distribute embers; and remove short understory trees. Criteria for tree removal would include consideration of tree health, structure, height, potential for failure, flammability/fire hazard, high fuel volume production of small diameter fuels, and competition with other trees (including for water, space, and light). Dead, unhealthy, and structurally unsound trees would be removed, as would trees prone to torching or burning with high fire intensity.

- Criteria for retention of trees include fuel characteristics (flammability, fuel volume, amount of dead material), consideration of ability to slow spreading of invasive species and surface fuels, protection of understory, encouragement of nesting and improvement of flight patterns of raptors, erosion prevention, and cost of removal. Near roads, trails, and buildings, lower limbs of trees would generally be pruned and understory vegetation shortened.
- In the case of fire salvage, the largest snags shall be left uncut for cavity nesting wildlife and to eventually contribute to the woody biomass component of the forest soil, in accordance with applicable regulations and practice rules.

Project Design Features

All GSNR Biomass Only Thinning Projects will include a number of project design features (PDFs) that will be implemented to avoid or minimize environmental impacts.

It should be noted that some GSNR Biomass Only Thinning Projects may be subject to existing regulatory requirements or other standards that cover the same subject matter as one or more PDFs. Where this occurs, whichever measure has the strictest environmental protection requirements shall be applied.

Administrative

- PDF-ADMIN-1: The boundaries of the treatment area and protected resources shall be clearly defined on maps for the treatment area and with highly-visible flagging or clear, existing landscape demarcations (e.g., edge of a roadway) prior to beginning any treatment to avoid disturbing the resource. “Protected Resources” refers to environmentally sensitive places within or adjacent to the treatment areas that would be avoided or protected to the extent feasible during planned treatment activities to sustain their natural qualities and processes. This work will be performed by a qualified person, as defined for the specific resource (e.g., qualified Registered Professional Forester or biologist).
- PDF-ADMIN-2: The treatment shall be designed and implemented in a manner that is consistent with applicable local plans (e.g., Forest Plans, general plans, Community Wildfire Protection Plans, CAL FIRE Unit Fire Plans), policies, and ordinances to the extent the project is subject to them.
- PDF-ADMIN-3: If trash receptacles are used on-site, fully covered trash receptacles with secure lids (wildlife proof) will be used to contain all food, food scraps, food wrappers, beverages, and other worker generated miscellaneous trash. Remove all temporary non-biodegradable flagging, trash, debris, and barriers from the project site upon completion of project activities.

- PDF-ADMIN-4: Vegetation treatments will not occur during extreme fire danger conditions such as red flag warnings, as posted by the local CAL FIRE unit or National Weather Service. Fire danger shall be specifically determined before the start of each work day, and GSNR may require that operations be limited or ceased to mitigate wildfire risk without a red flag warning. In addition, during the dry season, a ground inspection for fire will occur within 2 hours of felling, yarding, and mechanical loading activities ceasing each day, in accordance with Section 918.8, 958.8 of the California Forest Practice Rules (2023).

Aesthetics

- PDF-AES-1: Vegetation adjacent to the viewshed of public trails, parks, recreation areas, and roadways will be thinned and feathered to break up or screen linear edges of the clearing and mimic forms of natural clearings as reasonable or appropriate for vegetation conditions. In general, thinning and feathering in irregular patches of varying densities, as well as a gradation of tall to short vegetation at the clearing edge, will achieve a natural transitional appearance. The contrast of a distinct clearing edge will be faded into this transitional band.
- PDF-AES-2: All treatment-related materials, including vehicles, vegetation treatment debris, and equipment, will be stored outside of the viewshed of public trails, parks, recreation areas, and roadways to the extent feasible.
- PDF-AES-3: Sufficient vegetation shall be preserved within, at the edge of, or adjacent to treatment areas to screen views from public trails, parks, recreation areas, and roadways as reasonable or appropriate for vegetation conditions.

Air Quality

- PDF-AQ-1: All treatment activities will comply with the applicable air quality requirements of air districts within whose jurisdiction the project is located.
- PDF-AQ-2: To minimize dust during treatment activities, the following measures will be implemented:
 - Limit the speed of vehicles and equipment traveling on unpaved areas to 15 miles per hour to reduce fugitive dust emissions, in accordance with the California Air Resources Board (CARB) Fugitive Dust protocol.
 - If road use creates excessive dust, the work crew will wet appurtenant, unpaved, dirt roads using water trucks or treat roads with a non-toxic chemical dust suppressant (e.g., emulsion polymers, organic material) during dry, dusty conditions.

Any dust suppressant product used will be environmentally benign (i.e., non-toxic to plants and will not negatively impact water quality) and its use will not be prohibited by ARB, EPA, or the State Water Resources Control Board (SWRCB). Exposed areas will not be over-watered such that the water results in runoff. The type of dust suppression method will be selected based on soil, traffic, site-specific conditions, and air quality regulations.

- Remove visible dust, silt, or mud tracked-out on to public paved roadways in accordance with Vehicle Code Section 23113.
- Suspend ground-disturbing treatment activities, including land clearing and bulldozer lines, when there is visible dust transport (particulate pollution) outside the treatment boundary, if the particulate emissions may “cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property,” per Health and Safety Code Section 41700.
- PDF-AQ-3: Ground-disturbing treatment activities will be avoided in areas identified as likely to contain naturally occurring asbestos (NOA) per maps and guidance published by the California Geological Survey, unless an Asbestos Dust Control Plan (17 CCR Section 93105) is prepared and approved by the air district(s) with jurisdiction over the treatment area. Any NOA-related guidance provided by the applicable air district will be followed.
- PDF-AQ-3: Where feasible, GSNR will require that emission reduction techniques be implemented to reduce exhaust emissions from off-road equipment. It is acknowledged that due to cost, availability, and the limits of current technology, there may be circumstances where implementation of certain emission reduction techniques will not be feasible. GSNR will require that the emission reduction techniques that will be applied are documented, which shall include an explanation of the reasons other techniques that could reduce emissions are infeasible. Techniques for reducing emissions may include, but are not limited to, the following:
 - Diesel-powered off-road equipment used in construction will meet EPA’s Tier 4 emission standards as defined in 40 CFR 1039 and comply with the exhaust emission test procedures and provisions of 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. A copy of each unit’s certified tier specification or model year specification and operating permit (if applicable) will be available upon request at the time of mobilization of each unit of equipment.
 - Use renewable diesel fuel in diesel-powered construction equipment. Renewable diesel fuel must meet the following criteria:

- Meet California's Low Carbon Fuel Standards and be certified by CARB Executive Officer;
- Be hydrogenation-derived (reaction with hydrogen at high temperatures) from 100 percent biomass material (i.e., non-petroleum sources), such as animal fats and vegetables;
- Contain no fatty acids or functionalized fatty acid esters; and
- Have a chemical structure that is identical to petroleum-based diesel and complies with American Society for Testing and Materials D975 requirements for diesel fuels to ensure compatibility with all existing diesel engines.
- Electric- and gasoline-powered equipment will be substituted for diesel-powered equipment.
- Workers will be encouraged to carpool to work sites, and/or use public transportation for their commutes.
- Off-road equipment, diesel trucks, and generators will be equipped with Best Available Control Technology for emission reductions of NO_x and PM.

Archaeological and Cultural Resources

- PDF-CULT-1: An archaeological and historical resource record search will be conducted per the applicable state or local agency procedures prior to any treatment activities.
- PDF-CULT-2: GSNR will obtain the latest Native American Heritage Commission (NAHC) provided Native Americans Contact List. Using the appropriate Native Americans Contact List, the California Native American Tribes in the counties where the treatment activity is located will be notified. The notification will contain the following:
 - A written description of the treatment location and boundaries.
 - Brief narrative of the treatment objectives.
 - A description of the activities used (e.g., mastication) and associated acreages.
 - A map of the treatment area at a sufficient scale to indicate the spatial extent of activities.
 - A request for information regarding potential impacts to cultural resources from the proposed treatment.

- A detailed description of the depth of excavation, if ground disturbance is expected. In addition, NAHC will be contacted for a review of their Sacred Lands File.
- PDF-CULT-3: Research will be conducted prior to implementing treatments as part of the cultural resource investigation. The purpose of this research is to properly inform survey design, based on the types of resources likely to be encountered within the treatment area, and to be prepared to interpret, record, and evaluate these findings within the context of local history and prehistory. A qualified archaeologist will review records, study maps, read pertinent ethnographic, archaeological, and historical literature specific to the area being studied, and conduct other tasks to maximize the effectiveness of the survey.
- PDF-CULT-4: GSNR will coordinate with a qualified archaeologist to conduct a site-specific survey of the treatment area. The survey methodology (e.g., pedestrian survey, subsurface investigation) depends on whether the area has a low, moderate, or high sensitivity for resources, which is based on whether the records search, pre-field research, and/or Native American consultation identifies archaeological or historical resources near or within the treatment area. A survey report will be completed for every cultural resource survey completed. The specific requirements will comply with the applicable state or local agency procedures.
- PDF-CULT-5: If cultural resources are identified within a treatment area, and cannot be avoided, a qualified archaeologist will notify the culturally affiliated tribe(s) based on information provided by NAHC and assess, whether an archaeological find qualifies as a unique archaeological resource, an historical resource, or in coordination with said tribe(s), as a tribal cultural resource. GSNR, in consultation with culturally affiliated tribe(s), will develop effective protection measures for important cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. These protection measures will be written in clear, enforceable language, and will be included in the survey report in accordance with applicable state or local agency procedures.
- PDF-CULT-6: GSNR, in consultation with the culturally affiliated tribe(s), will develop effective protection measures for important tribal cultural resources located within treatment areas. These measures may include adjusting the treatment location or design to entirely avoid cultural resource locations or changing treatment activities so that damaging effects to cultural resources will not occur. GSNR will provide the tribe(s) the opportunity to submit comments and participate in consultation to resolve issues of concern. GSNR will defer implementing the treatment until the tribe approves protection measures, or if agreement cannot be reached after a good-faith effort, GSNR determines that any or all feasible measures have been implemented, where feasible, and the resource is either avoided or protected.

- PDF-CULT-7: If the records search identifies built historical resources, as defined in Section 15064.5 of the State CEQA Guidelines, these resources will be avoided. Within a buffer of 100 feet of the built historical resource, there will be no mechanical treatment activities. Buffers less than 100 feet for built historical resources will only be used after consultation with and receipt of written approval from a qualified archaeologist. If the records search does not identify known historical resources in the treatment area, but structures (i.e., buildings, bridges, roadways) over 50 years old that have not been evaluated for historic significance are present in the treatment area, they will similarly be avoided.
- PDF-CULT-8: All crew members and contractors implementing treatment activities will be trained on the protection of sensitive archaeological, historical, or tribal cultural resources. Workers will be trained to halt work if archaeological resources are encountered on a treatment site and the treatment method consists of physical disturbance of land surfaces (e.g., soil disturbance).
- PDF-CULT-9: If any prehistoric or historic-era subsurface archaeological features or deposits, including locally darkened soil (“midden”), that could conceal cultural deposits, are discovered during ground-disturbing activities, all ground-disturbing activity within 100 feet of the resources will be halted and a qualified archaeologist will assess the significance of the find. The qualified archaeologist will work with GSNR to develop a primary records report that will comply with applicable state or local agency procedures. If the archaeologist determines that further information is needed to evaluate significance, a data recovery plan will be prepared. If the find is determined to be significant by the qualified archaeologist (i.e., because the find constitutes a unique archaeological resource, subsurface historical resource, or tribal cultural resource), the archaeologist will work with GSNR to develop appropriate procedures to protect the integrity of the resource. Procedures could include preservation in place (which is the preferred manner of mitigating impacts to archaeological sites), archival research, subsurface testing, or recovery of scientifically consequential information from and about the resource. Any find will be recorded standard DPR Primary Record forms (Form DPR 523) will be submitted to the appropriate regional information center.

Biological Resources

- PDF-BIO-1: GSNR will require a qualified RPF or biologist to conduct a data review and reconnaissance-level survey prior to each treatment project during the feedstock acquisition phase. The review and surveys will be conducted no more than one year prior to the submittal of the Project-Specific Analysis (PSA), and no more than one year between completion of the PSA and implementation of each treatment project. The data reviewed will include the biological resources setting, species and sensitive natural communities tables, and habitat information where the treatment will occur. The data review will incorporate the best available, current data for the area, including vegetation mapping data, species distribution/range information, California Natural

Diversity Database (CNDDDB), California Native Plant Society Inventory of Rare and Endangered Plants of California, relevant Biogeographic Information and Observation System (BIOS) queries, relevant general and regional plans, and Tables 2 and 3 in Appendix X of the DEIR.

Reconnaissance-level biological surveys will be general surveys that include visual and auditory inspection for biological resources to help determine the environmental setting of the site. The qualified surveyor will: 1) identify and document sensitive resources, such as riparian or other sensitive habitats, sensitive natural communities, wetlands, or wildlife nursery sites (including bird nests); 2) assess the suitability of habitat for special-status plant and wildlife species; and 3) record any incidental wildlife observations. If more than one year passes between completion of the PSA and initiation of the treatment project, GSNR will verify the continued accuracy of the PSA prior to beginning the treatment project by reviewing for any data updates and/or visiting the site to verify conditions. Based on the results of the data review and reconnaissance-level survey, GSNR, in consultation with a qualified RPF or biologist, will determine which one of the following best characterizes the treatment:

- 1. Suitable Habitat Is Present but Adverse Effects Can Be Clearly Avoided.** If, based on the data review and reconnaissance-level survey, the qualified RPF or biologist determines that suitable habitat for sensitive biological resources is present but adverse effects on the suitable habitat can clearly be avoided through one of the following methods, the avoidance mechanism will be implemented prior to and throughout the treatment project:
 - a. Physically avoid suitable habitat. Physical avoidance will include flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of road or property fence) to delineate the boundary of the avoidance area around the suitable habitat. For physical avoidance, a buffer may be implemented as determined necessary by the qualified RPF or biologist.
 - b. Conduct the treatment outside of the season when a sensitive resource could be present or outside the season of sensitivity (e.g., outside of special-status bird nesting season, during dormant season of sensitive annual or geophytic plant species, or outside of maternity and rearing season at wildlife nursery sites).

- 2. Suitable Habitat is Present and Adverse Effects Cannot Be Clearly Avoided.** Further review and surveys will be conducted to determine presence/absence of sensitive biological resources that may be affected, as described in the PDFs below. Further review may include contacting USFWS, NOAA Fisheries, CDFW, or local resource agencies as necessary to determine the potential for special-status species or other sensitive biological resources to be affected by the treatment project.

Focused or protocol-level surveys will be conducted as necessary to determine species presence/absence. Survey procedures will adhere to methodologies approved by resource agencies and the scientific community. Specific survey requirements for special-status plants and wildlife are addressed by PDF-BIO-5 and PDF-BIO-7, respectively.

- PDF-BIO-2: GSNR will require crew members and contractors to receive worker environmental awareness training from a qualified RPF or biologist prior to beginning a treatment project or other project activities (e.g., wood pellet production and port to market). The training will describe the appropriate work practices necessary to effectively implement all relevant PDFs and to comply with applicable environmental laws and regulations regarding biological resources. The training will include the identification, relevant life history information, and avoidance of pertinent special-status species; identification and avoidance of sensitive natural communities and habitats present or with the potential to occur in the work area; impact minimization procedures; and reporting requirements. The training will instruct workers when it is appropriate to stop work and allow wildlife encountered during work activities to leave the area unharmed and to report encounters to a qualified RPF, biologist, or biological technician. The qualified RPF, biologist, or biological technician will immediately contact CDFW or USFWS, as appropriate, if any wildlife protected by the California Endangered Species Act (CESA) or Federal Endangered Species Act (FESA) is encountered and cannot leave the site on its own (without being handled). All attendees of the training will be required to sign a log documenting attendance and completion of the training.
- PDF-BIO-3: When implementing the proposed project in sensitive natural communities or other habitats at risk from plant pathogens, GSNR will require that the following best management practices be undertaken to prevent the spread of *Phytophthora* spp. and other plant pathogens (e.g., honey mushroom [*Armillaria gallica*], fir-annosum [*Heterobasidion annosum*], pitch canker [*Fusarium* spp.], shothole borer [*Scolytus rugulosus*], bark beetle [*Curculionidae* spp.]):
 - clean and sanitize vehicles, equipment, tools, footwear, and clothes before arriving on-site and when leaving a contaminated site, or a site in a county where contamination is a risk;
 - include training on *Phytophthora* diseases and other plant pathogens in the worker awareness training if applicable;
 - minimize soil disturbance as much as possible by limiting the number of vehicles, avoiding off-road travel as much as possible, and limiting use of mechanized equipment as feasible;

- minimize movement of soil and plant material within the site, especially between areas with high and low risk of contamination;
 - clean soil and debris from equipment and sanitize hand tools, buckets, gloves, and footwear when moving from high risk to low risk areas or between widely separated portions of a treatment area; and
 - follow the procedures listed in Guidance for plant pathogen prevention when working at contaminated restoration sites or within sensitive habitat as applicable (Working Group for *Phytophthora*s in Native Habitats 2016).
- PDF-BIO-4: GSNR will require that the following actions be taken as applicable to prevent the spread of invasive plants, noxious weeds, 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. Anti-fungal wash agents will be specified if the equipment has been exposed to any pathogen that could affect native species;
 - 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, 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 unless there are no uninfested areas present within a reasonable proximity to the treatment area;

- 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*.

- PDF-BIO-5: If PDF-BIO-1 determines that suitable habitat for special-status plant species is present in the treatment area and cannot be avoided, GSNR will require that the following actions be taken:
 - A qualified RPF or botanist will conduct protocol-level surveys for special-status plant species with the potential to be affected by a treatment project prior to initiation of the treatment. The survey will follow the most current and relevant agency survey protocols and guidelines for special-status plants (e.g., CDFW 2018, USFWS 2000, and CNPS 2001). The protocol surveys will be conducted in suitable habitat that could be affected by the treatment and timed to coincide with the blooming or other appropriate phenological period of the target species (as determined by a qualified RPF or botanist), or all species in the same genus as the target species will be assumed to be special-status.
 - If potentially occurring special-status plants are listed under CESA or FESA, 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.

- PDF-BIO-6: GSNR will require that the following actions be taken if special-status plant species are observed in the work area:

The qualified RPF or biologist will determine if following an established protocol is required, and GSNR may consult with CDFW and/or USFWS for technical information regarding appropriate survey protocols. Unless otherwise specified in a protocol, the survey will be conducted no more than 14 days prior to the beginning of treatment activities. Focused or protocol-level surveys for a special-status wildlife species with a potential to occur in the treatment area may not be required if species presence is assumed.

- PDF-BIO-8: If feasible, GSNR will require that project activities be scheduled to avoid the active nesting season of common native bird species, including raptors, that could be present within or adjacent to the work area. The active nesting season will be defined by the qualified RPF or biologist based on the location of the feedstock operation or other project activity (e.g., wood pellet processing and transport to market) and the nesting season of the bird species potentially affected by the activity.

If active nesting season avoidance is not feasible, and project activities will occur within the nesting season, a qualified RPF or biologist will conduct a survey for nesting birds (including raptors) and active nests. Surveys of nesting birds may be completed concurrent with other required surveys, provided the individual requirements of each survey are met.

The survey area will encompass reasonably accessible portion of the work area and nearby suitable nesting habitat viewable from the work area. The survey area will be determined by a qualified RPF or biologist, based on the species known to occur in the area, location of suitable nesting habitat, and expected project activities. The survey will be conducted at a time that balances the effectiveness of detecting nests and the reasonable consideration of potential avoidance strategies. Typically, this timeframe would be up to 2 weeks before project activities. Survey methods and timing will be tailored by the qualified RPF or biologist to the list of target bird species and site and habitat conditions, typically involving walking throughout the survey area, visually searching for nests and birds exhibiting breeding-type behavior (e.g., copulation, carrying nesting material, and delivering food).

If an active nest is observed (i.e., presence of eggs and/or chicks) or determined to likely be present based on breeding-type behavior, GSNR will implement a feasible strategy to avoid disturbance of active nests, which may include, but is not limited to, one or more of the following:

- **Establish Buffer.** GSNR will require that a species-appropriate no-disturbance buffer be established around the nest sufficient to reasonably expect that breeding would not be disrupted by project activities. Project activities will not be permitted within the buffer. The buffer location will be determined by a qualified RPF or biologist. Factors to be considered for determining buffer

location will include: presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and expected project activities. No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or similar, as well as maintained until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician.

- **Modify Activity.** GSNR will require that the project activity in the vicinity of an active nest be modified to avoid disturbance of active nests. Activity modifications will be determined by GSNR in coordination with the qualified RPF, biologist, or biological technician.
- **Defer Activity.** GSNR will require that the timing of project activities in the portion(s) of the work area that could disturb the active nest be deferred. When this avoidance strategy is implemented, project activity will not commence until young fledge or the nest becomes inactive, as determined by the qualified RPF, biologist, or biological technician.
- **Monitor During Activity.** A qualified RPF, biologist, or biological technician will monitor an active nest during project activities to identify signs of agitation, nest defense, or other behaviors that indicate potential nest disturbance. If nesting birds are showing signs of nest disturbance, one of the other avoidance strategies (establish buffer, modify or defer activity) will be implemented or a pause in the work area will occur until the disturbance behavior ceases.

The following avoidance strategy may also be considered together with or in lieu of other actions for implementation by GSNR to avoid disturbance to raptor nests:

- Trees with visible raptor nests, whether occupied or not, will be retained.
- PDF-BIO-9: GSNR will require that the following actions be taken if special-status wildlife species are observed during reconnaissance surveys (PDF-BIO-1), focused or protocol-level wildlife surveys (PDF-BIO-7) or nesting bird surveys (PDF-BIO-8):

California Fully Protected Species or Species Listed Under ESA or CESA:

- Injury or mortality of California Fully Protected Species is prohibited pursuant to Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code.

- GSNR will require that one of the following actions be taken to avoid mortality, injury, or disturbance of California Fully Protected Species or species listed under ESA or CESA:
 - Project activities will not be implemented within habitat occupied by California Fully Protected Species or species listed under ESA or CESA. Any project activities outside occupied habitat will be a sufficient distance from the occupied habitat such that mortality, injury, or disturbance of the species will not occur, as determined by a qualified RPF or biologist using the most current and commonly-accepted science and considering published agency guidance; OR
 - Project activities will be implemented outside the sensitive period of the species' life history (e.g., outside the breeding or nesting season). For species present year-round, CDFW and/or USFWS will be consulted to determine if there is a period of time within which project activities could occur that would avoid species mortality, injury, or disturbance.
- For species listed under ESA or CESA, if project activities cannot avoid mortality, injury or disturbance by taking one of the two actions listed above, GSNR will implement MM-BIO-2.
 - For treatment projects, the only exception to this approach is in cases where it is determined by a qualified RPF or biologist that the species would benefit from treatment activities in occupied habitat, even if some individual(s) may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to a given species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., citing scientific studies demonstrating that the species [or similar species] has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or reduction of inter-species competition). The substantial evidence will be included in the PSA (see PDF-BIO-1). If it is determined that treatment activities would be beneficial to a listed species, no compensatory mitigation will be needed. The qualified RPF or biologist will consult with CDFW and/or USFWS for technical information regarding the determination.

Other Special-Status Wildlife Species:

- GSNR will require that the following actions be taken to avoid mortality, injury, or disturbance of other special-status wildlife species:

- For all project activities, GSNR will require that a no-disturbance buffer be established around occupied sites (e.g., nests, dens, roosts, burrows, nursery colonies). Buffer size will be determined by a qualified RPF or biologist using the most current, commonly accepted science and will consider published agency guidance. Factors to be considered in determining buffer size may include: the species' tolerance to disturbance; the presence of natural buffers provided by vegetation or topography; locations of foraging territory; baseline levels of noise and human activity; and expected project activity. Buffer size may be adjusted if the qualified RPF or biologist determines that such an adjustment would not be likely to adversely affect (i.e., cause mortality, injury, or disturbance to) the species within the occupied site.
- No-disturbance buffers will be marked with high-visibility flagging, fencing, stakes, or similar. The no-disturbance buffer will be maintained until young fledge or the occupied site becomes inactive, as determined by the qualified RPF, biologist, or biological technician. A qualified RPF, biologist, or biological technician will monitor the effectiveness of the no-disturbance buffer during treatment. The qualified RPF, biologist, or biological technician will have the authority to stop any project activities that could result in mortality, injury or disturbance to the occupied site, as well as increase the buffer distance if project activities are causing disturbance to the occupied site (e.g., agitated behavior of special-status species).
- PDF-BIO-10: GSNR will require that one of the following actions be taken to maintain habitat function for special-status wildlife:
 - Concurrently with PDF-BIO-1, a qualified RPF or biologist will identify and demarcate any habitat features that are necessary for survival of the affected wildlife species (e.g., tree snags, trees cavities, dens, downed woody debris, foraging resources). Treatments will be designed to minimize or avoid the loss or degradation of the demarcated habitat features by incorporating life history and habitat requirements of the affected species and the most current, commonly accepted science.
 - If it is determined that special-status wildlife species with specific requirements for high canopy cover (e.g., marten, fisher, spotted owl) are present within a treatment area, then tree or shrub canopy cover within existing suitable areas will be retained at the percentage preferred by the species (as determined by the qualified RPF or biologist based on the most current, commonly accepted science for the affected species) such that habitat function is maintained.

- For wildlife species listed under FESA and/or CESA, the qualified RPF or biologist will consult with CDFW and/or USFWS regarding the determination that habitat function is maintained. If consultation determines that habitat function will be maintained and the impact on special-status wildlife would be less than significant, no further mitigation will be required. If consultation determines that the treatment will not maintain habitat function, GSNR will implement MM-BIO-2 to reduce the residual effects of treatment on special-status wildlife to less than significant under CEQA.
 - For other special-status wildlife species, the qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding habitat function. If technical information suggests that habitat function will be maintained and the impact on special-status wildlife would be less than significant, no further mitigation will be required. If technical information suggests that the treatment will not maintain habitat function, GSNR will implement MM-BIO-2 to reduce the residual effects of treatment on special-status wildlife to less than significant under CEQA.
 - For treatment projects, the only exception to this approach is in cases where it is determined by a qualified RPF or biologist that the species would benefit from treatment in occupied habitat, even if some individual(s) may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to a given species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., citing scientific studies demonstrating that the species [or similar species] has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or reduction of inter-species competition). The substantial evidence will be included in the PSA (see PDF-BIO-1). If it is determined that treatment activities would be beneficial to a non-listed special-status species, no compensatory mitigation will be needed. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding the determination.
- PDF-BIO-11: If special-status bumble bees are identified as occurring or having potential to occur in the treatment area during implementation of PDF-BIO-1, GSNR will require that the following actions be taken:
 - Concurrently with PDF-BIO-1, a qualified RPF or biologist will identify and demarcate any habitat features that are necessary for survival of the affected

species (e.g., hot plant species, foraging resources, and refugia). Treatments will be designed to minimize or avoid the loss or degradation of the demarcated habitat features by incorporating life history and habitat requirements of the affected species and the most current, commonly accepted science.

- Treatment areas within occupied or suitable habitat will be divided into a sufficient number of treatment units to avoid treating the entire habitat within a single year. In addition, treatment activities within occupied or suitable habitat will be conducted in a patchy pattern as feasible. This approach aims to provide continued shelter to special-status bumble bees during treatment and temporarily preserve nearby floral resources.
- A qualified RPF or biologist knowledgeable of the affected species will review the treatment design to reduce any residual effects of the treatment that could be significant under CEQA. If technical information suggests that habitat function will be maintained and the impact on special-status bumble bees would be less than significant, no further action will be required. If technical information suggests that the treatment will not maintain habitat function, GSNR will implement MM-BIO-2 to reduce the residual effects of treatment on special-status bumble bees to less than significant under CEQA.
 - The only exception to this approach is in cases where it is determined by a qualified RPF or biologist that the species would benefit from treatment in occupied habitat, even if some individual(s) may be killed, injured, or disturbed during treatment activities. For a treatment to be considered beneficial to a given species, the qualified RPF or biologist will demonstrate with substantial evidence that habitat function is reasonably expected to improve with implementation of the treatment (e.g., citing scientific studies demonstrating that the species [or similar species] has benefitted from increased sunlight due to canopy opening, eradication of invasive species, or reduction of inter-species competition). The substantial evidence will be included in the PSA (see PDF-BIO-1). If it is determined that treatment activities would be beneficial to a given species, no compensatory mitigation will be needed. The qualified RPF or biologist may consult with CDFW and/or USFWS for technical information regarding the determination.
- PDF-BIO-12: If PDF-BIO-1 determines that a sensitive natural community or other sensitive habitat may be present in the treatment area, GSNR will:
 - Require a qualified RPF, biologist, or botanist perform a protocol-level survey, following the most current CDFW *Protocols for Surveying and*

Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities, of the treatment area prior to the start of treatment activities for sensitive natural communities and other sensitive habitats. Sensitive natural communities and other sensitive habitats will be identified and keyed using the best scientific resources and data available, including the most current edition of *A Manual of California Vegetation* (<http://vegetation.cnps.org/>) or other relevant reports. The limits of these communities or habitats identified in the treatment area will be mapped and recorded digitally using a Global Positioning System (GPS), and GSNR will design treatments to avoid these delineated areas.

- Require that before implementation of treatment activities, all sensitive natural communities or other sensitive habitat identified during the above surveys will be delineated as an environmentally sensitive area with brightly visible construction flagging and/or fencing under the direction of the qualified RPF, biologist, or botanist. No treatment activities will be allowed within the environmentally sensitive area, including foot traffic to prevent inadvertent crushing of plants or spreading invasive or non-native species. The qualified RPF, biologist, botanist, or biological technician will routinely inspect the integrity of exclusion fencing/flagging throughout the treatment period.
- If GSNR determines that avoidance of a sensitive natural community or other sensitive habitat is not infeasible, a qualified RPF, biologist, or botanist will review the treatment design to reduce any residual effects of the treatment (i.e., habitat functions not maintained) that could be significant under CEQA. If it is determined that the impact would be less than significant, no additional action will be required. If it is determined that the impact would be significant under CEQA, even after implementing feasible treatment design alternatives and impact minimization measures, then GSNR will implement MM-BIO-3.
 - The only exception to this mitigation approach is when a qualified RPF, biologist, or botanist determines that treatment in the occupied area would be beneficial to a sensitive natural community or other sensitive habitat, even if there is some loss during the treatment. To be considered beneficial, the qualified individual must show that the habitat is likely to improve after the treatment, leading to expansion, regeneration, or increased vigor. This can be supported by scientific studies indicating benefits such as increased sunlight due to canopy opening, invasive species eradication, or reduced resource competition. These findings will be documented in a report to GSNR. If treatment is deemed beneficial, no compensatory mitigation will be needed.

- PDF-BIO-13: If potentially jurisdictional aquatic resources are identified in the treatment area during implementation of PDF-BIO-1, GSNR will require that the following actions be taken:
 - The qualified RPF or biologist will delineate the boundaries of aquatic resources in accordance with the most current published agency guidance at the time of the delineation (e.g., USACE 1987; USACE 2008; USACE 2010; SWRCB 2021) pursuant to Section 404 of the federal Clean Water Act, Section 401 of the federal Clean Water Act and the Porter-Cologne Act; and California Fish and Game Code. If there are aquatic resources delineated within 75 feet of the treatment area, the resource boundaries will be verified by the USACE by submitting a *Aquatic Resources Delineation Report and Request for Aquatic Resources Delineation Verification or Jurisdictional Determination* form to the appropriate USACE district office.
 - A qualified RPF or biologist will delineate a no-disturbance buffer around each aquatic resources within the treatment area. The buffer will be a minimum width of 25 feet or larger if necessary. The buffer will be installed using high-visibility flagging, fencing, stakes, or similar in coordination with the qualified RFP or biologist. The size and shape of the buffer will depend on the type of aquatic resource present, type and timing of treatment activities, special-status species occupancy, and environmental conditions and topography.
 - A qualified RPF, biologist, or biological technician will periodically inspect the condition and visibility of the no-disturbance buffer(s) and to confirm that impacts to the resource(s) are being avoided.
 - No soil disturbance, vehicle and equipment staging or access, or any other ground-disturbing activities will be allowed within the no-disturbance buffer.
- PDF-BIO-14: GSNR, in consultation with a qualified RPF or qualified biologist, will design treatments in riparian habitats to retain or improve habitat functions by implementing the following within riparian habitats:
 - Retain at least 75 percent of the overstory and 50 percent of the understory canopy of native riparian vegetation within the limits of riparian habitat identified and mapped during surveys conducted pursuant to PDF-BIO-5. Native riparian vegetation will be retained in a well distributed multi-storied stand composed of a diversity of species similar to that found before the start of treatment activities.

- Treatments will be limited to removal of uncharacteristic fuel loads (e.g., removing dead or dying vegetation), trimming/limbing of woody species as necessary to reduce ladder fuels, and select thinning of vegetation to restore densities that are characteristic of healthy stands of the riparian vegetation types characteristic of the region. This includes hand removal (or mechanized removal where topography allows) of dead or dying riparian trees and shrubs, invasive plant removal, selective thinning, and removal of encroaching upland species.
- Removal of large, native riparian hardwood trees (e.g., willow, ash, maple, oak, alder, sycamore, cottonwood) will be minimized to the extent feasible and 75 percent of the pretreatment native riparian hardwood tree canopy will be retained. Because tree size varies depending on vegetation type present and site conditions, the tree size retention parameter will be determined on a site-specific basis depending on vegetation type present and setting; however, live, healthy, native trees that are considered large for that type of tree and large relative to other trees in that location will be retained. A scientifically-based, project-specific explanation substantiating the retention size parameter for native riparian hardwood tree removal will be provided in the Biological Resources Discussion of the PSA. Consideration of factors such as site hydrology, erosion potential, suitability of wildlife habitat, presence of sufficient seed trees, light availability, and changes in stream shading may inform the tree size retention requirements.
- Removed trees will be felled away from adjacent streams or waterbodies and piled outside of the riparian vegetation zone (unless there is an ecological reason to do otherwise that is approved by applicable regulatory agencies, such as adding large woody material to a stream to enhance fish habitat, e.g., see *Accelerated Wood Recruitment and Timber Operations: Process Guidance from the California Timber Harvest Review Team Agencies and National Marine Fisheries Service*).
- Vegetation removal that could reduce stream shading and increase stream temperatures will be avoided.
- Ground disturbance within riparian habitats will be limited to the minimum necessary to implement effective treatments. This will consist of the minimum disturbance area necessary to reduce hazardous fuels and return the riparian community to a natural fire regime (i.e., Condition Class 1) considering historic fire return intervals, climate change, and land use constraints.
- GSNR will require that CDFW be notified pursuant to California Fish and Game Code Section 1602 prior to implementing any treatment activities in riparian habitats. Notification will identify the treatment activities, map the vegetation to be removed, identify the impact avoidance identification methods to be used (e.g., flagging), and appropriate protections for the retention of shaded riverine habitat, including buffers and other applicable measures to prevent erosion into the waterway.

species. Depending on whether the species are state and/or federally listed, the following steps will be associated with consultation and implementation of mitigation.

Federal Listed Species: If the proposed action may affect only federally listed species or critical habitat, and the action has a federal nexus (via other federal agency permit, funding, or approvals), consultation pursuant to Section 7 of the Federal Endangered Species Act (FESA) would apply. Under FESA Section 7, GSNR will need to prepare a Biological Assessment (BA) to assist the USFWS or USFS in its determination of the project's effect on species and/or critical habitat. If the action is not likely to adversely affect the listed species, no further mitigation is necessary.

If the action is likely to adversely affect a listed species, then the USFWS or USFS will prepare a Biological Opinion (BO). The conclusion of the BO will state whether or not the proposed action is likely to: 1. Jeopardize the continued existence of the listed species; and/or 2. Result in the destruction or adverse modification of critical habitat that appreciably diminishes the value of critical habitat as a whole for the conservation of the listed species. If the action is reasonably certain not to jeopardize the continued existence of the listed species or diminish the value of critical habitat as a whole for the species, then the BO will include an incidental take statement with the BO. Incidental take is subject to the terms and conditions provided in the incidental take statement. Examples of terms and conditions included within a typical BO are include:

- Monitoring
- Worker environmental awareness program (WEAP) training
- Minimization of construction-related impacts
- Preconstruction clearance surveys
- Weed management and monitoring
- Compensation for loss of habitat
- Protection of lands in perpetuity
- Mitigation ratios for impacts (e.g., no less than 1:1 mitigation for suitable habitat)
- Permanent protection and management of compensation lands
- Costs to acquire and manage lands
- Financial assurances

If the action has no associated federal action, permitting pursuant to FESA section 10(a)(1)(B) will apply. A Habitat Conservation Plan (HCP) will be prepared by GSNR and an application for an Incidental Take Permit (ITP). An applicant-prepared HCP will include, at a minimum, the following measures:

- Preservation (via acquisition or conservation easement) of existing habitat
- Enhancement or restoration of degraded or former habitat
- Creation of new habitat
- Establishment of buffer areas around existing habitats
- Restrictions to access

Both State and Federal Listed Species: If a plant species is listed by both FESA and the California Endangered Species Act (CESA), Fish and Game Code Section 2080.1 allows an applicant who has obtained a federal incidental take statement (FESA Section 7 consultation) or a federal ITP (FESA § 10(a)(1)(B)) to request that the Director of CDFW find the federal documents consistent with CESA via a consistency determination per Section 2080.1 of CESA. If a consistency determination is issued, no further authorization or approval is necessary under CESA. If a consistency determination is not feasible, the process for “State Only Listed Species,” as described below, will be implemented.

State Listed Species: For species that are listed by CDFW, but not the USFWS, as endangered, threatened, candidate, or a rare plant, and where take would occur, GSNR will apply for a State ITP under Section 2081(b) of the Fish and Game Code. When an ITP is issued, included terms and conditions will ensure that the items 1 through 5 below are met.

1. The authorized take must be incidental to an otherwise lawful activity.
2. The impacts of the authorized take must be minimized and fully mitigated.
3. The measures required to minimize and fully mitigate the impacts of the authorized take:
 - a. Are roughly proportional in extent to the impact of the taking on the species;
 - b. Maintain the applicant’s objective to the greatest extent possible; and
 - c. May be successfully implemented by the applicant.
4. Adequate funding is provided to implement the required minimization and mitigation measures and monitor compliance with the effectiveness of the measures.
5. Issuance of the permit will not jeopardize the continued existence of the CESA-listed species.

Non-Listed Rare Species: For rare species that are not listed by the USFWS or CDFW, GSNR will implement a Compensatory Mitigation Plan (Plan), prepared by a qualified botanist, 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 1:1 mitigation ratio. 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, (3) success criteria for population establishment, including a not-to-exceed threshold for invasive species cover, (4) 5 years of maintenance and monitoring, (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.

- **MM-BIO-2** **Compensate for Mortality, Injury, or Disturbance and Loss of Habitat Function for Special-Status Wildlife.** If, through implementation of the above PDFs, avoidance of take of wildlife 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 as rare, endangered, threatened, or candidate is not possible, GSNR will sufficiently compensate for such impacts. GSNR will initiate consultation with USFWS, CDFW, and/or USFS, as appropriate based on the identified species. Depending on whether the species are state and/or federally listed, the following steps will be associated with consultation and implementation of mitigation.

Federal Listed Species: If the proposed action may affect only federally listed species or critical habitat, and the action has a federal agency nexus, then consultation pursuant to Section 7 of the Federal Endangered Species Act (FESA) would apply. Under FESA Section 7, GSNR will need to prepare a Biological Assessment (BA) to assist the USFWS or USFS in its determination of the project's effect on species and/or critical habitat. If the action is not likely to adversely affect the listed species, no further mitigation is necessary.

If the action is likely to adversely affect a listed species, then the USFWS or USFS will prepare a Biological Opinion (BO). The conclusion of the BO will state whether or not the proposed action is likely to: 1. Jeopardize the continued existence of the listed species; and/or 2. Result in the destruction or adverse modification of critical habitat that appreciably diminishes the value of critical habitat as a whole for the conservation of the listed species. If the action is reasonably certain not to jeopardize the continued existence of the listed species or diminish the value of critical habitat as a whole for the species, then the BO will include an incidental take statement with the BO. Incidental take is subject to the terms and conditions provided in the incidental take statement. Examples of terms and conditions included within a typical BO are include:

- Monitoring
- Worker environmental awareness program (WEAP) training
- Minimization of construction-related impacts
- Preconstruction clearance surveys
- Weed management and monitoring
- Compensation for loss of habitat
- Protection of lands in perpetuity

- Mitigation ratios for impacts (e.g., no less than 1:1 mitigation for suitable habitat)
- Permanent protection and management of compensation lands
- Costs to acquire and manage lands
- Financial assurances

If the action has no federal agency nexus, permitting pursuant to FESA Section 10(a)(1)(B) will occur. A Habitat Conservation Plan (HCP) will be prepared by GSNR and an application for an Incidental Take Permit (ITP). An applicant-prepared HCP will include, at a minimum, the following measures:

- Preservation (via acquisition or conservation easement) of existing habitat
- Enhancement or restoration of degraded or former habitat
- Creation of new habitat
- Establishment of buffer areas around existing habitats
- Restrictions to access

Both State and Federal Listed Species: If a species is listed by both FESA and the California Endangered Species Act (CESA), Fish and Game Code Section 2080.1 allows an applicant who has obtained a federal incidental take statement (FESA Section 7 consultation) or a federal ITP (FESA § 10(a)(1)(B)) to request that the Director of CDFW find the federal documents consistent with CESA via a consistency determination per Section 2080.1 of CESA. If a consistency determination is issued, no further authorization or approval is necessary under CESA. If a consistency determination is not feasible, the process for “State Only Listed Species,” as described below, will be implemented.

State Listed Species: For species that are listed by CDFW, but not the USFWS, as endangered, threatened, candidate, or a rare species, and where take would occur, GSNR will apply for a State ITP under Section 2081(b) of the Fish and Game Code. When an ITP is issued, included terms and conditions will ensure that the items 1 through 5 below are met.

1. The authorized take must be incidental to an otherwise lawful activity.
2. The impacts of the authorized take must be minimized and fully mitigated.
3. The measures required to minimize and fully mitigate the impacts of the authorized take:
 - a. Are roughly proportional in extent to the impact of the taking on the species;
 - b. Maintain the applicant’s objective to the greatest extent possible; and
 - c. May be successfully implemented by the applicant.
4. Adequate funding is provided to implement the required minimization and mitigation measures and monitor compliance with the effectiveness of the measures.

5. Issuance of the permit will not jeopardize the continued existence of the CESA-listed species.

Non-Listed Rare Species: For rare species that are not listed by the USFWS or CDFW, GSNR will implement a Compensatory Mitigation Plan (Plan), prepared by a qualified biologist, that identifies the residual significant impacts requiring compensatory mitigation and describes the proposed strategy to reduce residual significant impacts, through at least one or a combination of the following:

- Preserving existing species habitat outside of the treatment area in perpetuity; this may entail purchasing lands and/or mitigation credits from a CDFW- and/or USFWS-approved entity in sufficient quantity to offset the residual significant impacts to habitat.
- Restoring or enhancing existing species habitat within or outside of the treatment area (e.g., decommissioning roads, installing perching or roosting structures, or removing movement barriers or other existing features that are adversely impacting the species).

Prior to finalizing the Plan, GSNR will consult with any applicable responsible agencies to ensure that the Plan will satisfy responsible agency requirements (e.g., permits and approvals):

- For California Fully Protected Species, GSNR will submit the Plan to CDFW for review and comment.
 - For other special-status wildlife species, GSNR may consult with CDFW and/or USFS regarding the availability and applicability of compensatory mitigation and other related technical information.
- **MM-BIO-3 Compensate for Unavoidable Loss of Sensitive Natural Communities and Oak Woodlands.** If significant impacts to sensitive natural communities or oak woodlands cannot feasibly be avoided as specified by the above PDFs, GSNR will sufficiently compensate for such impacts. Compensation may include:
 - A qualified botanist will conduct a pre-construction survey to identify and quantify the number of plants 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. 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; 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; 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, slopes, and aspect as well as the presence of similar native vegetation adjacent to the proposed mitigation areas.
- **MM-BIO-4 Compensate for Unavoidable Loss of Wetlands and Other Aquatic Resources.** If permanent loss of protected wetlands and other aquatic resources cannot feasibly be avoided as specified by the above PDFs, GSNR will implement the following actions:
 - Prior to project activities, GSNR will coordinate with the appropriate USACE district and RWQCB regional staff to assure conformance with permitting requirements of Section 401 and 404 of the Clean Water Act and the Porter–Cologne Water Quality Control Act. Prior to activity within CDFW-jurisdictional lake or streambed or associated riparian habitat, GSNR will coordinate with the appropriate CDFW regional staff to assure conformance with California Fish and Game Code Section 1600 permitting requirements.
 - As part of the permit application process, GSNR will sufficiently mitigate to ensure no-net-loss of waters at a minimum of 1:1 with establishment or re-establishment for impacts on aquatic resources as a part of an overall strategy to ensure no net loss, or at a higher ratio if establishment or re-establishment mitigation is not available. Final mitigation ratios and credits will be a minimum of 1:1 and determined in consultation with USACE, RWQCB and/or CDFW based on agency evaluation of current resource functions and values and through each agency’s respective permitting process.
 - Should applicant-sponsored mitigation be implemented, a mitigation and monitoring plan (Plan) will be prepared in accordance with resource agency guidelines and approved by the agencies in accordance with the proposed permits. The Plan will include but is not limited to a conceptual planting plan including planting zones, grading, and irrigation, as applicable; a conceptual planting plant palette; a long-term maintenance and monitoring plan; annual reporting requirements; proposed success criteria; legal and funding mechanisms; and parties responsible for long-term management and monitoring of the restored or enhanced habitat. Any off-site applicant-sponsored mitigation shall be conserved and managed in perpetuity.

Geology and Soils

- PDF-GEO-1: GSNR require that mechanical treatments be suspended if the National Weather Service forecast is a “chance” (30 percent or more) of rain within the next 24 hours during the Winter Period. Activities that cause mechanical soil disturbance may resume when precipitation stops and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: (1) areas of ponded water, (2) pumping of fines from the soil or road surfacing, (3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, (4) spinning or churning of wheels or tracks that produces a wet slurry, or (5) inadequate traction without blading wet soil or surfacing materials.

- PDF-GEO-2: New road construction and road maintenance activities in areas with slopes in excess of 50% (27 degrees) shall be completed under the guidance of a California Engineering Geologist (CEG). Prior to and during road construction or maintenance, a CEG shall evaluate the road route based on the presence of existing landslides, bedrock type, bedding orientation, steepness of slope, and drainage pathways (proposed and existing). In the event areas of potential slope instability are identified, slope stability remedial measures shall be employed to prevent slope instability from occurring. Remedial measures shall include, but not be limited to:
 - Installation of surface and subsurface drainage culverts, water diversion features, and drain holes;
 - Sloping the road inward toward the hillside;
 - Installation of erosion control blankets, soil binders, and wire mesh to stabilize the hillside;
 - Scaling (i.e., removing loose or potentially unstable material/rocks);
 - Installing ground anchors/rock bolts;
 - Reducing/flattening the slope angle; and
 - Installing rock trap devices at the toe of slopes.

- PDF-GEO-3: A Storm Water Pollution Prevention Plan (SWPPP) or equivalent document shall be prepared for the project specifically to address new road construction and existing road maintenance. The SWPPP or equivalent shall include sediment control and erosion control Best Management Practices (BMPs) to minimize erosion induced sedimentation of downslope water bodies, including creeks, wetlands, lakes, and reservoirs. A Qualified SWPPP Practitioner (QSP) and/or delegated monitor shall inspect

the road work, as set forth in the California Construction General Permit requirements. As the project progresses, the SWPPP or equivalent shall be modified and amended to reflect modifications to stormwater control measures, as construction/maintenance conditions change. The SWPPP or equivalent shall be kept on-site and amended to reflect the current site conditions until final stabilization is met. If field circumstances do not allow the SWPPP or equivalent to remain on-site, the QSP shall retain the hard copy SWPPP, which will be made available upon request to state or county inspectors. Erosion control measures on federal lands shall be implemented in accordance with the 2011 Forest Service Region 5 Water Quality Management Handbook 2509.22, Chapter 10 (U.S. Forest Service 2011) and the National Best Management Practices for Water Quality Management on National Forest System Lands, National Core BMP Technical Guide (USDA Forest Service 2012b). Erosion control measures on non-federal lands shall be implemented in accordance with the 2023 California Forest Practice Rules (California Licensed Timber Operators and California Registered Professional Foresters (2023). Existing compacted road surfaces with no maintenance required are exempted as they are already compacted from use.

Erosion prevention and control measures to be included in the SWPPP or equivalent shall include, but not be limited to:

- Sidecast deposits, which are loose sediments created during road construction/maintenance and pushed over the downslope side of the road, shall be minimized to prevent downstream sedimentation of water bodies and prevent mass wasting events during periods of heavy precipitation. Alternatively, a compacted berm shall be created with residual sediments along the downslope edge of the road, to prevent stormwater runoff from overtopping the road and eroding downslope sediments.
- Road construction and maintenance shall be completed such that stormwater drainage is controlled to prevent soil erosion. Drainage controls shall include measures described in PDF-GEO-2 regarding slope stability.
- Erosion control fabric, straw wattles, and soil binders shall be used on exposed areas of soil adjacent to roadways until vegetation can be reestablished.
- Road construction/maintenance shall be suspended during periods of heavy precipitation. Activities shall resume when precipitation ends and soils are no longer saturated (i.e., when soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur). Indicators of saturated soil conditions may include, but are not limited to: 1) areas of ponded water, 2) pumping of fines from the soil or road surfacing, 3) loss of bearing strength resulting in the deflection of soil or road surfaces under a load, such as the creation of wheel ruts, 4) spinning or churning of wheels or

tracks that produces a wet slurry, or 5) inadequate traction without blading wet soil or surface materials.

- GSNR shall require that road construction and maintenance areas be inspected for proper implementation of erosion control features prior to the rainy season. If erosion control measures are not properly implemented, they will be remediated prior to the first rainfall event. Additionally, GSNR shall require an inspection for evidence of erosion after the first large storm or rainfall event (i.e., greater than 1.5 inches in 24 hours), as soon as is feasible after the event. Any areas of erosion that will result in substantial sediment discharge shall be remediated within 48 hours.
- PDF-GEO-4: A SWPPP or equivalent document shall be prepared for the project specifically to address wildfire fuel reduction operations. Erosion prevention and control measures to be included in the SWPPP or equivalent shall include, but not be limited to:
 - Slopes steeper than 75% (37 degrees) shall be avoided to minimize soil erosion following soil disturbance.
 - Use of heavy equipment operations shall be limited to slopes less or equal to 35%; occasional short pitches less than 100 feet and less than 40% slope are allowable in strategic locations, straight up/down slope with no turning.
 - Skyline and/or noise yarding shall be used on slopes in excess of 35% (19 degrees), but less than 75% (37 degrees), to minimize soil erosion following soil disturbance.
 - High ground pressure vehicles shall be limited in treatment areas. GSNR will limit heavy equipment that could cause soil disturbance or compaction to be driven through treatment areas when soils are wet and saturated to avoid compaction and/or damage to soil structure. Saturated soil means that soil and/or surface material pore spaces are filled with water to such an extent that runoff is likely to occur. If use of heavy equipment is required in saturated areas, other measures such as operating on organic debris, using low ground pressure vehicles, operating on frozen soils/snow covered soils, or use of small specialty skyline yarding equipment, shall be implemented to minimize soil disturbance. Existing compacted road surfaces are exempted as they are already compacted from use.
- GSNR shall require that significant soil disturbance during forest thinning treatments be stabilized with mulch or equivalent immediately after treatment activities, to the maximum extent practicable, to minimize the potential for substantial sediment discharge. Organic material shall be incorporated onto at least 75% of the disturbed soil where the soil erosion

hazard is moderate or high, and 50% of the disturbed soil where soil erosion hazard is low, to help prevent erosion. Where slash mulch is used, it shall be packed into the ground surface with heavy equipment so that it is sufficiently in contact with the soil surface.

- In the event soil compaction damage has been sustained, deep subsoil ripping shall be completed to restore the productive qualities of the soils.
- PDF-GEO-5: GSNR will require drainage of compacted and/or bare linear treatment areas capable of generating storm runoff via water breaks using the spacing and erosion control guidelines contained in Sections 914.6, 934.6, and 954.6(c) of the California Forest Practice Rules (February 2019 version). Where waterbreaks cannot effectively disperse surface runoff, including where waterbreaks cause surface run-off to be concentrated on downslopes, other erosion controls will be installed as needed to maintain site productivity by minimizing soil loss.
- PDF-GEO-6: GSFR will require that a Registered Professional Forester (RPF) or licensed geologist evaluate treatment areas with slopes greater than 50 percent for unstable areas (areas with potential for landslide) and unstable soils (soil with moderate to high erosion hazard). If unstable areas or soils are identified within the treatment area, are unavoidable, and will be potentially directly or indirectly affected by the treatment, a licensed geologist (P.G. or C.E.G.) will determine the potential for landslide, erosion, of other issue related to unstable soils and identify measures that will be implemented by GSNR such that substantial erosion or loss of topsoil would not occur.

Hazards

- PDF-HAZ-1: GSNR will require that all diesel- and gasoline-powered equipment be maintained per manufacturer's specifications, and in compliance with all state and federal emissions requirements. Maintenance records will be available for verification. Prior to the start of treatment activities, all equipment will be inspected for leaks and inspect everyday thereafter until equipment is removed from the site. Any equipment found leaking will be promptly removed.
- PDF-HAZ-2: GSNR will require mechanized hand tools to have federal- or state-approved spark arrestors.
- PDF-HAZ-3: GSNR will require tree cutting crews to carry one fire extinguisher per chainsaw. Each vehicle would be equipped with one long-handled shovel and one axe or Pulaski consistent with PRC Section 4428.
- PDF-HAZ-4: GSNR will require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4).

- PDF-HAZ-5: GSNR will require that a Spill Prevention and Response Plan (SPRP) be prepared prior to beginning any herbicide treatment activities to provide protection to onsite workers, the public, and the environment from accidental leaks or spills of herbicides, adjuvants, or other potential contaminants. The SPRP will include (but not be limited to):
 - a map that delineates staging areas, and storage, loading, and mixing areas for herbicides;
 - a list of items required in an onsite spill kit that will be maintained throughout the life of the activity;
 - procedures for the proper storage, use, and disposal of any herbicides, adjuvants, or other chemicals used in vegetation treatment.

- PDF-HAZ-6: Prior to the start of vegetation treatment activities requiring soil disturbance (i.e., mechanical treatments), GSNR will make reasonable efforts to check with the landowner or other entity with jurisdiction (e.g., United States Forest Service, California Department of Parks and Recreation, etc.) to determine if there are any sites known to have previously used, stored, or disposed of hazardous materials. If it is determined that hazardous materials sites could be located within the boundary of a treatment site, GSNR will conduct a DTSC EnviroStor web search (<https://www.envirostor.dtsc.ca.gov/public/>) and consult DTSC's Cortese List to identify any known contamination sites within the project site. If a proposed mechanical treatment is located on a site included on the DTSC Cortese List as containing potential soil contamination that has not been cleaned up and deemed closed by DTSC, the area will be marked and no or soil disturbing treatment activities will occur within 100 feet of the site boundaries. If it is determined through coordination with landowners or after review of the Cortese List that no potential or known contamination is located on a project site, the project may proceed as planned.

- PDF-HAZ-7: Feedstock Acquisition Fire Prevention Plan. Best practices and standard requirements for fire risk reduction shall be required during feedstock acquisition activities. Prior to the start of feedstock acquisition activities (e.g., prior to the use of vehicles or mechanical equipment on site), a Fire Prevention Plan shall be prepared in consultation with and for review and approval by the U.S. Forest Service, California Department of Forestry and Fire Protection (CAL FIRE), or the fire agency having jurisdiction (FAHJ). The Fire Prevention Plan shall include, but would not be limited to, the following specific measures to be implemented during feedstock acquisition activities:
 - Responsibilities of the project applicant, its contractor(s), and fire agencies with respect to fire prevention and inspection of work areas;
 - Designation of a Site Safety Officer responsible for overseeing the Fire Prevention Plan implementation;

- Basic fire prevention training of employees/contractors upon employment and prior to beginning work, and documentation of the training. Basic fire prevention training shall include, but would not be limited to: fire prevention, proper response and notification, initial attack firefighting (e.g., the use of fire extinguishers and hand tools), and fire reporting;
- Emergency communication, response, and reporting procedures. All fires shall be reported to the FAHJ;
- Procedures for minimizing potential ignition, including, but not limited to: vegetation clearing, parking requirements/restrictions, idling restrictions, smoking restrictions, storage of combustible or flammable materials restrictions, proper use of gas-powered equipment, use of spark arresters;
- Identification of fire suppression equipment to be maintained in work areas and staging areas (e.g., portable fire extinguishers, water tender, shovels, Pulaski). The fire suppression equipment appropriate for the project shall be determined based on the project characteristics, but at minimum would include: one fire extinguisher per chainsaw and each vehicle shall be equipped with one long-handled shovel and one axe or Pulaski (PRC Section 4428);
- Identification of evacuation routes and procedures;
- Provisions for fire/emergency services access if roadway blockage or temporary closures occur;
- Designated worker parking and staging areas cleared of flammable vegetation; no parking or feedstock activities in non-designated areas;
- Prohibition of smoking and open fires at the project site. Prohibit smoking in vegetated areas and require that smoking is only permitted in designated smoking areas barren or cleared to mineral soil at least 3 feet in diameter (PRC Section 4423.4);
- Assurances that all internal-combustion equipment are equipped with appropriate spark arresters and that fire extinguishers are immediately available and maintained in readiness for use at all times;
- Presence of a designated fire watch personnel with appropriate firefighting equipment available at the project site at all times;
- Curtailment of all feedstock acquisition activities in the event of a fire or when fuel and weather conditions get into the “very high” and “extreme” ranges (Red Flag Warning), as determined by the National Weather Service, with specific project-related activities to be allowed during very high or extreme weather conditions at the discretion of the FAHJ;

- Information contained in the Fire Prevention Plan and location of fire-suppression materials and equipment to be included as part of the employee environmental training.

Hydrology and Water Quality

- PDF-HYDRO-1: GSNR shall require that proposed vegetation treatments be conducted in conformance with appropriate RWQCB timber, vegetation and land disturbance related Waste Discharge Requirements (WDRs) and/or related Conditional Waivers of Waste Discharge Requirements (Waivers), and appropriate Basin Plan Prohibitions. Where these regulatory requirements differ, the most restrictive will apply. If applicable, this includes compliance with the conditions of general waste discharge requirements (GWDR) and waste discharge requirement waivers for timber or silviculture activities where these waivers are designed to apply to non-commercial fuel reduction and forest health projects. In general, GWDR and Waivers of waste discharge requirements for fuel reduction and forest health activities require that wastes, including but not limited to petroleum products, soil, silt, sand, clay, rock, felled trees, slash, sawdust, bark, ash, and pesticides must not be discharged to surface waters or placed where it may be carried into surface waters; and that Water Board staff must be allowed reasonable access to the property in order to determine compliance with the waiver conditions.
- PDF-HYDRO-2: GSNR shall require that cumulative watershed effects (CWE) analysis be performed for proposed treatment areas prior to implementing proposed treatments to ensure cumulative effects are below the threshold of concern. CWE analysis shall meet or exceed the standards set forth in Technical Rule Addendum No 2 “Cumulative Impacts Assessment Guidelines” in the 2023 California Forest Practice Rules, and shall include evaluation of sediment, water temperature, organic debris, chemical contamination, peak flow, soil productivity effects.
- PDF-HYDRO-3: GSNR will require that Watercourse and Lake Protection Zones (WLPZs) be established on either side of watercourses as defined in the table below, which is based on Article 16 of the 2023 California Forest Practice Rules. WLPZ’s are classified based on the uses of the stream and the presence of aquatic life. Wider WLPZs are required for steep slopes.

Procedures for Determining Watercourse and Lake Protection Zone (WLPZ) widths

Water Class	Class I	Class II	Class III	Class IV
Water Class Characteristics or Key Indicator Beneficial Use	1) Domestic supplies, including springs, on site and/or within 100 feet downstream of the operations area and/or	1) Fish always or seasonally present offsite within 1000 feet downstream and/or	No aquatic life present, watercourse showing evidence of being capable of sediment transport to Class I	Man-made watercourses, usually downstream, established domestic, agricultural,

Water Class	Class I	Class II	Class III	Class IV
	2) Fish always or seasonally present onsite, includes habitat to sustain fish migration and spawning.	2) Aquatic habitat for nonfish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.	and II waters under normal high-water flow conditions after completion of timber operations.	hydroelectric supply or other beneficial use.

WLPZ Width (ft) – Distance from top of bank to the edge of the protection zone			
< 30 % Slope	75	50	Sufficient to prevent the degradation of downstream beneficial uses of water. Determined on a site-specific basis.
30-50 % Slope	100	75	
>50 % Slope	150	100	

Source: 14 CCR Section 916.5 [936.5, 956.5] (February 2019 version)

The following WLPZ protections will be applied for all treatments:

- Treatment activities with WLPZs will retain at least 75 percent surface cover and undisturbed area to act as a filter strip for raindrop energy dissipation and for wildlife habitat. If this percentage is reduced, a qualified RPF will provide a site- and/or treatment activity-specific explanation for the percent surface cover reduction, which will be included in the PSA. After completion of the PSA and prior to or during treatment implementation, if there is any deviation (e.g., further reduction) from the reduced percent as explained in the PSA, this will be documented in the post-project implementation report (referred to by CAL FIRE as a Completion Report). This requirement is based on 14 CCR Section 916.4 [936.4, 956.4] Subsection (b)(6) (February 2019 version) and 14 CCR Section 916.5 (February 2019 version).
- Equipment, including tractors and vehicles, must not be driven in wet areas or WLPZs, except over existing roads or watercourse crossings where vehicle tires or tracks remain dry.
- Equipment used in vegetation removal operations will not be serviced in WLPZs, within wet meadows or other wet areas, or in locations that would allow grease, oil, or fuel to pass into lakes, watercourses, or wet areas.
- WLPZs will be kept free of slash, debris, and other material that harm the beneficial uses of water. Accidental deposits will be removed immediately.
- Within Class I and Class II WLPZs, locations where project operations expose a continuous area of mineral soil 800 square feet or larger shall be treated for

reduction of soil loss. Treatment shall occur prior to October 15th and disturbances that are created after October 15th shall be treated within 10 days. Stabilization measures shall be selected that will prevent significant movement of soil into water bodies and may include but are not limited to mulching, rip-rap, grass seeding, or chemical soil stabilizers.

Where mineral soil has been exposed by project operations on approaches to watercourse crossings of Class I, II, or III within a WLPZ, the disturbed area shall be stabilized to the extent necessary to prevent the discharge of soil into watercourses or lakes in amounts that would adversely affect the quality and beneficial uses of the watercourse.

Where necessary to protect beneficial uses of water from project operations, protection measures such as seeding, mulching, or replanting shall be used to retain and improve the natural ability of the ground cover within the WLPZ to filter sediment, minimize soil erosion, and stabilize banks of watercourses and lakes.

- Equipment limitation zones (ELZs) will be designated adjacent to Class III and Class IV watercourses with minimum widths of 25 feet where side-slope is less than 30 percent and 50 feet where side-slope is 30 percent or greater. An RPF will describe the limitations of heavy equipment within the ELZ and, where appropriate, will include additional measures to protect the beneficial uses of water.
- PDF-HYDRO-4: If a treatment activity is adjacent to a roadway with stormwater drainage infrastructure, the existing stormwater drainage infrastructure will be marked prior to ground disturbing activities. If a drainage structure or infiltration system is inadvertently disturbed or modified during project activities, GSNR will coordinate with owner of the system or feature to repair any damage and ensure that restore pre-project drainage conditions.
- PDF-HYDRO-5: The following standards shall be met for new road construction reconstruction and relocation: (1) design new stream crossings and replacement stream crossings for at least the 100 year flood, including bedload and debris; (2) design stream crossings to minimize the diversion of streamflow out of the channel and down the road in the event of crossing failure; (3) design stream crossings to minimize disruption of natural hydrologic flow paths, including diversion of streamflow and interception of surface and subsurface water; (4) avoid wetlands or minimize effects to natural flow patterns in wetlands; and (5) avoid road construction in meadows.

Noise

- PDF-NOI-1: GSNR will require that operation of heavy equipment associated with treatment activities (heavy off-road equipment, tools, and delivery of equipment and materials) will occur during daytime hours if such noise would be audible to receptors

(e.g., residential land uses, schools, hospitals, places of worship). Cities and counties in the treatable landscape typically restrict construction-noise (which would apply to vegetation treatment noise) to particular daytime hours. If treatment activity is subject to local noise ordinance, it will adhere to those to the extent the project is subject to them. If the applicable jurisdiction does not have a noise ordinance or policy restricting the time-of-day when noise-generating activity can occur noise-generating vegetation treatment activity will be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and between 9:00 a.m. and 6:00 p.m. on Sunday and federal holidays. If the treatment activity is not subject to local ordinances, it will adhere to the restrictions stated above or may elect to adhere to the restrictions identified by the local ordinance encompassing the treatment area.

- PDF-NOI-2: GSNR will require that all powered treatment equipment and power tools will be used and maintained according to manufacturer specifications. All diesel- and gasoline-powered treatment equipment will be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations.
- PDF-NOI-3: GSNR will require that engine shrouds be closed during equipment operation.
- PDF-NOI-4: GSNR will require that treatment activities, equipment, and equipment staging areas be located away from nearby noise-sensitive land uses (e.g., residential land uses, schools, hospitals, places of worship), to the extent feasible, to minimize noise exposure.
- PDF-NOI-5: GSNR will require that all motorized equipment be shut down when not in use. Idling of equipment and haul trucks will be limited to 5 minutes.
- PDF-NOI-6: For treatment activities utilizing heavy equipment, GSNR will require notification of noise-sensitive receptors (e.g., residential land uses, schools, hospitals, places of worship) located within 1,500 feet of the treatment activity. Notification will include anticipated dates and hours during which treatment activities are anticipated to occur and contact information, including a daytime telephone number, of the project representative. Recommendations to assist noise-sensitive land uses in reducing interior noise levels (e.g., closing windows and doors) will also be included in the notification.

Recreation

- PDF-REC-1: If a treatment activity would require temporary closure of a public recreation area or facility, GSNR will coordinate with the owner/manager of that recreation area or facility. If temporary closure of a recreation area or facility is required, GSNR will work with the owner/manager to post notifications of the closure at least 2 weeks prior to the commencement of the treatment activities. Additionally,

notification of the treatment activity will be provided to the Administrative Officer (or equivalent official responsible for distribution of public information) of the county(ies) in which the affected recreation area or facility is located.

- PDF-REC-2: For operations occurring on public lands, GSNR shall require utilization of signage, press releases, and coordination with local user groups to redirect recreation activities to safe areas during project implementation, a minimum of one week prior to treatment activities beginning at or directly adjacent to recreation sites.
- PDF-REC-3: GSNR shall require protection, repair, and restoration of any unintended damage to recreation site infrastructure (e.g., dispersed sites, trailheads, signs) caused by the project activities to pre-work conditions.

"Harvest Residuals"

Subject to the constraints set forth in this section, GSNR will procure and utilize residual biomass material resulting from timber harvest and forest management operations undertaken by third-parties unaffiliated with GSNR, for their own purposes, which would occur regardless of GSNR's proposed project.

The third-party operations the generate Harvest Residuals generally include the following types of projects (undertaken by those third-parties, on their own initiative):

- **Commercial Timber Harvest Residuals.** Licensed Timber Operators and other forest contractors hired by a private landowner or federal timber purchaser cut and remove green or dead, dying, or diseased trees using sustainable silvicultural methodologies. Tree bole wood is removed in log form and transported to traditional forest products facilities such as sawmills and plywood plants. Feedstock procured by GSNR resulting from these projects will be derived from limbs and tops of green trees and other bole wood that is unutilizable by traditional forest products facilities.
- **Pre-commercial Thinning Harvests.** These ecological thinning operations selectively remove smaller, less healthy trees (16 inches DBH or less) to increase the inter-tree spacing between the remaining larger and healthiest trees generally to improve overall forest health, growth, and carbon sequestration, and to increase resiliency to wildfire, insects, and diseases. Generally, 100% of the trees removed in these projects will be utilized as pellet feedstock. The equipment typically used for these projects will be tracked feller bunchers, rubber-tired grapple skidders, and a whole tree chipper that will convert the removed trees to chips and load them into a truck for delivery to GSNR's facility.
- **Fire, Insect, or Disease Salvage Harvests.** These operations selectively remove dead, diseased, or dying trees, generally in an emergency situation aimed at utilizing bole wood as higher value sawlogs or veneer before they are too decayed. Feedstock will

generally be derived from bole wood that is too defective for local forest products facilities to use, or tree limbs and tops that are unutilizable for making lumber or veneer. Tree cutting and removal may be accomplished using tracked feller-bunchers or chain saws, rubber-tired grapple skidders, and processed using whole tree processors and whole tree chippers.

- **Removal of Slash Piles Slated for Open-Burning.** This type of operation removes slash piles, generally along roads left in the forest from previous forest management activities on private, state, or federal timberlands that have been slated for disposal through traditional open-burning. Feedstock is derived from chipping or grinding all woody material in the slash piles uncontaminated by soil, rock, and other non-woody material and loaded into large chip vans for delivery to GSNR's facility.
- **Third-Party Hazardous Fuel Reduction Projects, Construction of Shaded Fuel Breaks, and Reforestation Site Preparation.** These types of operations are described in greater detail in Section 2.4.1.

Harvest Residual material may come in the form of either roundwood or chips, depending upon the type of third-party operation from which it resulted. GSNR's activities to obtain Harvest Residual feedstock will typically commence after the third-party operations within a forested area have been completed.

All of GSNR's activities to obtain Harvest Residual feedstock (i.e., from the location(s) in which it was deposited by the third-party) will incorporate the following project design features (PDFs), described in the preceding section, that will be implemented to avoid or minimize environmental impacts from the activities under GSNR's control. The impact determinations discussed throughout this Environmental Impact Report account for the influence of these PDFs:

PDF-ADMIN-3, PDF-AQ-1, PDF-AQ-2, PDF-AQ-3, PDF-AW-4, PDF-CULT-8, PDF-CULT-9, PDF-BIO-2, PDF-BIO-4, PDF-BIO-16, PDF-GEO-1, PDF-HAZ-1, PDF-HAZ-2, PDF-HAZ-4, PDF-HAZ-5, PDF-NOI-1, PDF-NOI-2, PDF-NOI-3, PDF-NOI-6, PDF-REC-3, PDF-TRAN-1.

GSNR's procurement of Harvest Residuals will be subject to the following constraints:

- GSNR will not accept "harvest residual" materials (in any form) from operations that involve the conversion of forest land to non-forest use.
- GSNR will only accept "harvest residual" materials (in any form) from timber harvest and forest management operations within California that were subject to review under NEPA, CEQA, or the Forest Practices Act.
- GSNR's activities to obtain Harvest Residual feedstock (i.e., from the location(s) in which it was deposited by the third-party) will comply with all conditions and mitigation

measures adopted for the third-party timber harvest or forest management operations that generated the Harvest Residuals.

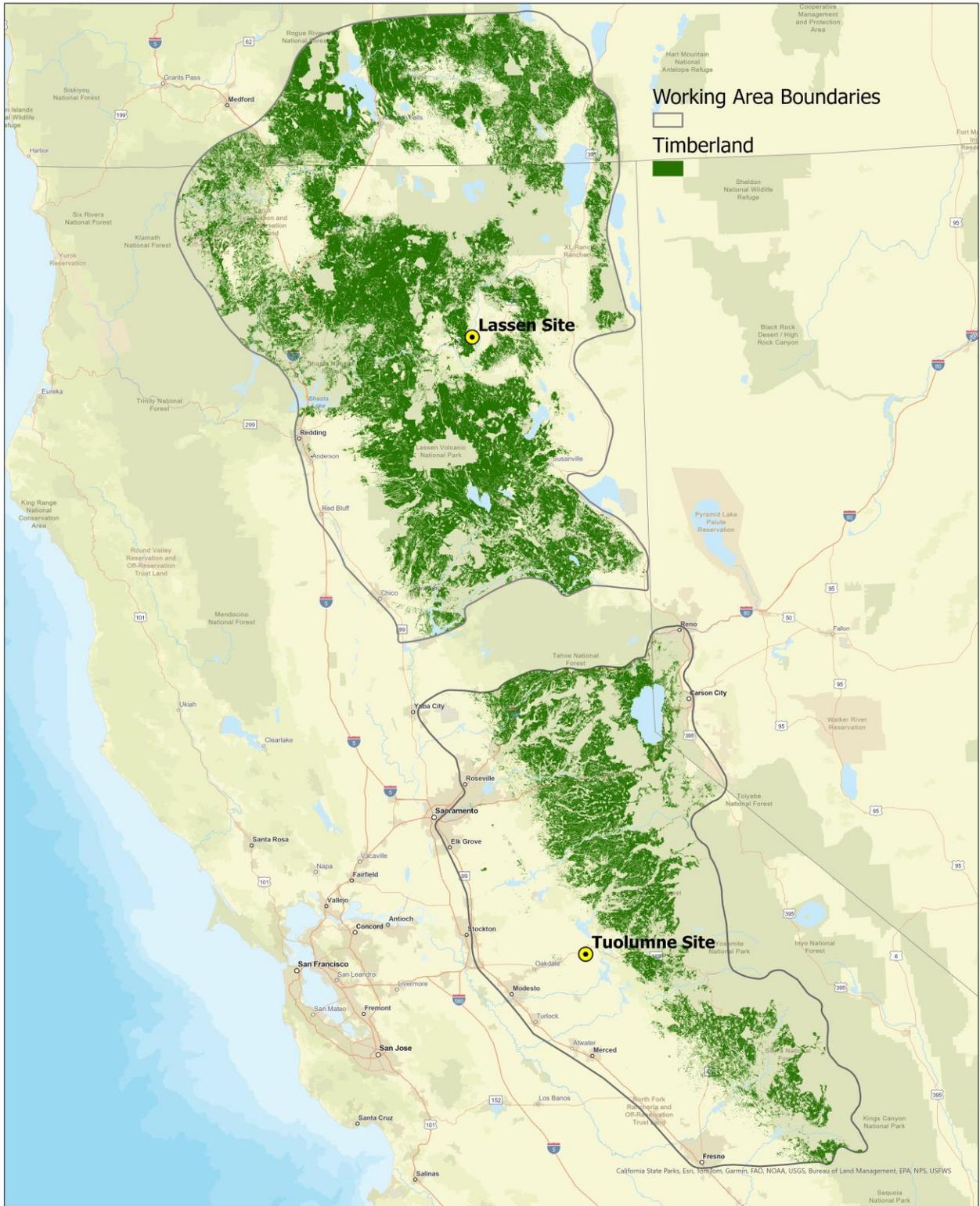
- GSNR will only accept "harvest residual" material from out-of-state timber harvest and forest management operations that are subject to review under NEPA or under a law of that state requiring preparation of a document containing essentially the same points of analysis as NEPA.
- For both in-state and out-of-state timber harvest and forest management operations, the environmental review for the operation must have included assurances of all of the following:
 - All State and Federal environmental laws are observed.
 - The timber harvest and forest management operation is legally permitted and received an approved environmental document (under CEQA, NEPA, the Forest Practices Act, or equivalent law of another state) where the public has been noticed and given an opportunity to provide input.
 - The timber harvest and forest management operation has a well-described silvicultural treatment that includes regeneration and practices that protect the forest from insects and disease. The project is designed to protect & enhance long-term sustained yield of forest and other products.
 - Biological resources are recognized and any impacts fully mitigated to the extent feasible – including wildlife habitat and late successional forest protection, plant diversity (including threatened and endangered), aquatics, protection of endangered and sensitive species and their habitat.
 - Water quality and riparian vegetation is protected and maintained and any impacts fully mitigated to the extent feasible. Sensitive watersheds have been designated. Roads and landings have been designed to protect water quality. Cumulative watershed effects have been analyzed and mitigated.
 - Soil resources are protected and maintained and any impacts fully mitigated to the extent feasible.
 - Air quality is protected and maintained and any impacts fully mitigated to the extent feasible.
 - Archaeological, historical and tribal cultural resources are protected, and any impacts fully mitigated to the extent feasible, and local tribes have been given sufficient opportunity to provide input.

- The project area is managed to minimize wildfire risks and offset climate change effects by maximizing carbon sequestration and minimizing carbon emissions to the extent feasible.
- GSNR will not remove materials from Nationally Designated Areas, including federally designated wilderness areas, Wild and Scenic Rivers, or National Monuments, or from areas protected under the California Wild and Scenic Rivers Act.
- GSNR will not remove materials from Roadless Areas subject to the 2001 Roadless Rule (36 CFR 294).
- GSNR will not remove materials from areas with slope greater than 40%.
- GSNR will not remove materials from riparian areas – i.e., areas within 75' of a perennial stream or body of water.

Additionally, where feasible, GSNR will prioritize acquisition of Harvest Residuals based upon the following considerations:

- GSNR will prioritize removing Harvest Residual materials from forested lands that cause or threaten substantial increased risk of the occurrence or severity of wildfire.
- GSNR will prioritize removing Harvest Residual materials from forested lands whose decay will cause substantial carbon emissions.
- GSNR will prioritize removing Harvest Residual material from forested lands that are classified as High or Very High Fire Hazard Severity Zones or are otherwise designated by a public agency as Wildland Urban Interface (WUI) areas.
- GSNR will prioritize removing Harvest Residual material from forested lands that have previously been heavily burned in catastrophic wildfires for the purpose of reducing fuel loading prior to reforestation activities.

GSNR Working Area





To: Members of the GSNR Board of Directors
From: Anthony Rahill, RCRC Director of Data Management
Date: February 20, 2024
Re: Project Coordination Update

Summary

This memo provides a project management update for the overall Golden State Natural Resources (GSNR) project.

Background

The GSNR project team continues to meet weekly to advance the project. The current focus is to complete the California Environmental Quality Act (CEQA) environmental analysis and secure the required entitlements for both the Lassen and Tuolumne county sites.

In addition, the team continues to pursue opportunities where GSNR's active engagement can advance a pilot set of forest resiliency projects.

Recent Success

- Internal review of portions of the ADEIR (Ongoing, 60% ADEIR chapter delivered and under staff review)
- County review of portions of the ADEIR (Ongoing, 35% ADEIR chapters delivered)
- Well Testing (Underway, both facilities)
- Neighborhood visits at Lassen and Tuolumne locations (January | February)
- Draft Port of Stockton Reimbursement Agreement Submitted (November 15, 2023)
- Lassen Percolation Testing completed (November 13, 2023)
- Draft Development Agreements submitted to counties (October 17, 2023)
- Conditional Use Permit application submitted for the Tuolumne facility (September 12, 2023)
- Preliminary grading plan completed (September 12, 2023)
- Conditional Use Permit application submitted for the Lassen facility (July 12, 2023)

Upcoming Milestones

- Port of Stockton community outreach sessions.
- All ADEIR chapters complete.
- Modoc SPA Record of Decision.

Staff Recommendation

No action requested. This is for informational purposes only.



To: Members of the GSNR Board of Directors
From: Arthur J. Wylene, General Counsel
Date: February 20, 2024
Re: CEQA and Permitting Update

Summary

This memo provides an update on the CEQA and permitting processes for the GSNR project.

Background

Consistent with Board direction, the GSNR project team is focused on completing the CEQA (environmental review) process and obtaining durable entitlements for the two proposed project sites. These two processes are closely intertwined and are proceeding simultaneously. Technical studies and review of draft impact chapters remain ongoing, with significant progress in several areas, including:

- Well testing and water supply assessment have commenced at both the Lassen and Tuolumne sites.
- Ongoing development of the Feedstock Supply Environmental Resource Protection Minimum Requirements.
- Finalizing anticipated truck traffic counts for the production facilities.
- Incorporating "Inherently Safer Design" features into the fire protection mitigations for production and port facilities.
- Conducting floodplain analysis and developing a conceptual drainage plan for the Lassen site.
- Refining the noise analysis at the pellet facilities and incorporating further noise reduction features as appropriate.
- In-person community outreach in Lassen and Tuolumne Counties (complementing the community outreach in Stockton discussed in the Communications Update).

The process remains on track for having the Draft EIR ready for public release near the beginning of Quarter 2, 2024. Completion of the Final EIR and presentation to the GSFA Board are expected during mid-2024.

The entitlement process is likewise proceeding on track. Formal Use Permit applications were submitted to Lassen County in July 2023 and to Tuolumne County in September 2023. Additionally, draft development agreements were submitted to both counties for review in October 2023. These applications are presently under review by county staff, and the GSNR team continues to meet weekly with each county to coordinate this review with the CEQA process.

Recommendation

No action is necessary at present as this is an informational item only.



To: Members of the GSNR Board of Directors
From: Staci Heaton, RCRC Senior Policy Advocate
Date: February 20, 2024
Re: Governmental Affairs Update

SUMMARY

This serves as an update on governmental affairs efforts for Golden State Natural Resources.

BACKGROUND

GNSR, since its inception, has been engaged with state and federal legislative bodies and regulatory agencies that set policy on forest resilience and fuels treatment projects on state, federal and private lands in California. Advocacy for GSNR has ranged from educating key legislators and agency officials on the goals of GSNR's Forest Resilience Project to engaging on legislation and agency policies to help ensure positive outcomes for forest resilience and fuels treatment. With the environmental scoping process for GSNR's Forest Resilience Project underway, staff are reaching out to key officials to provide updates on GSNR, as well as expanding education and advocacy efforts in accordance with the current status of the project.

Key Policy Meetings

A key aspect of GSNR's governmental affairs plan is outreach to government officials to update and educate on the status of the project.

The governmental affairs plan remains focused on follow-up meetings with key agency staff to provide update briefings on the project. Staff has met with the California Natural Resources Agency, Sierra Nevada Conservancy, Department of Conservation, California Department of Food and Agriculture, and the Office of Governor Gavin Newsom, as well as USDA Forest Service (USFS) staff in Washington, DC. Staff will be engaged in ongoing conversations with state legislative and Congressional members. Staff is also working on outreach to other organizations that could provide opportunities to partner on community education and outreach.

Legislative Update

The California state Legislature has reconvened after the new year, and staff will continue to consider opportunities to engage on policies and legislative proposals to help ensure positive impact on GSNR's forest resilience goals. Staff is monitoring the state's multi-billion dollar budget shortfall and how that might impact funding opportunities for forest resilience projects like GSNR.

STAFF RECOMMENDATION

Information only.



To: Members of the GSNR Board of Directors
From: Carolyn Jhajj, RCRC Communications Director
Date: February 20, 2024
Re: Communications Update

SUMMARY

Receive update on communications and outreach efforts for Golden State Natural Resources.

BACKGROUND

With the environmental scoping process for GSNR's Forest Resilience Project underway, including the issuance of a revised Notice of Preparation (NOP) on June 1, 2023, staff are currently expanding outreach efforts to inform the public and key stakeholders about the proposed project.

A key aspect of GSNR's communications plan is increased public outreach. GSNR has held public outreach meetings in Lassen and Tuolumne counties and is actively conducting targeted outreach to the surrounding neighborhood communities of the two proposed project sites. Staff also held two virtual public scoping meetings and are preparing to hold an in-person meeting in the City of Stockton. These meetings provide an opportunity for the public to learn about the project, meet the project team, ask questions, and provide feedback. As part of this increased public outreach, staff are adding additional information and resources to the GSNR website specific to each of the project communities.

In addition to the public outreach, staff are meeting with local leaders, elected officials, various organizations, and other interest parties regarding GSNR's proposed project. At these meetings, staff are also discussing outreach efforts and gathering input on any additional stakeholder groups to include in GSNR's communications. With the alteration in port location in the reissued NOP to the Port of Stockton, staff are focusing some of this stakeholder outreach in the Stockton area.

In January staff held a meeting, facilitated by the Institute for Local Government, with half a dozen representatives from community groups in Stockton in anticipation of a larger public meeting. This meeting built upon previous one-on-one meetings held with a community representatives in December and provided the team with some valuable feedback and input regarding potential concerns, mitigation interests, opportunities for partnership, and outreach recommendations for the greater Stockton community. An additional meeting with a larger group of stakeholders in Stockton is planned for February in preparation for holding a public workshop meeting in March.

STAFF RECOMMENDATION
Information Only.



To: Members of the GSNR Board of Directors
From: Terrance Rodgers, RCRC Economic Development Officer
Date: February 20, 2024
Re: Forest Treatment Project Development Update

Summary

This memo provides an update on current priorities under development in partnership with the U.S. Forest Service (USFS), allied agencies, and private partner participants. The overall purpose is to advance forest treatment projects that enhance forest health and resiliency and create rural economic development opportunities.

Background

The current GSNR strategic approach includes a specific initiative to facilitate forest health treatments through partnerships with land management entities currently engaged in advancing forest health projects. The following section is an update on the priority areas previously shared with the GSNR Board of Directors.

1. Modoc National Forest Supplemental Project Agreement

The Modoc National Forest (MDF) Supplemental Project Agreement (SPA) will enable the treatment of nearly 24,000 acres of conifer plantations from treatment units located in the counties of Lassen, Modoc, and Siskiyou. RCRC staff and consultants continue working with USFS staff to advance the project, with a targeted timeline for completion in spring of 2024. To date, all SPA draft Specialist Reports were submitted to USFS staff for review, clarification, and concurrence, with the exception of the Archaeology Report. However, the initial government to government consultations have commenced and staff will be monitoring this aspect of the NEPA process to facilitate its completion. The Heritage Implementation Plan development process is expected to take the most time to complete, but the team is consistently communicating with the relevant parties to expedite the process wherever possible. RCRC staff and USFS leadership continue to agree on the proposed approach and timelines for the required NEPA documents and Decision Memo.

2. Partnership development with existing wood producers to facilitate landscape scale treatment projects through utilization of GSFA's Master Stewardship Agreement (MSA).

RCRC staff continue discussions with public and private partners to identify USFS forest management opportunities associated with forest health projects. RCRC staff routinely attend national forest monitoring meetings to share

information about GSFA's MSA with private industry participants and identify and pursue potential partnerships. In addition to the monitoring meetings, RCRC staff continue to meet with private industry on both an individual basis and through industry events. These efforts are specifically informing the development of a pipeline of forest health-projects that supply biomass to operational wood users to enhance rural economic development. Staff will identify specific project proposals to pursue and develop a repository of specific biomass data, forest maps, potential cost-sharing or available funding, and other information to inform biomass users to prioritize forest treatment opportunities.

Due to many factors, additional funding will likely be needed to complete forest health-related projects on national forests. RCRC staff anticipate partnering with wood users to identify forest-health projects, facilitate SPA development, and/or other required environmental review, identify integrated resource service contract-funded projects and/or other opportunities to implement forest treatment efforts. RCRC staff are also routinely monitoring funding opportunities that would enable the implementation of forest-health projects including, but not limited to, CAL FIRE's Forest Health, Business and Workforce Development, and California Forest Improvement Program.

Additionally, staff are identifying projects with available USFS funding for projects on National Forests. Staff are also working with other entities with available funding, capacity, and technical expertise to partner on forest treatment projects. Where feasible, RCRC staff will work with private partners to pursue funding opportunities that enable project implementation which may not otherwise be economically viable. Staff intend to replicate a similar approach as the MDF SPA across other national forests to accelerate potential forest treatment projects. The goal is to facilitate and expedite completing one or more projects through grant acquisition and collaboration with private and public partners.

RCRC staff recognize it is imperative to complete an initial project(s) to catalyze the MSA and develop a consistent, adequate, long-term feedstock supply that enables landscape scale treatment and de-risks this aspect of the overall project.

Staff Recommendation

No action is necessary as this is an informational item only.



To: Members of the GSNR Board of Directors
From: Craig Ferguson, RCRC Senior Vice President
Date: February 20, 2024
Re: Project Investment Update

SUMMARY

Receive update on private partner communications and outreach efforts for Golden State Natural Resources (GSNR).

BACKGROUND

GSNR continues to meet regularly with prospective investment partners and stakeholders, both on the financing and product purchasing fronts. This will continue to occur during the environmental scoping process now underway. A verbal update will be provided at the GSNR Board of Directors meeting.

STAFF RECOMMENDATION

Information only.



To: Members of the GSNR Board of Directors
From: Milena De Melo, RCRC Finance Director
Date: February 20, 2024
Re: Finance/Administration Update

Summary

This memo provides an update on finance and administration efforts for Golden State Natural Resources (GSNR).

Background

Golden State Finance Authority (GSFA) loan

In March 2020, the GSFA Board authorized a loan of up to \$10.0 million to GSNR to fund predevelopment activities for the project. During the June 16, 2023 meeting, the GSFA Executive Committee unanimously approved the amendment of the loan agreement with GSNR accordingly and that the GSNR loan be increased by up to \$1.75 million, bringing the total maximum borrowing up to \$11.75 million. This amount supports implementation of this more narrowly focused approach on completing the CEQA process and obtaining durable entitlements for the two proposed project sites throughout 2023 as well as providing six months of additional capacity in 2024. Through February 21, 2024 total draws on the loan were \$9.5 million, with about \$225.6 thousand cash available. Accrued interest on the loan draws was \$675,479.

Staff Recommendation

Information only.