



Request for Proposals to Provide National Environmental Policy Act Services
2022 Lightning Complex Restoration Project (EA)
and
Route 1 & 6 Timber Stand and Wildlife Habitat Improvements (CE)

Requesting Organization: Great Basin Institute

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IMPORTANT DATES & TIMES

Proposal Posting Date & Time: Thursday, August 28, 2025 by 5:00 PM PST.

Posting URL: <https://thegreatbasininstitute.org/partnerships-rfps/>

*****Geodata for the Anticipated Survey Needs is also available for download at this website along with the RFP (NOTE: All project data and information provided is preliminary) *****

Written Proposal Questions: Any questions regarding this RFP must be submitted to palden@thegreatbasininstitute.org by 5:00 PM PST Wednesday, September 3, 2025.

Voluntary GBI-hosted Zoom Proposal Meeting: Monday, September 8, 2025 10:00 AM PST.

Posting URL: <https://thegreatbasininstitute.org/partnerships-rfps/>

Written Response to Questions Posting Date & Time: Friday, September 12, 2025 by 5:00 PM PST.

Posting URL: <https://thegreatbasininstitute.org/partnerships-rfps/>

Proposal Deadline: Friday, September 26, 2025 by 5:00 PM PST.

Notice of Intent to Award Posting Date: October, 2025.

Posting URL: <https://thegreatbasininstitute.org/partnerships-rfps/>

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Overview

The Great Basin Institute (GBI), on behalf of the U.S. Forest Service (“Forest Service” or “FS”), Six Rivers National Forest (SRF), intends to contract a qualified Environmental Planning consultant (“the consultant”) to provide comprehensive National Environmental Policy Act (NEPA) environmental planning services for its stewardship initiatives. Proposals that address the full scope of work for both the Lightning Complex EA and Route 1 & 6 CE, including the fieldwork components, will be given preference during the evaluation process. GBI may choose to award one or more contracts in response to this RFP. Contracts could cover all or only a portion of the requested services (e.g. fieldwork only), depending on consultant capacity and the needs of the project.

The successful consultant will work closely under the direction of GBI’s Project Manager to oversee the comprehensive scope of work for this phase of project planning. The investment by the GBI and the SRF in this partnership is designed to better align the consultant early in the planning process with agency priorities and local land management needs, thereby resulting in completed NEPA documents that expedite the much needed implementation.

The NEPA analysis for the Lightning Complex (EA) and Route 1 & 6 (CE) Project EA will document existing conditions and potential effects / impacts specific enough to address issues associated with the emerging proposed actions to satisfy NEPA requirements. All of the options for treatment, as outlined in the proposed actions, will be covered in the NEPA analysis. The SRF will provide a rough draft of the proposed action for the consultant to finalize (see Exhibit A and B).

The successful consultant will be selected through a competitive Request for Proposals (RFP) process. The period of performance will not surpass December 31, 2027 and the consultant will be expected to meet predetermined timelines for deliverables detailed in this RFP.

Background

The SRF Lightning Complex is located on the Lower Trinity Ranger District and spans two counties: Humboldt and Trinity (Figure 1). The complex started on August 5, 2022 from multiple lightning strikes. The fire burned approximately 42,000 acres on the SRF near the communities of Willow Creek, Salyer, and Trinity Village. On November 2, 2022, the fire was reported as 100% contained at 41,687 acres. The fire resulted in the loss of one structure, evacuation orders of local communities, and a forest closure in the burn area. Although much of the fire burned at a healthy low to moderate severity, it created unsafe conditions for some forest infrastructure while also providing an opportunity to manage the area for long term wildfire resilience. For more detailed information on Lightning Complex Fire burn severity see the [2022 Lightning Complex Fire BAER Report](#).

The Lightning Complex Project EA will address the need to implement post-fire recovery actions to restore ecosystem health, reduce hazardous fuels, and support reforestation within areas impacted by the 2022 Lightning Complex on SRF lands. The Forest Service, GBI, and subcontractors, will plan

for the introduction of mixed treatments in areas where post-fire conditions have led to dense accumulations of dead and downed fuels and there is an increased risk of high-severity reburn. Treatments will also target conifer plantations and hazard tree corridors to reduce safety risks and promote landscape resilience. Post-treatment reforestation will be necessary in areas where natural regeneration is expected to be insufficient. These actions will re-establish desired mixed conifer and hardwood species composition and densities, and improve the recreational and aesthetic quality of the landscape.

The Route 1 CE Project will address the need to implement timber stand improvement activities to enhance forest health, reduce wildfire risk, and increase resilience in plantation stands within the Lower Trinity Ranger District (Figure 1). The Forest Service, GBI, and subcontractors, will plan for the implementation of mechanical and manual treatments including plantation thinning, mastication, slash piling, and prescribed burning. These treatments are designed to produce timber, reduce competition, increase stand resilience to drought, insects, diseases, and reduce the risk of high severity wildfire. These actions will support timber production objectives and contribute to long-term forest sustainability.

Contract Scope

GBI intends to contract a qualified consulting team to establish an ID Team that will work in partnership with the SRF to complete third party NEPA to the standards and approvals required by the Forest Service. In addition to standard expectations for a qualified Environmental Planning Consulting Team, including specialized expertise to complete all required NEPA studies and assessments, the ideal candidate will be familiar with the Coast Range ecosystems and natural resource management in the area. The Environmental Planning Team shall also be responsible for facilitating public outreach and input, as is customary in the NEPA process.

The desired qualifications for the Environmental Planning Team are described below:

- Demonstrated NEPA/CEQA planning knowledge and experience;
- Experience leading programs and teams to accomplish environmental planning;
- Strong knowledge of Coast Range ecosystems and natural resource management issues;
- Experience with landscape scale forest restoration projects;
- Proven commitment to building capacity in Coast Range communities to improve natural resource management;
- Experience with forest / watershed restoration planning, and implementation;
- Strong working relationship with the Forest Service and the SRF;
- Public meeting facilitation;
- Ability to interpret scientific data to draft technical reports;
- Qualified specialist expertise in each of the following areas:
 - Botany (e.g., invasive plant management),
 - Archeology,
 - Wildlife Biology,
 - Aquatics and Fisheries,

- Public Lands,
- Recreation,
- Fire and Fuels,
- Silviculture,
- Transportation,
- Air Quality,
- Wetland Delineation,
- Hydrology,
- Soil Science,
- Scenery analysis
- GIS mapping and data analysis, and
- Implementation plan development,

Some specialties may be provided by GBI (e.g. wildlife, archaeology, and forestry/silviculture/fire and fuels). All services should be included in the Proposal but identified as discrete task expenditures for each discipline from the consultant. However, the consultant will be required to work closely with SRF / GBI Staff to ensure timely completion of tasks associated with those specialties as they pertain to the NEPA planning process.

Activities and Project Deliverable

Surveys and Permits

The consultant will work under the Authority of the Forest Service, SRF to schedule and design all necessary environmental surveys for NEPA compliance described in the Overview. The consultant will determine applicable 1995 Six Rivers National Forest Land Management Plan and the 1994 Northwest Forest Plan components and review for compliance and development of project design features for all assessments and surveys to be conducted. The consultant will use the data and research gathered to recommend project design features or proposed action modifications or alternatives.

Deliverables will be outlined in the following format:

Deliverables Format Key
All ' <u>Deliverables</u> ' are underlined
'Tasks' are not underlined
Short (1-3 page) deliverables contain "memorandum"
Non-standalone reports say "included in X report"

Task 1 – Data Collection/Presentation

The consultant will analyze the identified resources by project/document (e.g., EA or CE) below (see Tasks 1.2-1.7). The SRF will provide initial GIS datasets and other documentation in a file structure that GBI and the consultant must maintain for the duration of this work. Reference materials, templates, guidance, and other pertinent material will be provided by the SRF to GBI / the consultant via the agreed upon location and will be maintained and indexed by the consultant as part of the Two NEPA Deliverables' project records. The SRF will review the quality and format of data provided by GBI / the consultant and request any corrections prior to approval of this task.

The consultant shall collect data as necessary, by resource area, as described by Tasks below (see Tasks 1.2-1.7). Geodata for the Anticipated Survey Needs (Tasks 1.2, 1.3 [no data], 1.4, and 1.5) was posted on GBI's website along with this RFP here:
<https://thegreatbasininstitute.org/partnerships-rfps/>).

NOTE: In the geodatabase provided, the Lightning Complex EA is referred to as "LC2022" and the Route 1 & 6 CE as "Rt1". **All project data and information provided is preliminary**

Task 1.1: Setup Tasks and Geodatabase Establishment

Assumptions:

Lightning Complex Restoration Project (EA):

- The SRF will provide Natural Resource Information System Geodata.
- The SRF will define Project Area (approximately 41,598 acres).
- The SRF will define vegetation classification system (e.g. CalVeg).
- The SRF will provide Watershed, Project Area, and Terrestrial and Aquatic Critical Habitat Maps.
- The SRF will provide Specialist Report Data of Prior Survey & Sightings (Aquatic Species, Wildlife, Botany).

Route 1 & 6 (CE):

- The SRF will provide Natural Resource Information System Geodata.
- The SRF will define the Project Area (approximately 3,100 acres of treatments with a 28,234 acre analysis area).
- The SRF will define the vegetation classification system (e.g. CalVeg).
- The SRF will provide Watershed, Project Area, and Terrestrial and Aquatic Critical Habitat Maps.
- The SRF will provide Specialist Report Data of Prior Survey & Sightings (Aquatic Species, Wildlife, Botany).

Deliverables:

Lightning Complex Restoration Project (EA) deliverables include:

- Data Gap Analysis.

Route 1 & 6 (CE) deliverables include:

- Data Gap Analysis.

Task 1.2: Biological Resources Assessment & Evaluation

The consultant shall review known information (as revised by FWS every 90 days) about at-risk species habitat in the Project Area, conduct habitat mapping, surveys, and habitat assessments to the level necessary (see specific deliverables below). The consultant shall complete a fisheries, wildlife, and invasive plant / noxious weed assessment for the Two Project Areas, which will include but is not limited to:

- Review known information about at-risk species habitat.
- Coordinate and perform vegetation mapping, biological surveys, and habitat assessments in priority areas.
- Confirm Listing of Federally Listed Species to consider in the BA for the EA and CE.
- Confirm Listing of USFS Sensitive Species to consider in the BE for the EA and CE.

The consultant will support FS, SRF who will consult for Wildlife and Botany with the US Fish and Wildlife Service (USFWS), and Fisheries with the National Oceanic and Atmospheric Administration (NOAA) to produce a Biological Opinion for species with Federal status.

Assumptions:

Lightning Complex Restoration Project (EA):

- The SRF will complete necessary TES species surveys.
- The SRF will complete the Botanical Resources Assessment including a Botany BA and BE.
- The SRF will submit final documents to USFWS.

Route 1 & 6 (CE):

- The SRF will complete Fisheries Resources Assessment.
- The SRF will provide Migratory Bird Evaluation Report.
- The SRF will complete Management Indicator Species Report.
- The SRF will complete necessary TES species surveys.
- The SRF will prepare Fisheries, Terrestrial, and Botanical Biological Assessments (BA) and Biological Evaluations (BE) and submit them to USFWS and NOAA.

Reporting Deliverables:

The consultant will prepare the following deliverables for submission for a Biological Resources Assessment which will include, but not limited to, the following:

Lightning Complex Restoration Project (EA):

- Framework Analysis (memorandum).

- Fisheries Biological Assessment (standalone).
- Fisheries Biological Evaluation (standalone).
- Terrestrial Biological Assessment (standalone).
- Terrestrial Biological Evaluation (standalone).
 - Migratory Bird Evaluation Report (included in BE).
 - Management Indicator Species Report (included in BE).
- NWFP Survey and Manage Species Report (all resources combined).
- Fisheries Resource Assessment.
- Invasive Plant/Noxious Weed Risk Assessment.
- Revised Drafts to USFWS and NOAA.
- Revisions per USFWS and Final to USFWS and NOAA.
- Virtual attendance of two consultation meetings with SRF and NOAA.

Route 1 & 6 (CE):

- Invasive Plant/Noxious Weed Risk Assessment.

Fieldwork Deliverables:

Anticipated level of baseline data collection / fieldwork / survey needed. Please indicate your cost per acre by resource:

Lightning Complex Restoration Project (EA):

- Botany: Invasive Plant Surveys (estimated 373 acres or ~65 miles of roads (316 acres) and ~14 miles of trails (57 acres).

Route 1 & 6 (CE):

- Invasive Plant Surveys (estimated 303 acres or ~64 miles of roads).
- Invasive Plant Survey Report.

Task 1.3: Silviculture / Fires and Fuels

The consultant will prepare a desktop analysis of fire and fuels within the Project areas, as well as complete outlined fieldwork components (see specific deliverables below).

Assumptions:

Lightning Complex Restoration Project (EA):

- The SRF will provide FVS data for Silviculture/Fire and Fuels modeling.

Route 1 & 6 (CE):

- The SRF will provide FVS data for Silviculture/Fire and Fuels modeling.

Deliverables:

Lightning Complex Restoration Project (EA) deliverables include:

- Framework Analysis (memorandum).
- Modeling (e.g. CalVPT, LANDFIRE, IFTDSS).
- Silviculture/Fire and Fuels Report.
- Vegetation Specialist Report (included in Silviculture Report).
- Reforestation Report.
- Late Successional Reserve (LSR) Attachment.

Route 1 & 6 (CE) deliverables include:

- Modeling (e.g. CalVPT, LANDFIRE, IFTDSS).
- Silviculture/Fire and Fuels Report (in-text of NEPA doc).
- Late Successional Reserve (LSR) Attachment.

Fieldwork Deliverables:

Anticipated level of baseline data collection / fieldwork / survey needed:

Lightning Complex Restoration Project (EA):

- Reconnaissance Surveys (estimated 10-15 field days).

Route 1 & 6 (CE):

- Reconnaissance Surveys (estimated 3-5 days).

Task 1.4: Hydrology, Soils & Riparian Reserves Assessment

The consultant will identify and map waterways, wetlands, meadows, springs, and other water features using GIS, field verifications, air photos, or other methods as needed. This will include: Delineating water body buffer zones using Water Board definitions; Planning design features and proposed action mitigations or alternatives based on analysis findings. The consultant will submit the Hydrology & Soils Assessment which will include but not limited to:

- Review water bodies in the analysis area to record any special designations (303d list, special status, designated Wild and Scenic Rivers).
- Determine applicable management plans.
- Complete Cumulative Watershed Effects analysis using the Equivalent Roaded Area method.

Deliverables:

Lightning Complex Restoration Project (EA) deliverables include:

- Framework Analysis (memorandum).
- Hydrology Assessment.
- Soils Report (including Erosion, Compaction, and Burn Severity Assessment).
- Watershed analysis (included in Hydrology Assessment).

Route 1 & 6 (CE) deliverables include:

- Watershed Report.
- Hydrology Assessment (included in Watershed Report).
- Soils Analysis, in-text of NEPA doc (including Erosion, Compaction, and Burn Severity Assessment).

Fieldwork Deliverables:

Anticipated level of baseline data collection / fieldwork / survey needed. Riparian Reserve flagging and Soils/Geology surveys will ideally be done in conjunction by the same team:

Lightning Complex Restoration Project (EA):

- Riparian Reserve flagging (estimated 2,666 acres or ~134 miles).
- Soils/Geology survey (estimated 5-10 days).

Route 1 & 6 (CE):

- Riparian Reserve flagging (estimated 926 acres or ~53 miles).
- Soils/Geology survey (estimated 2-3 days).

Task 1.5: Archaeological Assessment

The consultant shall complete an archaeological inventory and effects assessments for the Project Area, with permissions and permits from the Forest Service and other agencies as needed. All data and reports shall be protected and treated as confidential as outlined in the *Programmatic Agreement among the USDA Forest Service, Pacific Southwest Region (Region 5), California State Historic Preservation Officer and the Advisory Council on Historic Preservation Regarding the Processes for Compliance with Section 106 of the National Historic Preservation Act for Management of Historic Properties by the National Forests of the Pacific Southwest Region and the Archaeological Resources Protection Act*. Task may include but are not limited to:

- Conduct cultural surveys as directed by the SRF for Section 106 compliance (forest will provide survey protocols).
- Perform a records search of previous cultural inventories and historic properties within the Project Areas.
- Analyze effects of project activities on cultural resources within the Project Area.
- Coordinate findings with Heritage IDT Specialist for concurrence.

Assumptions:

Lightning Complex Restoration Project (EA):

- The SRF will conduct Tribal Consultation.
- The Region 5 Programmatic Agreement will be used for Section 106 compliance for this project.
- No cultural sites will be evaluated for the National Register of Historic Places for this project.
- The SRF will provide the consultant with the areas of the project that will require cultural surveys.

Route 1 & 6 (CE):

- The SRF will conduct Tribal Consultation.
- The Region 5 Programmatic Agreement will be used for Section 106 compliance for this project.
- No cultural sites will be evaluated for the National Register of Historic Places for this project.
- The SRF will provide the consultant with the areas of the project that will require cultural surveys.

Reporting Deliverables:

Lightning Complex Restoration Project (EA) deliverables include:

- Records Search at the NWIC CHRIS center to be followed up by Forest Archives Search (Records Searches for EA and CE may be combined for efficiency).
- Framework Analysis (memorandum).
- Archaeological Project Effects Analysis Report.
- The consultant shall submit proof of the completion of the Archaeological Inventory and Archaeological Project Effects Analysis Report to the FS Heritage IDT Specialist.

Route 1 & 6 (CE) deliverables include:

- Records Search at the NWIC CHRIS center to be followed up by Forest Archives Search (Records Searches for EA and CE may be combined for efficiency).
- Archaeological Project Effects Analysis Report.
- The consultant shall submit proof of the completion of the Archaeological Inventory and Archaeological Project Effects Analysis Report to the FS Heritage IDT Specialist.

Fieldwork Deliverables:

Anticipated level of baseline data collection / fieldwork / survey needed. This task will include but not be limited to:

- Conducting intensive pedestrian surveys in project areas that do not have existing coverage to current standards or previous survey coverage;
- Record any newly identified cultural resources (for the purpose of this RFP we assume 30-40 new sites) on California Department of Parks and Recreation (CA DPR 523) forms, consistent with the documentation standards outlined in the R5 PA and the SRF Heritage Program requirements;
- Re-recording, monitoring, or supplementing existing site records (for the purposes of this RFP assume 16 known sites across both project areas) as needed based on discrepancies, alterations, or impacts observed;
- Using SRF standards for GPS accuracy to record site boundaries (resource-grade Global Positioning System (GPS)).
- The consultant shall coordinate with the SRF Heritage IDT Specialist for review of findings and Survey Report.

Lightning Complex Restoration Project (EA):

- Section 106 and/or Reconnaissance Surveys (estimated 6,457 acres and 13 archaeological sites).
- Class III Inventory Report, completed site records, and associated field notes and photos as specified in fieldwork SOW (Class III Inventory Reports for EA and CE may be combined for efficiency).

Route 1 & 6 (CE):

- Section 106 and/or Reconnaissance Surveys (estimated 2,626 acres and 3 archaeological sites).
- Class III Inventory Report, completed site records, and associated field notes and photos as specified in fieldwork SOW (Class III Inventory Reports for EA and CE may be combined for efficiency).

Task 1.6: Recreation Assessment

SRF will complete the Framework Analysis and Recreational Assessment, including the identification of recreational facilities and activities within the Project Area and potential beneficial or adverse effects related to fuel loads. The consultant will be responsible for integrating this SRF provided information into the Environmental Assessment (EA) and Categorical Exclusion (CE), as applicable.

Assumptions:

Lightning Complex Restoration Project (EA):

- The SRF will complete Framework Analysis.
- The SRF will complete Recreational Assessment.

Route 1 & 6 (CE):

- The SRF will complete the Recreational Assessment.
- The SRF will complete the Wild and Scenic River Report.

Task 1.7: Transportation

The consultant will provide an analysis of transportation resources, including a summary of existing roads using existing GIS and other information from the SRF (miles of FS roads by maintenance level [Levels 1 to 5] and non-FS roads [State, County, Local, Private] bordered by FS lands within the Project Area).

Deliverables:

Lightning Complex Restoration Project (EA) deliverables include:

- Framework Analysis (memorandum).
- Transportation Assessment Report which will include but not be limited to the Transportation Effects Analysis for the Project.

Route 1 & 6 (CE):

- Transportation Analysis (in-text of NEPA doc).

Task 2 – Meeting Coordination, Attendance, and Participation

The GBI, consultant, and Forest Service personnel will participate in an initial kickoff in-person meeting to be hosted by the SRF, on a day, at a specific time and location (method) agreed upon. The project leaders from the SRF and the consultant who will be responsible for coordinating, organizing and leading the work described within this RFP SOW must be identified at, or prior to, the initial kickoff in-person meeting. Coordination and scheduling of the initial kickoff in-person meeting will be the responsibility of the SRF and GBI. A second field-based meeting may be scheduled upon the consultant's request to familiarize the consultant's staff with the Project Area. This field-based meeting will be coordinated by the SRF and GBI.

The consultant is responsible for establishing a recurring virtual meeting schedule with SRF, as agreed to in writing. The consultant is responsible for scheduling all meetings and briefings with the Forest Supervisor and staff, as well as appropriate GBI, consultant, and Forest Service personnel to provide support as needed. The consultant will provide draft agenda outlines for review by the SRF and GBI no less than 48hrs prior to a given meeting. The SRF and GBI will add agenda topics based on project specific issues, concerns, questions, or other topics as needed.

A preliminary list of resource areas that have required tasks as a part of this description of work, and therefore require participation in meetings and/or calls, as necessary, will be provided by the SRF.

Assumptions:

Lightning Complex Restoration Project (EA):

- The SRF will coordinate Tribal meeting(s) and the consultant is not expected to attend.

Route 1 & 6 (CE):

- The SRF will coordinate Tribal meeting(s) and the consultant is not expected to attend.

Deliverables:

Lightning Complex Restoration Project (EA) deliverables include:

- Initial kickoff in-person meeting agendas, notes, and materials.
- Bi-weekly IDT virtual meeting attendance.
- Bi-weekly IDT virtual meeting agendas, notes, and materials for 12 months.

Route 1 & 6 (CE) deliverables include:

- Initial Kickoff in-person meeting agendas, notes, and materials.
- IDT virtual meeting attendance, monthly.
- Monthly IDT virtual meeting agendas, notes, and materials for 9 months.

Task 3 – Project Record and Document Management

The SRF shall establish one location with a specific file structure to house project records with working and final files. The consultant shall organize the information composing the project record by topic and include an index using a specific Forest Service files structure provided by the SRF. The project record

includes all information and analyses either generated or obtained from other sources, or used to support documentation and analyses. A complete project record is the entirety of the information relied upon within the consultant's possession. The geospatial data files and metadata must be included. The consultant shall prepare and assemble a project record and furnish one electronic copy (of electronic documents) on electronic media to the SRF. The project record must be provided within one (1) week of initiating the objection filing period (should an Emergency Declaration be unavailable) and completing Task 4 and all of Task 4 subtasks.

Assumptions:

Lightning Complex Restoration Project (EA):

- The SRF will set up one electronic file location with team access.
- Final documents will be 508 compliant.

Route 1 & 6 (CE):

- The SRF will set up one electronic file location with team access.
- Final documents will be 508 compliant.

Deliverables:

Lightning Complex Restoration Project (EA) deliverables include:

- Establish and maintain the working project record, folder structure, and indexing system using FS protocols/direction.
- Final administrative record and index per the FS' direction.

Route 1 & 6 (CE) deliverables include:

- Establish and maintain the working project record, folder structure, and indexing system using FS protocols/direction.
- Final administrative record and index per the FS' direction.

Task 4 – Environmental Assessment, Conduct NEPA Scoping & Facilitate Decision Process

The consultant shall conduct all necessary actions to produce National Environmental Policy Act (NEPA) compliance documents for review and finalization by the SRF Responsible Official. In collaboration with SRF, the consultant will provide facilitation and documentation of stakeholder group public engagement with regards to scoping and comments. The consultant will work closely with the SRF to complete the appropriate environmental studies and analyses for adequate environmental review and public scoping. It is expected that an Environmental Assessment will be adequate for this project, and the SRF will provide a template. However, the SRF Responsible Official will determine whether an Environmental Impact Statement (EIS) is required. If a FONSI cannot be completed under an Environmental Assessment, and an EIS is required, any necessary additional work will be procured outside the scope of this project. The consultant will work with the SRF to

finalize all NEPA compliance documents and facilitate the public participation and notification process for the final decision.

Task 4.1: Public Engagement

Public engagement will be developed collaboratively with the SRF and GBI. The consultant will be provided a standard mailing list created by the SRF and is expected to ensure the accuracy of the contact information for each entry. Additional contacts may be added to the mailing list as requested by the public or the Forest Service. The consultant will use the provided list and maintain and update the mailing list throughout the planning process. Each version of the mailing list used to distribute materials before initiating each public involvement phase will be saved in the project record. The consultant may support the SRF in coordinating field trips and public meetings, including press releases, mailings, phone calls, announcements, and other related materials. The consultant is responsible for distributing these materials as appropriate and agreed to prior to the event. The consultant will submit notices to the newspaper of record and ensure their online publication.

Deliverables:

Lightning Complex Restoration Project (EA) deliverables include:

- Maintain mailing list and mail public engagement materials.
- Develop and submit notices to a newspaper, website, or other publication of record.

Route 1 & 6 (CE) deliverables include:

- Maintain mailing list and mail public engagement materials.
- Develop and submit notices to a newspaper, website, or other publication of record.

Task 4.2: Environmental Analysis

The consultant will gather past, present, and reasonably future foreseeable actions specific to the forest and associated with the Project's analysis areas. The consultant will complete effects analysis for required natural and cultural resources and those that are relevant to the action alternatives and issues, and complete required environmental effects and if decided, specialist reports. The consultant will complete all steps required for consultation with US Fish and Wildlife Service, the State Historic Preservation Office (SHPO). All consultation steps would include support from the SRF and any inherently governmental responsibilities would properly lie with Forest Service personnel. The consultant will recommend the type of NEPA document needed or required based on environmental effects findings. The consultant needs to conduct a preliminary finding of effects prior to finalizing effects analysis and specialist reports. If the consultant believes that there will be a significant impact from the proposed project, then a meeting with the SRF will be required to discuss the consultant's preliminary determination and, if necessary, modify the proposed action to avoid significant impacts.

Deliverables:

Lightning Complex Restoration Project (EA) deliverables include:

- Draft EA (for internal FS review prior to publication).
- Draft EA (for publication).
- Design Criteria.

Route 1 & 6 (CE) deliverables include:

- Draft CE (for internal FS review).
- Draft CE.
- Design Criteria.

Task 4.3: Formal Comment Period

The Consultant will prepare comment period materials for SRF review and edits, initiate the comment period, and provide final materials to the SRF. Final comment materials will be distributed to the updated mailing list and incorporate updates by the consultant.

Deliverables:

Lightning Complex Restoration Project (EA) deliverables include:

- Materials to initiate the public comment period on the EA.
- Agenda and meeting notes for a Post Comment Period Review specific meeting.
- Comment report or memo on outcome of comment period.

Task 4.4: Final NEPA Documents, Findings/Decisions & Objection Resolution

The consultant will complete content analysis of comments received and document by considering and responding to comments. The consultant will edit and finalize environmental document and, if decided by the line officer, the specialist reports as appropriate based on comments received. The consultant will write a draft Decision Notice and Finding of No Significant Impact (FONSI) (assumes EA is environmental document). The consultant will prepare objection related materials and send to Forest Service for review, coordinate with forest and regional office prior to initiating the objection filing period, and initiate 45-day objection filing period, and provide the project record, including final objection materials. Note if Emergency Authority is approved, there will be no objection period. Final comment materials will be distributed to the updated mailing list and incorporate updates into PALS by the consultant. The consultant will update and finalize the Decision Notice and FONSI, and any related materials for Forest Service review, and coordinate Forest Supervisor's signature for Decision Notice for the EA.

Assumptions:

Lightning Complex Restoration Project (EA):

- The SRF will provide decision notice signatures.

Route 1 & 6 (CE):

- The SRF will provide decision notice signatures.

Deliverables:

Lightning Complex Restoration Project (EA) deliverables include:

- Response to Comments (RTC) Report and final comment materials.
- Final EA and FONSI.
- Final Design Criteria
- Briefing for Forest Supervisor or signing officer.

Route 1 & 6 (CE) deliverables include:

- Findings of Applicability and No Extraordinary Circumstances (FANEC).
- Briefing for Forest Supervisor or signing officer.
- Final Design Criteria

Contract Deliverables and Timelines

The consultant shall provide the following deliverables in accordance with the desired timeline from the SRF. This timeline is subject to change according to SRF needs or speed of deliverable completion:

Lightning Complex Restoration Project (EA) - Proposed Timeline:

Task	Proposed Due Date
Project start date (internal)	October
Project Development / Draft Proposed Action	TBD
Contract review / Scope of Work Development / Finalization	TBD
Effects Analysis Timeline Update and Proposed Action (Issue and Alternative Development- if needed)	TBD
Specialist Reports and Implementation Plan Draft	TBD
Complete Analysis, Regulatory Concurrence	TBD
Prepare EA/FONSI	TBD
Legal Notice for Objection Filing Period	TBD
Objection Period ends (if needed)	TBD
Objection Response Period / Decision Document	TBD

Estimated Start Date & Contract Time (to complete the above Specific Work Requirements):

Start: October

End: <1 year

Route 1 & 6 (CE) - Proposed Timeline:

Task	Due Date
Project start date (internal)	Upon completion of the Lightning Complex EA
Project Development / Draft Proposed Action	TBD
Contract review / Scope of Work Development / Finalization	TBD
Effects Analysis Timeline Update and Proposed Action	TBD
Specialist Reports and Design Criteria Draft	TBD
Complete Analysis and Design Criteria	TBD
Prepare Final CE	TBD
FANEC	TBD

Estimated Start Date & Contract Time (to complete the above Specific Work Requirements):

Start: Upon completion of the Lightning Complex EA

End: ~9 months

Deliverables Summary Table

Expected Deliverables	
Lightning Complex (EA)	Route 1 & 6 (CE)
Task 1: Data Collection	
Data Gap Analysis.	Data Gap Analysis.
Task 1.2: Biological Resources Assessment & Evaluation	
<u>Framework Analysis</u> (memorandum).	<u>Invasive Plant/Noxious Weed Risk Assessment.</u>
<u>Fisheries Biological Assessment</u> (standalone).	
<u>Fisheries Biological Evaluation</u> (standalone).	
<u>Terrestrial Biological Assessment</u> (standalone).	
<u>Terrestrial Biological Evaluation</u> (standalone).	
<u>Migratory Bird Evaluation Report</u> (included in BE).	
<u>Management Indicator Species Report</u> (included in BE).	
<u>NWFP Survey and Manage Species Report</u> (all resources combined).	
<u>Fisheries Resource Assessment.</u>	
<u>Invasive Plant/Noxious Weed Risk Assessment.</u>	
Revised Drafts to USFWS and NOAA.	
<u>Revisions per USFWS and Final to USFWS and NOAA.</u>	
<u>Virtual attendance of two consultation meetings with SRF and NOAA.</u>	
Task 1.3: Silviculture / Fires and Fuels	
<u>Framework Analysis</u> (memorandum).	Modeling (e.g. CalVPT, LANDFIRE, IFTDSS).
Modeling (e.g. CalVPT, LANDFIRE, IFTDSS).	<u>Silviculture/Fire and Fuels Report</u> (in-text of NEPA doc).
<u>Silviculture/Fire and Fuels Report.</u>	<u>Late Successional Reserve (LSR) Attachment.</u>
<u>Vegetation Specialist Report</u> (included in Silviculture Report).	
<u>Reforestation Report.</u>	
<u>Late Successional Reserve (LSR) Attachment.</u>	

Expected Deliverables	
Lightning Complex (EA)	Route 1 & 6 (CE)
Task 1.4: Hydrology, Soils & Riparian Reserves Assessment	
<u>Framework Analysis</u> (memorandum).	<u>Watershed Report</u> .
<u>Hydrology Assessment</u> .	<u>Hydrology Assessment</u> (included in Watershed Report).
<u>Soils Report</u> (including Erosion, Compaction, and Burn Severity Assessment).	<u>Soils Analysis</u> , in-text of NEPA doc (including Erosion, Compaction, and Burn Severity Assessment).
<u>Watershed analysis</u> (included in Hydrology Assessment).	
Task 1.5: Archaeological Assessment	
Records Search at the NWIC CHRIS center to be followed up by Forest Archives Search (Records Searches for EA and CE may be combined for efficiency).	Records Search at the NWIC CHRIS center to be followed up by Forest Archives Search (Records Searches for EA and CE may be combined for efficiency).
<u>Framework Analysis</u> (memorandum).	<u>Archaeological Project Effects Analysis Report</u> .
<u>Archaeological Project Effects Analysis Report</u> .	
The consultant shall submit proof of the completion of the <u>Archaeological Inventory and Archaeological Project Effects Analysis Report</u> to the FS Heritage IDT Specialist.	The consultant shall submit proof of the completion of the <u>Archaeological Inventory and Archaeological Project Effects Analysis Report</u> to the FS Heritage IDT Specialist.
Task 1.7: Transportation	
<u>Framework Analysis</u> (memorandum).	<u>Transportation Analysis</u> (in-text of NEPA doc).
<u>Transportation Assessment Report</u> which will include but not be limited to the Transportation Effects Analysis for the Project.	
Task 2 – Meeting Coordination, Attendance, and Participation	
<u>Initial kickoff in-person meeting agendas, notes, and materials</u> .	<u>Initial Kickoff in-person meeting agendas, notes, and materials</u> .
<u>Bi-weekly IDT virtual meeting attendance</u> .	IDT virtual meeting attendance, monthly.
<u>Bi-weekly IDT virtual meeting agendas, notes, and materials</u> for 12 months.	<u>Monthly IDT virtual meeting agendas, notes, and materials</u> for 9 months.
Task 3 – Project Record and Document Management	
Establish and maintain the working project record, folder structure, and indexing system using FS protocols/direction.	Establish and maintain the working project record, folder structure, and indexing system using FS protocols/direction.
Final administrative record and <u>index</u> per the FS' direction.	Final administrative record and <u>index</u> per the FS' direction.

Expected Deliverables	
Lightning Complex (EA)	Route 1 & 6 (CE)
Task 4.1: Public Engagement	
Maintain mailing list and mail public engagement materials.	Maintain mailing list and mail public engagement materials.
<u>Develop and submit notices to a newspaper, website, or other publication of record.</u>	<u>Develop and submit notices to a newspaper, website, or other publication of record.</u>
Task 4.2: Environmental Analysis	
<u>Draft EA</u> (for internal FS review prior to publication).	<u>Draft CE</u> (for internal FS review).
<u>Draft EA</u> (for publication).	<u>Draft CE.</u>
<u>Design Criteria.</u>	<u>Design Criteria.</u>
Task 4.3: Formal Comment Period	
<u>Materials</u> to initiate the public comment period on the EA.	
<u>Agenda and meeting notes</u> for a Post Comment Period Review specific meeting.	
<u>Comment report or memo</u> on outcome of comment period.	
Task 4.4: Final NEPA Documents, Findings/Decisions & Objection Resolution	
<u>Response to Comments (RTC) Report and final comment materials.</u>	<u>Findings of Applicability and No Extraordinary Circumstances (FANEC).</u>
<u>Final EA and FONSI.</u>	<u>Briefing for Forest Supervisor or signing officer.</u>
<u>Final Design Criteria.</u>	<u>Final Design Criteria.</u>
<u>Briefing for Forest Supervisor or signing officer.</u>	

Anticipated Survey Needs Summary Table

Geodata for the Anticipated Survey Needs (Tasks 1.2, 1.3 [no data], 1.4, and 1.5) was posted on GBI's website along with this RFP here: <https://thegreatbasininstitute.org/partnerships-rfps/>).

NOTE: In the geodatabase provided, the Lightning Complex EA is referred to as "LC2022" and the Route 1 & 6 CE as "Rt1". **All project data and information provided is preliminary.**

Expected Fieldwork Summary	
Lightning Complex (EA)	Route 1 & 6 (CE)
Task 1.2: Biological Resources Assessment & Evaluation	
Botany: Invasive Plant Surveys (estimated 373 acres or ~65 miles of roads (316 acres) and ~14 miles of trails (57 acres). <i>Geodata: LC2022_Botany_Invasive_Survey_Needs</i>	Botany: Invasive Plant Surveys (estimated 303 acres or ~64 miles of roads). <i>Geodata: Rt1_Botany_Invasive_Survey_Needs</i>
Task 1.3: Silviculture / Fires and Fuels	
Reconnaissance Surveys (estimated 10-15 field days). <i>No Geodata Provided</i>	Reconnaissance Surveys (estimated 3-5 field days). <i>No Geodata Provided</i>
Task 1.4: Hydrology, Soils & Riparian Reserves Assessment	
Riparian Reserve Flagging (estimated 2,666 acres or ~134 miles). <i>Geodata: LC2022_Riparian_Reserve_Flagging</i>	Riparian Reserve Flagging (estimated 926 acres or ~53 miles). <i>Geodata: Rt1_Riparian_Reserve_Flagging</i>
Soils/Geology survey (estimated 5-10 days). <i>No Geodata Provided</i>	Soils/Geology survey (estimated 2-3 days). <i>No Geodata Provided</i>
Task 1.5: Archaeological Assessment	
Section 106 and/or Reconnaissance Surveys (estimated 6,457 acres and 13 archaeological sites). <i>Geodata: LC2022_Heritage_Survey_Needs</i>	Section 106 and/or Reconnaissance Surveys (estimated 2,626 acres and 3 archaeological sites). <i>Geodata: Rt1_Heritage_Survey_Needs</i>
<u>Class III Inventory Report, completed site records, and associated field notes and photos as specified in fieldwork SOW</u> (Class III Inventory Reports for EA and CE may be combined for efficiency).	<u>Class III Inventory Report, completed site records, and associated field notes and photos as specified in fieldwork SOW</u> (Class III Inventory Reports for EA and CE may be combined for efficiency).

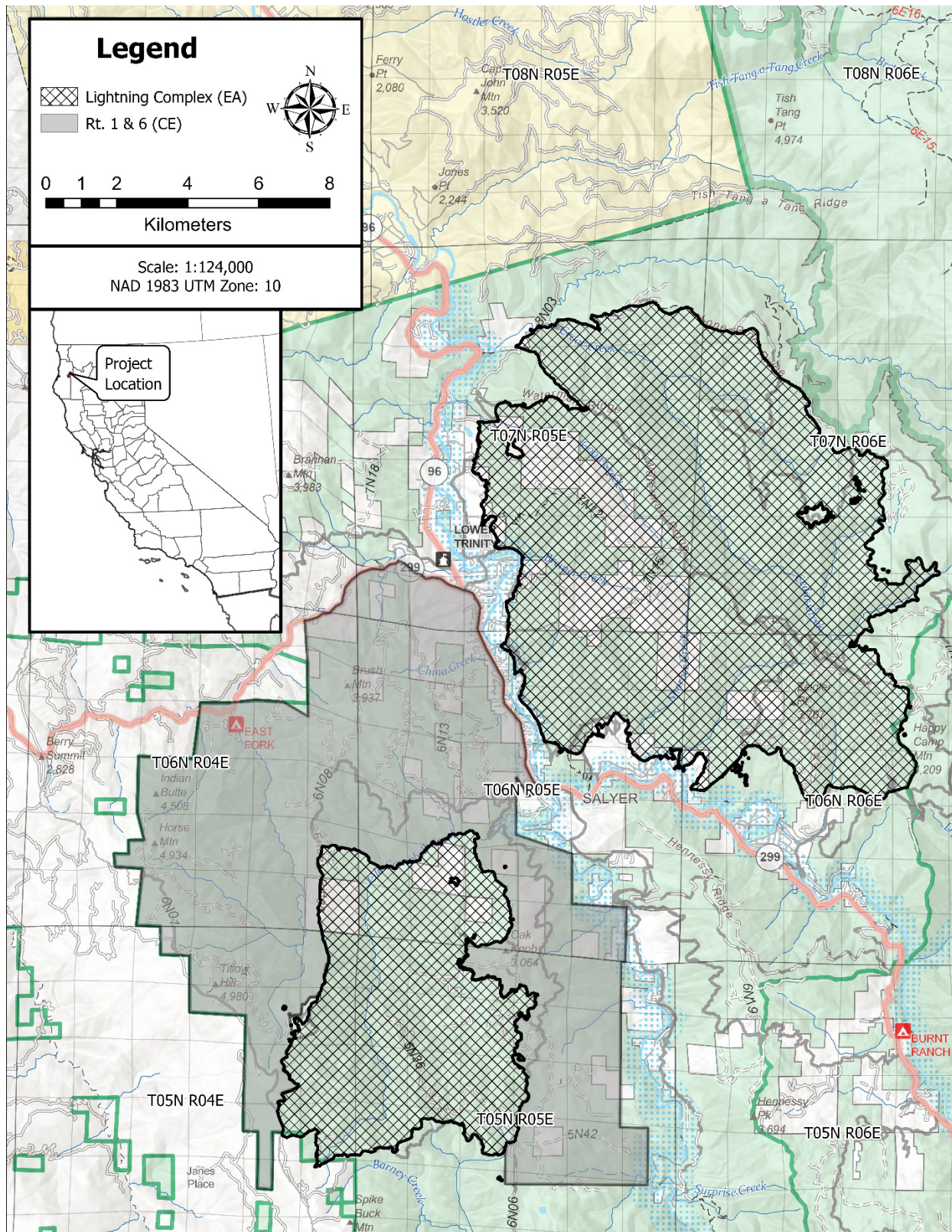


Figure 1. Project Areas for the Lightning Complex EA and Route 1 CE.

Criteria for Competitive Applications

The evaluation criteria listed below will be used to evaluate Proposals for the purpose of ranking them based on how fully each Proposal meets the requirements of this RFP. The successful consultant may be asked to modify objectives, work plans, or budgets prior to final approval of the award.

Understanding of the Scope of Work. A statement demonstrating a thorough understanding of the Project, team building, personnel management, field surveys and data analysis, and appropriate assessments as required by NEPA. Providing technical expertise in completing environmental affects analysis and drafting NEPA supporting documents for Federal Agency review and approval. Preference will be given to consultants who are capable of building an IDT team workforce based in the Coast Range for future NEPA collaboration with the SRF in alignment with forest planning objectives. Additional credit will be given to applicants involved with active environmental work programs in the Coast Range. (25%)

Technical Approach. The proposed technical approach for fulfilling the scope of work must demonstrate familiarity with the Project, IDT team building in partnership with federal agencies, and proficiency in understanding the survey and analysis requirements of the NEPA process, and demonstration of successful management of complex projects with high levels of technical expertise required. (25%)

Qualifications of Proposed Personnel. The Proposal should describe relevant professional experience in the following areas: (a) experience dealing with federal, state, and local governmental agencies, as well as national and local organizations involved with NEPA, and experience completing surveys, analysis or other services in support of NEPA compliance for the Forest Service, if any; (b) an understanding of conducting NEPA generally, and preparing NEPA documents, specifically; (c) biographies including resumes and/or vitae of key staff and their potential role in your proposed work area. If consultant intends to hire these key staff as an outcome of this award, a succinct staffing plan complete with position descriptions seeking necessary specialists and/or letters of interest from prospective hires will be accepted in lieu of team resumes (20%)

Consultant's Past Performance. Preference will be given to those who have experience conducting NEPA compliance on Federal lands with experience writing resource reports for California forest ecosystems and adherence to the 1994 USFS Northwest Forest Plan. The ideal applicant will be able to showcase its experience working cooperatively with the U.S. Forest Service and have examples of NEPA documentation that they have provided to previous clients. The Proposal should include: (a) information on the consultant's past performance related to the NEPA technical expertise you will be offering; (b) list recent (last 2-5 years) accomplishments, events and previous services related to the NEPA technical

expertise; (c) references including a list of three clients who have received services from your organization that is similar in nature to the proposed work; include names, postal and email addresses, and telephone numbers. (15%)

Cost Proposal. The cost Proposal budget should be cost effective and should maximize the value for monies requested in the consultant's budget. Proposal costs should be presented in a 'time and materials, not to exceed' format quoted in United States dollars. Pricing for activities under this Proposal shall be on a time-and-materials basis for hours actually spent in performance of the work described within this RFP plus direct costs. Consultant shall provide unit (hourly) costs for key personnel expected to perform work under this Proposal. Proposal costs should be the minimum necessary to adequately achieve the stated scope of work. (15%)

Submission Requirements

Submission requirements will include two distinct and separate documents: 1) Technical Proposal and 2) Cost Proposal.

Interested parties will submit Proposals via email to

Preston Alden, palden@thegreatbasininstitute.org and

Miles Carlile mcarlile@thegreatbasininstitute.org and provide the information as described below:

1. Technical Proposal (15-page limit for entire Technical Proposal):

Contact Information - Primary contact person, company name, address, phone, email, and website.

Narrative - Concise description of the work plan to include the following sections from the Criteria for Competitive Applications:

- Understanding of the Scope of Work.
- Technical Approach.
- Qualifications of Proposed Personnel.
- The consultant's Past Performance.

The following items do not count towards the 15-page limit for the Technical Proposal:

- Cover Letter.
- Cover Page.
- Table of Contents.
- Resumes.

2. Cost Proposal:

The Cost Proposal includes the Proposal budget and budget justification with the following detail breakdown:

- A cost proposal table, by task (Tasks 1-6 above), in GBI's Cost Proposal Spreadsheet format, must be provided. The Cost Proposal Spreadsheet is available on our website: <https://thegreatbasininstitute.org/partnerships-rfps/> along with the RFP and other related materials.
 - The required spreadsheet should be supported by detail including level of effort (hours) and a billing rate for each position.
- Anticipated levels of data collection / fieldwork / survey for the following tasks shall be provided as Option A through Option D on the following table (or on the consultant's Cost Proposal spreadsheet) and are made part of consultant's Cost Proposal (subject to final negotiation after selection):

- Task 1.2: Biological Resources Assessment & Evaluation - Invasive Plant Surveys.
- Task 1.3: Silviculture / Fires and Fuels - Reconnaissance Surveys.
- Task 1.4: Hydrology, Soils & Riparian Reserves Assessment - Riparian Reserve Delineation and Soils/Geology Surveys.
- Task 1.5: Archaeological Assessment - Section 106 and/or Reconnaissance Survey.

Late Proposal in response to this RFP will not be accepted.

All costs required for the preparation and submission of a Proposal in response to this RFP shall be borne by the consultant.

The Proposal in response to this RFP shall remain open to acceptance and is irrevocable for a period of 90 days, unless otherwise specified in the RFP documents.

The right is reserved to reject any or all Proposals, or to accept one part of a Proposal and reject the other, unless the consultant stipulates to the contrary.

GBI has the right to decline to award this contract or any part of it for any reason.

Respondents may indicate that they consider any part of their Proposal to be confidential and/or trade secret information by clearly stamping any pages that contain such information with the word "CONFIDENTIAL" in the header of that page. However, respondents must also be aware that, as a public agency, this project is subject to the California Public Records Act, and by submitting a Proposal to GBI, all parts of the Proposal may become a public record that is subject to disclosure to any member of the public. Should GBI receive a Public Records Act request to disclose a Proposal that contains allegedly confidential information, GBI will independently assess the respondent's assertion of a need for confidentiality to determine whether any part of the Proposal can be withheld from disclosure.

Protests

Protests must be in writing and received no later than 7 business days after GBI issues the Notice of Intent to Award, which is sent by electronic mail to all entities who submitted a Proposal. GBI will reject the protest as untimely if it is received after this specified time frame. Protests will be accepted from proposers only. If the protest is mailed and not received by GBI, the protesting party bears the burden of proof to submit documentation (e.g., certified mail receipt) that the protest was timely sent to be otherwise received by GBI within the RFP protest period.

Proposal protests must contain a detailed and complete written statement describing the reason(s) for protest. The protest must include the RFP title, the name of the firm protesting, and include a name, telephone number, email address and physical address of the protestor. If a firm is representing the protestor, they shall include their contact information in addition to that of the protesting firm.

Protests must be mailed or hand delivered to **Peter Woodruff, CEO, 16750 Mount Rose Highway, Reno, NV 89511**. Facsimile and electronic mail protests are sent to **Peter Woodruff at pwoodruff@thegreatbasininstitute.org** and must be followed by a mailed or hand delivered identical copy of the protest and must arrive within the 5-day time limit.

The GBI CEO, in consultation with the Forest Service and GBI Board of Directors, will investigate the protest and if determined to be valid the Institute may reject and re-propose or not re-propose the work, or recommend award to the remaining best qualified proposer. Affected proposers will be notified by electronic mail within 7 business days of the action taken.

GBI may transmit copies of the protest and any attached documentation to all other parties who may be affected by the outcome of the protest. The decision of GBI as to the validity of any protest is final. GBI's final decision will be transmitted to all affected parties in a timely manner. The procedure and time limit set forth are mandatory and are the proposer's sole and exclusive remedy in the event of a protest of the rating of its proposal or award of the contract. The failure to pursue said remedy shall constitute a waiver of any right to further pursue said protest, including filing a Government Code claim or legal proceedings.

Exhibit A: **DRAFT** Purpose and Need & Proposed Action - Lightning Complex Restoration Project (EA)

Source: Lightning Complex (2022) Restoration and Fuel Management Project (SRF internal document)

The goal of this project is to restore the lands impacted by the 2022 Lightning complex on the Six Rivers National Forest and prepare the landscape for future wildfire resilience. The Lightning Complex burned approximately 42,000 acres in August 2022 near the communities of Willow Creek, Salyer, and Trinity Village. Although much of the fire burned at a healthy low to moderate severity, it created unsafe conditions for some forest infrastructure while also providing an opportunity to manage the area for long term fire resilience. More specifically, the following needs were identified for this Project Area:

- There is a need to reduce safety hazards adjacent to roads, trails, facilities, and strategic containment features.
- There is a need to maintain the integrity and utility of the NFS roads, trails, and facilities.
- There is a need to reduce fuel loading associated with dead, dying, fire-damaged, and fire caused fallen hazard trees adjacent to roads, trails, facilities, and strategic containment features-potential operational delineations (PODs).
- There is a need to reduce the overstocked fuels in conifer plantations.

Proposed Action Summary

The Forest Service is proposing the Lightning Complex and Fuel Management Project to create fuel breaks, reduce excessive fuel loading, remove hazard trees and improve and restore forest ecosystem health. The Lightning Complex planning area encompasses approximately 41, 596 acres. The project would treat approximately 11,060 acres of NFS lands. Treatment would consist of: 1) commercially harvesting 3,700 acres of green and partially burned plantations to remove dead trees and thin stands; 2) commercial removal of 1,560 acres of hazard trees along roads and trails and removal of dead trees in high severity patches; 3) 5,800 acres of linear fuel break treatments along roadside, POD lines and around private property; and 4) hazard tree removal and trail rehabilitation along 14 miles of trail.

Proposed Treatments

Treatment Type	Slope	Acres
Linear Fuel Breaks		5,800
Hazard Tree Removal / High Severity Patches	<35%	0
	>35%	1,600
Plantation Thinning		3,700
Total Acres		11,060

Note: the amount of cable vs. ground-based logging still needs to be verified.

PRELIMINARY PROPOSED ACTION

- Linear fuel breaks would be constructed in a 300-foot buffer on both sides of roads and POD lines within the fire footprint. Treatment would consist of thinning trees and removing brush within treatment areas. Treatments would include both manual and mechanical fuel reductions and prescribed fire treatments. Treatments would utilize mechanical and manual fuels treatments as well as prescribed fire to create a shaded fuel break.
- Additional fuels reduction would be used to reduce fuels in a 300-foot buffer around private property using manual and mechanical treatments. Potential fuels reduction treatments:
 - Thinning understory vegetation, including trees with stems up to 12-inch dbh (diameter at breast height)
 - Mastication, chipping and machine piling along existing roads (no new road construction allowed)
 - Pruning
 - Lop and scatter
 - Hand piling
 - Fireline construction
 - Pile burning
 - Broadcast/jackpot burning
 - Understory burning
 - Prescribed fire ignition (all fire intensities permitted)
 - Fuels maintenance (allows for repeated use of tools listed above)

- Treatments in green plantations with low severity fire behavior would be treated with commercial thinning or timber stand improvements (TSI). Both treatments are designed to reduce stand density, decrease competition and improve growing space for residual trees. Commercially thinned plantations would consist of thinning trees greater than 8" DBH. Plantations without a commercial saw-log component (TSI) would consist of thinning trees less than 8" DBH and reducing brush. Commercial biomass would be a by-product of TSI treatments.
- Identify, fell, and remove hazardous trees, including fire killed trees that have already fallen along maintenance level 2, 3, 4, 5 NFS roads, county roads and FS roads accessing private parcels. Treatment area consists of 600 feet corridor, (300 feet each side of centerline of road).
- Plantations with moderate to high severity burn patches would be cleared of dead vegetation and thinned as appropriate.
- High, and some moderate, intensity burn areas would be identified for restoration, where hazard trees would be felled and removed, and slash would be mitigated through burn piles, lop and scatter, mastication, or removed. Patches of high tree mortality within the fire footprints would utilize commercial removal of biomass and replanting to restore forested areas. Within the high intensity burn areas, where hazard trees won't reach the roads or trails, trees may be felled and left for wildlife downed logs or left standing within the 600-foot buffers. Treatments would be designed to remove standing dead trees and excess fuels, remove hazard trees along roadsides and restore forested areas.
- Restoration treatments would include selective replanting of trees including conifers and hardwoods (specifically black oak) as well as grass and forbs.
- Trail rehabilitation would include removal of hazard trees along trails and rehabilitation of the trail bed.

TREATMENT DESCRIPTIONS

Thinning Understory Fuels

Thinning understory fuels involves cutting brush, saplings, pole trees, and small-diameter (no larger than 10 inches DBH in non-late seral stands) lower canopy trees that constitute surface and ladder fuels to reduce dense understory fuel loading and associated fire severity and risk of transition to a canopy fire. Douglas-fir and other conifers would be selectively removed from oak woodlands to create 15 feet to 25 feet wide spacing. Larger trees may be treated per the silviculturist to reduce overcrowded canopies and the risk of active crown fire (from tree canopy to tree canopy), as specified elsewhere to reduce overcrowding and risk of canopy fire. In NSO N/R habitat and late seral stands, the upper limit for vegetative fuel removal would be reduced to no larger than 8 inches. Across the landscape, the dominant vegetation structure would remain, as more than 40% of pre-existing shrub or canopy cover would be left. Douglas-fir and other conifers would be selectively removed from oak woodlands. Additionally, woody fuels removed during understory thinning operations may be repurposed as public firewood, chips, or biofuels; burned; or otherwise disposed.

Mastication

A masticator (low ground-pressure mechanical equipment like a mowing machine, usually attached to an excavator, dozer, or tractor) may be used to grind and crush vegetation. Live material (small saplings, shrubs, and herbaceous vegetation) would be reduced to approximately 6 to 12 inches above the ground surface. Dead and downed fuels would target less than 3 inches deep.

Chipping

Chipping would be completed in treatment areas next to roads or in flat areas. The chipping process involves woody debris being shredded using an industrial chipper. This project would either remove chips from the site, or target less than 3 inches deep of material.

Machine or Grapple Piling

Machine or grapple piling may concentrate fuels for future pile burning. Large machine piles may be created at pre-approved log landing sites. All use of machines shall be conducted from existing skid trails wherever possible to limit soil impacts. Machine piling would be conducted using either tracked or rubber-tired equipment that would be restricted in size where necessary to minimize damage to the residual stand. Piles may be covered with non-permeable materials to keep portions of the pile dry to aid in burning.

Pruning

Pruning involves cutting the lower, often dead, branches off of trees to reduce ladder fuels that can carry a fire into the canopy. The branches may be scattered or piled.

Lop and Scatter

Lop and scatter involves cutting project-generated fuels into 10 feet or smaller pieces and scattering the fuels in a manner that results in surface fuels 36 inches deep or less. This project would target less than 18 inches deep dead and downed fuel bed.

Hand Piling

Smaller hand piles may occur throughout the treatment units. Existing ground fuels, thinning residue or slash, and cut brush may be piled by hand. In ground-based equipment units, an excavator may be used to create piles throughout the unit, provided excavators stay on designated skid trails and use an attachment to pick material up instead of dragging and scraping the soil. Piles would be kept small, approximately 6 feet in diameter and 4 to 6 feet high to minimize impacts to soils and vegetation. Excavator piles can be compacted by the machine to burn quickly, reducing heat impacts to the soil.

Fireline Construction

Fireline construction involves removing vegetation and ground fuels to expose bare mineral soil prior to prescribed fuel treatments to limit the spread of the prescribed fire. Manually constructed fire lines would generally be up to 18 inches. All fire lines would be water barred after use or prior to the onset of winter.

Fireline is recommended around pre-approved, machine pile log landings as a contingency line to help contain the larger pile burns.

Pile Burning

Pile burning is used to dispose of dead and downed fuels and activity-generated vegetative slash piled after hand thinning and mechanical treatment. Piles would be manually ignited and burned. Prescribed fire would follow standard USFS procedures to review and approve burn plans. Burn plans specify weather conditions and personnel holding requirements to safely contain, control, and execute a prescribed fire. Qualified burn bosses have discretion to adapt the plan as needed to meet objectives. The number of acres ignited in a day depends on fuel moisture, humidity, wind, and other environmental conditions at the time of burning. To achieve long-term objectives for a Project Area, ignition may require multiple days and burn seasons. Burning of piles would only take place on permissive burn days as determined by the State Air Resources Board. An “Air Curtain Incinerator” may also be used to reduce smoke impacts.

Broadcast/Jackpot Burning

Involves burning existing concentrations of fuels as they occur in a stand, without machine or hand piling.

Fuels Maintenance

Treatments would be implemented through phased entries. Each entry may occur as needed over several seasons to years and may involve a single or a combination of treatments to reduce surface and ladder fuels to achieve and maintain desired conditions. Repeated or multiple applications in units that have already received treatment may be implemented as necessary.

Exhibit B: **DRAFT** Purpose and Need & Proposed Action - Route 1 & 6 Timber Stand and Wildlife Habitat Improvements (CE)

Source: Route 1 CE Draft Proposed Action (SRF internal document)

Approximately 3,900 acres of plantation thinning within the Lower Trinity Ranger District of the Six Rivers National Forest.

- Thinning may be accomplished using mechanized ground-based logging equipment, cable logging equipment, mastication, manual use of chainsaws
- Yarding of whole trees and removal of logs and slash
- Manual piling and machine piling of slash
- Opening of existing skid trails, temporary roads and landings
- Construction of new skid trails, new temporary roads and new landings as required
- Construction of fire containment features
- Broadcast burning
- Follow up treatments on approximately 5 year intervals including thinning, mastication, pile burning, and broadcast burning

CE Category

These activities fall under [7 CFR 1b.4\(d\)\(30\)](#) (30) (USDA-30d-USFS) Timber stand and/or wildlife habitat improvement activities that do not include the use of herbicides or do not require more than 1 mile of low standard road construction. Examples include, but are not limited to:

- (i) Girdling trees to create snags;
- (ii) Thinning or brush control to improve growth or to reduce fire hazard including the opening of an existing road to a dense timber stand;
- (iii) Prescribed burning to control understory hardwoods in stands of southern pine; and
- (iv) Prescribed burning to reduce natural fuel build-up and improve plant vigor.

Purpose and Need

The Six Rivers National Forest has identified the need to thin planted stands of trees within the Lower Trinity Ranger District in the area of Forest Route 1, Friday Ridge Road, and Forest Route 6 to produce timber, reduce competition and increase stand resilience to drought, insects, diseases, and reduce the risk of high severity wildfire.