

APPENDIX H

Eligibility and Grant Selection Criteria

Below are the eligibility and grant selection criteria for GGRF PTEIR for Carbon Sequestration and Fuels Reduction Projects. These criteria will be the basis for the scope of work for applicants and be used for evaluating and ranking both Concept Proposals and Project Applications.

Eligibility:

1. The applicant meets the items listed in the “APPLICANT ELIGIBILITY AND CONDITIONS”.
2. The applicant shows a high potential for completing the project, has a well-defined plan and demonstrates a reasonable likelihood of success, which may be based, in part, on past performance, including completing similar projects.
3. The applicant demonstrates specific, advance planning for long-term forest management that affords carbon sequestration following the conclusion of the grant period and the reporting thereof.
4. The project clearly shows how the funds will be spent and that costs are reasonable in proportion to the proposed deliverables.
5. The total amount requested is appropriate for the scope of the project.
6. Greenhouse Gas (GHG) Emission Reduction Requirements:
 - a. All projects shall be designed to meet the goals of the California Global Warming Solutions Act of 2006 (Assembly Bill 32, Health and Safety Code Section 38500 et. seq). Additionally, projects shall be designed to meet some or all of the GHG emission reduction objectives stated in this Procedural Guide. All projects shall include a methodology and calculate and quantify the GHG emission benefits resulting from the project.
7. Applicants must provide a methodology and implementation framework for pre and post-project evaluation/monitoring of site conditions and project results. Grantees will be required to implement the evaluation /monitoring framework.
8. All project work related to the grant must be completed by December 31, 2019.
9. Applicants ~~who are awarded grants~~ will be required to provide CAL FIRE project information to support entry in CAL MAPPER, CAL FIRE’s geo spatial database framework that facilitates mapping and monitoring of GGRF and other CAL FIRE vegetation treatment projects.

Comment [TB1]: DECISION POINT 8:
1. Incorporate back into Procedural Guide.
2. Do not incorporate back into Procedural Guide.

Comment [TB2]: Compare to Project Scope of Work Guidance in Procedural Guide on page 25 and consider redundancy.

Comment [TB3]: Should this also be in **APPLICANT ELIGIBILITY AND CONDITIONS** in Procedural Guide. What makes something go here versus in **APPLICANT ELIGIBILITY AND CONDITIONS** in the Procedural Guide?

Comment [TB4]: Deleted language since this will be required of all applicants, even those not awarded grants.

Information from ~~grantees~~ Applicants will include shapefiles or feature class of project boundary (use ESRI ARC GIS, ESRI ArcrView geodatabase, or Google Earth KMZ file types), project type, ~~grantee~~ Applicants contact information, project activities and costs, and other information. CAL MAPPER information from ~~grantees~~ Applicants will be required at specific times throughout the effective period of the grant including at initial grant award and at periodic invoice billing submissions.

Comment [TB5]: Changed to Applicant because this is wanted by CAL FIRE at the Application phase.

Comment [TB6]: Changed to Applicant because this is wanted by CAL FIRE at the Application phase.

Grant Selection Criteria:

Note: Grant selection criteria will be applicable to both Project Concept Proposals and Project Applications. These criteria correspond to items within the Concept Proposals/Project Applications and are intended to assist applicants when completing the forms. These criteria will be the basis for the scope of work for grantees and be used for evaluating and ranking projects.

1. **Scope of Work** - Project is appropriate for the program with clear, complete articulation of intended work, and high achievement of all eligibility and selection criteria contained in the program's Procedural Guide.
2. **Budget** - The project clearly shows how the budget will be spent; costs are reasonable in proportion to the proposed deliverables; direct admin costs reasonable.
3. **Greenhouse Gas Benefits and Emission Reduction Quantification and Methodology** – The project includes a quantitative estimate of the greenhouse gas reduction in terms of metric tonnes of carbon dioxide equivalent. The estimate quantifies and compares the emission reductions of the project vs. emission reductions resulting from no implementation of the project.

Comment [TB7]: Should we mention phases?

Project has reliable and accurate GHG net emission reductions on a tonnes/acre, cost/tonne and/or total tonne basis.

The GHG benefits disclosures clearly justify how the project will further the objectives of AB 32 and describes how the proposed project will reduce greenhouse gas emissions or provide benefits from carbon sequestration, reducing potential wildfire impacts, offsetting fossil fuel use, or increasing forest health.

The project includes a detailed description and a technically defensible methodology is used to calculate and quantify the greenhouse gas emission benefits resulting from the project. Numerical calculations can be reviewed and validated. A carbon benefit incorporating the following concepts is demonstrated, in writing, by the Applicant:

- Real (can be measured to a high degree of accuracy and is based on an activity that has occurred, not one that is projected to occur in the future).
- Additional (occurs outside of any regulatory requirement).
- Verifiable.
- Enforceable (ownership is undisputed and enforcement mechanisms exist to ensure all program rules are followed) and

- Permanent (is removed from the atmosphere for a minimum of 100 years).

Comment [A8]: MR maybe 20 years consistent with deed restriction. Note: deed restriction is only for non TPZ.

The project includes a methodology and implementation framework for pre and post-project evaluation/monitoring of site conditions and project results. The pre and post project evaluation and monitoring address site conditions and project results relative to vegetation conditions, carbon flux, wildfire hazards, and other related factors. The methodology and framework demonstrates reliable estimates, assessments and verification of GHG benefits attainment. A timeframe of evaluation and monitoring activities is included.

CAL FIRE will favor those project applications where the project carbon calculation methodology is clearly explained, and the carbon estimates are deemed reliable and accurate.

4. **Co-Benefits** - A description of the co-benefits of the project is included. Project Applications clearly demonstrate co-benefits will be achieved, as determined by the Department. Increased carbon sequestration co-benefits may include enhanced wildlife habitat, increased biodiversity, reduced soil erosion, improved water quality, enhanced aesthetics and reduced energy usage. Fuel reduction co-benefits may include the promotion of public safety and reduction of the potential loss of life and property, reduced suppression costs, reduced forest pests, invasive weed control, avoided emissions through the decrease in wildfire severity and acres burned, airshed improvements in non-attainment air basins and offsetting the use of fossil fuels if harvested material is fed to a biomass plant. Preferred co-benefits, include, but are not limited to, socio economic benefits, public health, air quality, jobs, and projects located in a disadvantaged community.
5. **Local Fire Plan or Other Forest Management Plan Compatibility** - Project contains fuel reduction efforts or fuel breaks included in a local fire plan or a conservation plan.
6. **Collaboration and Community Support** - Project shows broad community support, partnerships or collaborative efforts to achieve the GHG benefits. Collaboration and support is demonstrated by presence of planning, involvement by partners, and funding from private and public partnerships contributed to the project. CAL FIRE will favor those projects with substantial levels of collaboration and community support. An indication of collaboration may be that Eligible Landowners, within the Project Area representing a significant portion of the watershed have signed an Agreement stating their commitment to utilizing the PTEIR and, if their land is not in a timber preserve zone, have signed a deed restriction in which the Eligible Landowners agree not to develop the parcel of timberland for uses incompatible with the PTEIR within 20 years of the execution of the Grant Agreement or, if the Department assumes responsibility, the execution of an Agreement.
7. **Assurance of Attaining GHG Emission Reduction Benefits** – A description is included of agreements and other characteristics that will take place to ensure project goals, accomplishments, and GHG emission reduction benefits are maintained, realized, and long lasting. CAL FIRE will favor those projects which demonstrate assurance of accomplishment of GHG emission reduction benefits.

Comment [TB9]: Define. It's defined for use in urban forestry.

Comment [TB10]: Modify or not based on outcome of DECISION POINTS 2 and 3.

8. **Project Contribution to Multiple GGRF Programs** - Project includes other CAL FIRE GGRF GHG emission reduction/carbon sequestration program activities. CAL FIRE will favor those projects that include multiple GGRF program activities.
9. **Grantee's Past Forest Management History and References** - The applicant shows a high potential for completing the project, has a well-defined plan and demonstrates a reasonable likelihood of success, which may be based, in part, on past performance, including completing similar projects.
10. **Readiness** - Grantee is ready to implement project and has capability to begin work on the project within 12 months of the grant award.
11. **Fire Hazard Severity Zones (FHSZ)** - Project is located in a high or very high fire hazard severity zone.
12. **Community at Risk** – Project is associated with a community that is listed as a Community at Risk.
13. **Biomass** - Project focuses on utilizing biomass, when biomass facilities are within an economically feasible radius, and other solid wood products. An example is wood products from thinning, forest health improvement, and fuel reduction treatment.
14. **Forest Management** – How the project will be accomplished is clearly defined and includes measurable outcomes (e.g. forest management objectives are defined, growth and inventory is described, monitoring management activities are clear and achievable, etc.) and describes how the Project will provide for the following:
 - o Increased direct carbon sequestration through increased growth and inventory and long-term uneven aged management of the timberlands.
 - o Improved forest resistance to wildland fire, demonstrated through fuel reduction treatments, construction of shaded fuel breaks, improved forest health etc.
 - o Maintenance of large old trees across the watershed.
 - o Optimized timber growth potential of the timberland consistent with maintaining carbon additionally over the baseline.
 - o Demonstrated GHG reduction achieved by the long-term management of the timberland utilizing measurable metrics to be analyzed in the PTEIR.

How the planned long-term forest management through uneven aged management including the retention of large old trees across the watershed will improve carbon sequestration on timberlands is clearly defined. This may be satisfied in part by including the management activities, such as the following, which are consistent with increasing carbon sequestration.

- o Optimize rotation age and stocking from a carbon life cycle perspective.
- o Reduce the amount of material removed.
- o Increase growth by thinning, diseased, and suppressed trees.
- o Manage competing brush and short-lived forest species.
- o Plant additional trees where the existing stocks are not fully utilizing the biological potential of the site.

Comment [TB11]: Deleted because it is wordy and redundant with language in the previous paragraph.

- Maintain stocks at a high level, compared to the baseline, and/or
- Extend the riparian zone.

Silvicultural prescriptions and fuel treatments proposed in the Project focus on treating understory trees and brush with a goal of reducing fire hazard, improving tree growth, stabilizing carbon in retained trees, increasing forest resilience, and utilizing vegetative material removed during treatment. ~~and the likelihood that forest stands in the Project are likely to will~~ respond to the management and achieve GHG emission reduction objectives. ~~The p~~Post-harvest forest results in an increase in the quadratic mean diameter of the stand, consists primarily of healthy and vigorous dominant and codominant trees ~~and slash and woody debris are is~~ treated to reduce ~~fuel fire hazard~~ and meet GHG objectives.

Grant Selection Criteria (Program specific)

15. **Soil Carbon Disturbance** – Project minimizes soil disturbance.

16. **Dollar Metric** - GHG reduction is estimated per dollar of Grant Funds spent.

17. **Project Area** - The Project Area represents a large portion of the Watershed.

Comment [TB12]: Modify or not based on outcome of DECISION POINT 1.

18. **WUI** - Applications contain a documented assessment of need for providing wildfire protection of human infrastructure, especially those located near the WUI, and the means to satisfy that need are attainable, and congruent with achieving the GHG reduction objectives.

19. **Site Class** - The Project is conducted on Site Class I or II, highly productive timberland.

Comment [TB13]: Revisit per MGMT request.

20. **Standing Inventory** - The Project carries an existing high standing inventory, compared to the baseline, but commensurate with forest health.

Competing Project Applications will be selected based on degree of conformance with the above criteria.

Metrics and Analysis:

Tools to assist applicants in assessing carbon sequestration and GHG emissions resulting from timber harvesting activities:

1. The Greenhouse Gas (GHG) Calculator Spreadsheet. The GHG Calculator Spreadsheet and accompanying GHG Emissions Calculator User Guide can be found on the CAL FIRE website at: http://calfire.ca.gov/resource_mgt/resource_mgt_forestpractice_pubsmemos_memos.php

2. Recently developed Berkeley's Carbon Calculator available at: http://ucanr.edu/sites/forestry/Carbon_Sequestration_Tool_for_THPs/

3. The Guidance on Methods for Evaluating GHG Emission Reductions for Programs in the CAL FIRE Greenhouse gas Reduction Fund available at: http://www.fire.ca.gov/grants/downloads/Methods_for_Evaluating_GHG_Emission_Reductions.pdf

4. A suitable methodology to quantify the carbon benefit is described in Section 6 of the The Air Resources Board "Compliance Offset Protocol US Forest Projects" available at: <http://www.arb.ca.gov/regact/2010/capandtrade10/copusforest.pdf>
~~All projects should include a crediting period (e.g. 40 years) and project life (e.g. 100 years). All treatments and growth projections will use commonly accepted methods that represent standards and practice in the forestry profession. GHG reductions will be estimated as the difference between a no project alternative and the proposed project, at the end of the project crediting period.~~

Comment [TB14]: If a PTEIR for a watershed is developed that encompasses industrial and federal land, owners that will never tier to the PTEIR, should they be specifically excluded from the quantification methods?

Modify or not based on outcome of DECISION POINT 3 .

For Information About Other PTEIRs That Have Been Developed:

There are 4 PTEIRs that have been approved. Go to http://www.fire.ca.gov/resource_mgt/resource_mgt_EPRP_PTEIR.php

PTEIR	Preparer	Year	Acreage	Cost	Notes
Meadow Vista	Doug Ferrier for the Placer Co. RCD	1999	7,000	\$30,000 to \$40,000	It was tiered to the Meadow Vista Community Plan, the EIR for which was done years earlier and a guess regarding its cost was between \$150,000 and \$1,000,000.
Hearst Forests	Jones and Stokes Associates	1998	60,801	unknown	
Weaverville	BBW	2004	4,275	unknown	
Mattole Forest Futures Project	BBW	2011	156,484	~\$1,000,000 (RG)	
MRC		2012	~200,000	unknown	

Resources:

Excerpts of SB 862, Committee on Budget and Fiscal Review. Greenhouse gases: emissions reduction http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB862&search_keywords

Notes: 4598.5 references 3712, 3716 and 3718, which reference Division 25.5 (commencing with Section 38500), which is the Air pollution: greenhouse gases: California Global Warming Solutions Act of 2006.

Guidance in the Preparation and Review of Program Timberland Environmental Impact Reports, finalized in November 04, 2009 http://bofdata.fire.ca.gov/board_business/board_memorandums_and_guidance_documents/board_memorandums_and_guidance_documents/final_pteir_guidance_updated_072914_by_tb.pdf

The 2010 Forest and Range Assessment: Final Document. Chapter 3.7: Climate Change: Threats and Opportunities http://frap.fire.ca.gov/data/assessment2010/pdfs/3.7climate_change.pdf

[The Guidance on Methods for Evaluating GHG Emission Reductions for Programs in the CAL FIRE Greenhouse gas Reduction Fund available at: http://www.fire.ca.gov/grants/downloads/Methods_for_Evaluating_GHG_Emission_Reductions.pdf](http://www.fire.ca.gov/grants/downloads/Methods_for_Evaluating_GHG_Emission_Reductions.pdf)

Compliance Offset Protocol US Forest Projects, Air Resources Board, October 20, 2011. <http://www.arb.ca.gov/cc/capandtrade/protocols/usforestprojects.htm>

AB 1532, John A. Pérez. California Global Warming Solutions Act of 2006: Greenhouse Gas Reduction Fund. http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201120120AB1532&search_keywords=39712

Part of statute that supports fuel reduction treatments: HSC 39712. http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201120120AB1532&search_keywords=39712

Appendix C of the original A 32 Scoping Plan. Beginning page C-165. http://www.arb.ca.gov/cc/scopingplan/document/appendices_volume1.pdf

Greenhouse gas and air pollutant emissions of alternatives for woody biomass residues (Olympic Region Clean Air Agency, 2010) <http://data.orcaa.org/reports/all-reports-entries/woody-biomass-emissions-study/>
See Table 5 for comparison of GHG, CO₂ and PM_{2.5} emissions from various disposal techniques.

Placer County Biomass Waste for Energy Greenhouse Gas Offset Credit Project <http://www.placer.ca.gov/departments/air/greenhousegasoffsetproject>

California Fire Hazard Severity Zone Map Update Project http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps.php