Longleaf Pine Growth and Yield Model Development

Informational Webinar
Thursday, April 9, 2020
WEBINAR GUIDANCE

• All attendees will be muted for the duration of the webinar.

• Please type your questions into the “questions” box in the webinar controls on the right side of your screen. NFWF staff will answer these questions during several breaks in the presentation, but you can type them in any time. Everyone will be able to hear the answers.

• Don’t be shy. If you have a question, someone else is thinking it, too.

• If you experience a technical glitch, please type it into the chat/question box.

• The Webinar is being recorded. We will post a copy of these slides and the recording on the NFWF website at http://www.nfwf.org/longleaf
WEBINAR AGENDA

• Background
• Funding Priorities
• Evaluation Criteria
• How to Submit a Proposal in Easygrants
• Timeline
America’s Longleaf Restoration Initiative goal: 8 million acres of longleaf by 2025

Majority of forest land within the historic longleaf range is in private ownership

Private landowners key to helping reach the 8 million acre goal!

Large-acreage private landowners express interest in managing longleaf on appropriate sites within their land portfolios

However, current longleaf growth and yield models not utilizing data from container-grown seedlings established using modern techniques
Majority of forest land within the historic longleaf range is in private ownership.

- Accelerates restoration and enhancement of the longleaf pine ecosystem.
- Supports the recovery of iconic and keystone species.
- Supports the goals and missions of each funding partner.
NFWF is seeking proposals that address three components of developing a refined growth and yield model for longleaf pine:

1. Identification of sites for plot establishment, initial permanent plot measurements, and completion of data quality assurance/quality control.

2. Completion of a third party audit for plot measurement integrity.

3. Development of a first-iteration model and a plan for incorporation of additional data that will be collected through future remeasurements.
1. Plot Identification, Establishment and Initial Measurements

Identify and establish plots and complete initial measurements that can be used to develop a stand-level prediction and projection model

A. Minimum of 300 plots, though applicants are encouraged to propose more plots if feasible

B. Site selection should prioritize a history of consistent treatments between plots and minimize non-typical treatments for longleaf pine, such as fertilization and genetic improvement

C. Plots should be located in stands in which:
   
   i. seedlings have been in the ground for 5 years and have initiated height growth, and;

   ii. trees have not yet been thinned

D. Plots should be located in stands that will be in place for at least 10 years
1. Plot Identification, Establishment and Initial Measurements (cont.)

- Some support for identification of potential sites for plots can be expected
- Grantee has final responsibility for site identification, landowner contact, and coordination for plot establishment
- Should be limited to sites characteristic of large-acreage institutional landowners
- Desired plot attributes include:
  - Stands established under reforestation scenarios on cutover sites, regardless of tree species on the site in the previous rotation
  - Stands with documented establishment and management history.
  - Emphasis on sites of moderately low to moderately high productivity.
  - Distributed evenly across the above range of site quality, as well as being representative of the range of soil characteristics based on Cooperative Research in Forest Fertilization (CRIFF) soil groups.
Where should plots be established?

Initially, plot locations for this project should be on lands east of the Mississippi River and north of latitude 29°N. Applicants are also encouraged to focus plots in areas with greater concentrations of corporate lands.
1. **Plot Identification, Establishment and Initial Measurements (cont.)**

- All plots should satisfy the criteria given below:
  - At least 0.1 to 0.125 acres in size
  - Stand is at least ≥ 5 years old
  - Buffer plots by two rows from edges
  - Plots permanently monumented to facilitate remeasurement
  - Plots MUST be installed and measured during the dormant season
  - Precise measurements of tree diameter (nearest 0.1’’), total tree height (nearest 0.1’), and height to live crown (nearest 0.1’)
  - Trees must be tagged to facilitate individual tree remeasurement over time
  - Trained, experienced personnel should be used for data collection
2. **Plot Auditing and Data Quality Assurance/Quality Control**

Proposals to identify and establish plots and complete initial measurements must also include a proposal to complete a third-party audit

- Prior to establishing plots, the sample design and measurement criteria will be submitted to NFWF for review and final approval
- Plots and plot data must be collected in such a way that identification of plot location and individual tree data can be audited for quality control purposes by an independent third party
- Plot auditing should include an initial audit early in the data collection process after 5 plots have been established and then a second round to achieve a total audit of at least 5% of the total number of plots established
- Proposals should address initial measurement data quality assurance/quality control in preparation for analysis and model development
2. Plot Auditing and Data Quality Assurance/Quality Control (cont.)

- New approaches and technology are ok, but core of the proposal should be based on standard approaches and foundational measurements for growth and yield modeling
- Applicants should provide a data management plan
- Any and all data and the model will be publicly available and open access
- Open access should be facilitated by hosting data and model equations on Github (www.github.com)
- Prefer modelers develop the growth and yield system as a package in R, allowing distribution using CRAN (https://cran.r-project.org)
3. First-Iteration Model Development

Proposals to develop a first-iteration model must address and provide details on the following aspects of model development:

- Modeling techniques and approach that will be used
- Programming language to be used
- Model documentation (manuals, etc.)
- Validation techniques to be used (model fitness criteria, biological realism testing, etc.)
- The software platform that will be used for code control, documentation, and to provide open access to the model
3. First-Iteration Model Development

Project(s) selected for funding will be expected to submit all data to NFWF, which will be publicly available and open access.

Upon completion of the model, a peer-reviewed journal article will be developed, submitted, and published in an appropriate journal in the forest sciences.

Future Phases...

Future phase to conduct two additional remeasurements three and six years after the initial measurements are taken.

• Additional funding for this final phase is anticipated, but has not yet been secured.
APPLICATION GUIDANCE

• Request for Proposals: www.nfwf.org/longleaf

• Proposal due date: April 30th

• Eligible Applicants*:
  ✓ Non-profit 501(c)
  ✓ Commercial (for profit) organizations
  ✓ State, tribal and local governments
  ✓ Academic institutions

  NFWF encourages applicants to partner with other qualified entities to address all three components under one comprehensive proposal

• Funding Availability: Up to $250,000

• Match: A 1:1 non-federal match in cash and/or in-kind services is not required, but is strongly encouraged, and projects providing match will be more competitive.

*Federal agencies and individual landowners cannot directly apply, but may partner with eligible applicants on proposals
1. **Technical Expertise, Capacity and Commitment** – Preference will be given to proposals from entities with a proven track record in forest biometrics and G&Y modeling and a demonstrated history of data quality assurance/quality control, data stewardship, and model development.

2. **Cost-Effectiveness** – Evaluation of proposals will include consideration of the cost-effectiveness of project budget that balances performance risk and efficient use of funds. Cost-effectiveness evaluation may include, but is not limited to, an assessment of either or both direct and indirect costs in the proposed budget. The federal government has determined that a de minimis 10% indirect rate is an acceptable minimum for organizations without a NICRA, as such NFWF reserves the right to scrutinize ALL proposals with indirect rates above 10% for cost-effectiveness.
3. **Budget** – Costs are allowable, reasonable and budgeted in accordance with NFWF’s Budget Instructions cost categories. Federally-funded projects must be in compliance with OMB Uniform Guidance as applicable.

*While for-profit entities are eligible applicants, charges to a potential award may include actual costs only; recipients may not apply loaded rates or realize profit from an award of federal financial assistance funds.*

4. **Matching Contributions** – Matching Contributions consist of cash, contributed goods and services, volunteer hours, and/or property raised and spent for the Project during the Period of Performance. Larger match ratios and matching fund contributions from a diversity of partners are encouraged and will be more competitive during application review. Applicants are encouraged to describe federal partner contributions as well in the proposal narrative.

5. **Review** – Proposals will be reviewed by NFWF staff, representatives from the Longleaf Partnership Council, and an advisory team. The advisory team includes biometricicians and representatives of institutional forestland owners.
1. **Procurement** – When procuring goods and services, NFWF recipients must follow documented procurement procedures which reflect applicable laws and regulations.

2. **Publicity and Acknowledgement of Support** – Award recipients will be required to grant NFWF the right and authority to publicize the project and NFWF’s financial support for the grant in press releases, publications and other public communications.

3. **Receiving Award Funds** – Award payments are primarily reimbursable. Projects may request funds for reimbursement at any time after completing a signed agreement with NFWF.

4. **Compliance Requirements** – Projects selected may be subject to requirements under the National Environmental Policy Act, Endangered Species Act (state and federal), and National Historic Preservation Act. As may be applicable, successful applicants may be required to comply with additional Federal, state or local requirements and obtain all necessary permits and clearances.
4. **Permits** – Successful applicants will be required to provide sufficient documentation that the project expects to receive or has received all necessary permits and clearances to comply with any Federal, state or local requirements.

5. **Federal Funding** – The availability of federal funds estimated in this solicitation is contingent upon the federal appropriations process. Funding decisions will be made based on level of funding and timing of when it is received by NFWF.
QUESTIONS?
Easygrants – Creating Username or Organization

- Do not create duplicate accounts.
- Use your professional email address and full legal organization name.
- Unsure if you already have a user account or if organization is registered in Easygrants? Contact helpdesk at easygrants@nfwf.org or 202-595-2497.
Please visit review your contact details and make sure that you provide a phone number.

Click here

Scroll down
Full Proposal Requirements

- Personal Contact Information
- Organization Information
- Project Information:
  - Title
  - Description
  - Abstract
  - Period of Performance
- Project Location and Map
- Uploads
- Metrics
- Budget
- Matching Contributions
Full Proposal Task in Easygrants

Used for navigating through your application in EasyGrants
Period of Performance

Start date should be as soon as possible after award announcements (mid August).

End date should be no later than December 31, 2022.

Match must be spent between project start and end dates.
**Project Information**

- **Title:** (~100 characters)
  - short, descriptive name indicating project purpose

- **Description:** (~500 characters)
  - Main activities and methods
  - Specific habitat, location or species benefitted

- **Abstract:** (~1,500 characters)
  - Location, activities, outcome/metrics, and partners
  - Context and background information
  - Explain how outcomes will address a conservation issue
Map

Instructions

Leaving this Map page before completing all of the steps below will result in the loss of your unsaved map data. If you take longer than one hour to complete the steps below, EasyGrants will time out and you will lose your unsaved map data. You may click Save before you are done to reset the EasyGrants clock, but you must first submit your location so that they appear GREEN (submitted). Clicking Save when there are ORANGE (pending) locations will result in loss of those orange polygons. You may return to this Map page at any time to add to (or delete) the mapping work that you save.

Overview of Steps to Create and Submit Your Project Location Map

Click Help on the left to see detailed instructions for all of the steps below as well as a glossary of mapping terms used in this mapping tool. If using this tool for the first time, please read through the Help guide and familiarize yourself with the mapping tool features and terminology before entering your mapping data.

1. Begin by clicking Save at the bottom of this Map page to set the EasyGrants one-hour clock ticking. If you skip this step, the system may time out sooner than expected and you may lose unsaved map data.

Important: Once you start creating a map, to avoid losing map data, complete all the steps below, in succession, before clicking Save or Save and Continue (Step 3).

2. Find, mark your Project Location(s) using one of the three options provided in the mapping tool below. Detailed instructions for each are contained in the Help document.

a. Upload an existing shapefile (see Shapefile requirements below) by clicking on the Upload Shapefile feature bar (this option is open by default when you start using the mapping tool) or
b. Select one or more geographic features (e.g., county, lake, national park) for your project by clicking on the Select by Geography feature bar or
c. Create a custom area to depict your project location(s) by clicking on the Draw a Custom Area feature bar.

3. Finally, the creation of your map by clicking Submit Project Location.

4. To confirm your map, click the Confirmation Check Box at the bottom of the page.

5. Finally, click Save to save your map and stay on this page, or Save & Continue to save your map and move to the next page in this task.

All GREEN locations will be saved and any ORANGE locations will be discarded.

Map your project at the finest scale by any of the three options:

Upload Shapefile

- Select a .zip file (zip) containing a shapefile (shp, dbf, prj) from your local file system
- The shapefile must be of POLYGON geometry type
- The shapefile must not exceed 1 MB

Choose File: No file chosen
1. Upload Shapefile
2. Select by Geography
3. Draw a Custom Area
Uploads

- Narrative (10 page max)*
- Map*
- Letters of support
- Photos
- Resume*
- Other documents
- Financial documents (*next slide)*

*Required
Review ‘Upload Checklist’ and upload relevant files into Easygrants.

Required:
- IRS-990
- A-133 Audit
- GAAP Audit
- Board of Trustees, Directors or Equivalent
- GAAP audited financial statements

If you don’t have a required document, just upload an explanation on your company letterhead in place of the required document.
All financial documentation must:

- Represent the same fiscal year period
- Must be the most recent financial information available
- Must be less than two years old

For details on what documents you need to submit and for FAQs regarding financial documents, go here: https://www.nfwf.org/apply-grant/application-information/required-financial-documents
Metrics

• Just 1 metric- # of studies used to inform management
Budget

• **Only** the grant amount requested from NFWF

• Itemize all costs in appropriate budget categories.

• No lumping costs i.e., ‘All Salaries: $10,000’

• ‘**Total Amount Requested**’ in Project Information section must equal the ‘**Budget Grand Total**’ in Budget section

https://www.nfwf.org/whatwedo/grants/applicants/Pages/budget-instructions.aspx
How-to input additional information in your Budget

- Domestic Airfare - Per Flight
  - To Seattle from Boston Round Trip
    - $4,271.00
  - To Anchorage from St. Petersburg Round Trip
    - $895.00

Notes:

Line Item
Budget

Domestic Airfare - Per Flight
Travel for one biotech and one volunteer to Seattle from Boston for Killer Whale Conference. Travel for principal investigator to Anchorage from St. Petersburg for site visits.

Save  Save and Close  Cancel
“Know Before You Apply” Best Practices: Budgeting

Federal Grants must follow the standards set forth in 2 CFR 200 – The Uniform Guidance

Subrecipient Requirements:
- ‘Flow-down’ terms to all subawards/subrecipients included in the Full Proposal Budget
- Monitor the activities of subrecipients to ensure the subaward is used for authorized purposes
- Guarantee costs are necessary and reasonable, and are adequately documented
- Receive prior written approval in advance of the incurrence of special or unusual costs
- Maintain financial records, supporting documents, statistical records, and all other records
- Restrict awards, subawards, and contracts with parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in Federal assistance programs or activities
- Profit cannot be recognized on grant funding
“Know Before You Apply” Best Practices

Personnel

- Personnel rates should be unloaded and reasonable for the work being conducted (§200.430)
- Fringe should be entered into its respective category

Travel

- Costs may be charged on an actual cost basis, on a per diem or mileage basis in lieu of actual costs incurred, or on a combination of the two. (§200.474(a))
- In the absence of a written non-Federal entity policy regarding travel costs, please follow GSA rates. (§200.474(d))
“Know Before You Apply” Best Practices

**Materials & Supplies**

- Materials & Supplies should represent current market prices (§200.453)

- Proprietary Products: Identify these items if included in the proposal and consult with Program Staff about their use over the course of the project. Federal Funders may have different ways of handling these items.

- Supplies and tools that are components of items created under a grant must be charged at a reasonable, market price
“Know Before You Apply” Best Practices

Contractual Services

- NFWF Does Not Approve Procurements
  - During Project Fiscal Review, NFWF ensures all cost categories align with program and project goals, but does not issue approval for procurement methodologies

- Applicants are expected to follow requirements outlined in 2 CFR 200 that covers general standards, competition, methods, cost and price, etc (§200.320 – §200.326)

- Contractual agreement costs should represent reasonable market prices for the region and work being completed
“Know Before You Apply” Best Practices

Indirect Costs

- Indirect costs should be billed according to grantee NICRA or de minimis allowance
  - NFWF does not accept GSA Billing Rates or other rates applicable to Federal government contracts
- Any non-Federal entity that has never received a negotiated indirect cost rate may elect to charge a de minimis rate of 10% of modified total direct costs (MTDC) which may be used indefinitely. (§200.404(f))
Matching Contributions

Matching Contribution Editor

Instructions
Enter the required matching contribution details below. Click Save regularly to save your work. The system will timeout and you will lose unsaved work if you do not save at least once every hour. Click Save and Close to save and return to the Matching Contributions list page. Fields marked with a red asterisk (*) are required for final submission for most programs. Click Help for examples and instructions.

Status *
Source *
Source Type *
Type *
Description *
Amount *

Save and Close  Close
Federal funding may be subject to requirements under the following acts. Applicants should budget time and resources to obtain the needed approvals.

- National Environmental Policy Act
- Endangered Species Act
- National Historic Preservation Act

Award payments are primarily reimbursable. Projects may request funds for reimbursement at any time after completing a signed agreement with NFWF.
Application Assistance

Program Homepage:
https://www.nfwf.org/programs/longleaf-stewardship-fund

RFP:

Applicant Tip Sheet:

Technical Assistance / Easygrants Helpdesk:
   Email: Easygrants@nfwf.org
   Voicemail: 202-595-2497
   Hours: 9:00 am to 5:00 pm ET, Monday-Friday.
   Include: your name, proposal ID #, e-mail address, phone number, program you are applying to, and a description of the issue.
Additional Resources

Electronic Federal Code of Regulations (2 CFR 200)
https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=a94fd4e2b1fd1597e6456124e0fd5b3a&mc=true&n=pt2.1.200&r=PART&ty=HTML

NFWF Indirect Cost Policy
https://www.nfwf.org/apply-grant/application-information/indirect-cost-policy

NFWF Indirect Cost Calculator
https://www.nfwf.org/grants/application-information/indirect-cost-calculator

GSA.gov

IRS Mileage Rate

Budget & Narrative Guide
2020

April

30th: Proposals due

April - May

Review proposals with funding partner and external technical reviewers

June - July

Finalize funding recommendations

July - Aug.

NFWF notifies Congress and NFWF Board of Directors of funding recommendations

Aug.

NFWF notifies applicants of funding decisions
Proposal/project questions:
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(202) 595-2609

Easygrants questions:
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Zachary.Bernstein@nfwf.org
(202) 595-2433

Easygrants technical support:
Email helpdesk at Easygrants@nfwf.org or leave a message at 202-595-2497