

Secure Rural Schools & Community Self-Determination Act
Reauthorized by Public Law 115-141
Title II Project Submission Form
USDA Forest Service

Prince William Sound Resource Advisory Committee
Project Number (Assigned by Designated Federal Official):

Funding Fiscal Year(s): 2024 - 2025

2. Project Name: Cordova Native Seed Collection and Seed Banking	3a. State: Alaska 3b. County(s): Cordova
4. Project Submitted By: Copper River Watershed Project	5. Date: 01/24/2024
6. Contact Phone Number: (907)-424-3334	7. Contact E-mail: stewardship@copperiver.org

8. Project Location:	
a. National Forest(s): Chugach National Forest	b. Forest Service District: Cordova Ranger District
c. Location (Township-Range-Section) T15S, R3W, Sections 28	

9. Project Goals and Objectives:

The Copper River Watershed Project (CRWP) will assist in ecosystem restoration projects and mitigate the effects of climate change and the potential for native plant biodiversity loss by developing and maintaining a Native Plant Seed Bank for the Cordova area that aligns with the National Seed Laboratory guidelines outlined by the U.S. Forest Service and Department of Agriculture and the Great Basin Restoration Initiative.

Native plants are important elements to ecosystem restoration efforts in ways that provide food and habitat for wildlife, promote a biodiverse ecosystem, and develop deep root systems to hold soil in place. Native plant seeds have a higher chance of forming self-sustaining plant communities, especially when native seeds are transplanted from local sources or collected within the climate where they will be reseeded. By reseeding with native and local seeds, we will also decrease the risk of introducing non-native plant species that could happen when sourcing seeds outside of Cordova.

The Cordova Native Plant Seed Program will help re-establish native plants on lands treated for invasive plant species, and other areas where the landscape has been disturbed, including at the conclusion of multiple fish passage restoration projects the CRWP is implementing in the area. CRWP will also work with other ground-disturbing entities, including Alaska Department of Transportation (ADOT&PF) and local utility companies or other contractors working on utility lines in the region to help provide local seeds for applying to areas post-disturbance. The CRWP will also expand public education programs and outreach on the importance and vital role native plants and native plant communities play across the watershed.

Specific goals of this program are to hire local technicians to assist in the collection and processing of native seeds for Cordova's Native Seed Bank. Additionally, CRWP will invite local partners, including Prince William Sound College (PWSC), Prince William Sound Science Center (PWSSC), Cordova School District, and Native Village of Eyak (NVE) to help develop a Seed Stewards Program. The goal will be to coordinate on opportunities to engage and even employ youth in the effort to generate a stockpile of native plant seeds for using after ground disturbance activities. CRWP will also continue to educate local residents about the importance of native plant species and sourcing seeds locally.

10. Project Description:

a. Brief: (*in one sentence*)

The Copper River Watershed Project (CRWP) will develop a Native Plant Seed Bank for the Cordova area and Copper River Delta that will result in native seed planting for use after invasive plant removal and other ground disturbing activities.

b. Detailed:

The CRWP proposes a 3-year approach to successfully develop a Native Plant Seed Bank for Cordova and the Copper River Delta. Year one will involve program planning, partnership outreach, training, and trial seed harvest and germination testing. Years two and three will focus on continued collection and program growth.

Objective 1: Coordinate collection, processing, and storage of native plant seed within Cordova and Copper River Delta.

Description:

With existing funding from Copper Basin partner and landowner Bureau of Land Management BLM, CRWP staff are pursuing training through webinars and workshops facilitated by the Alaska Native Plant Society, Native Seed Network, and Terraformation. These trainings provide a foundation of understanding for best practices in facilitating the collection, processing, cleaning, drying, and storage of native plant seeds.

With USFS RAC support, CRWP will convene with landowner partners, including USFS and The Eyak Corporation (TEC), to develop a list of target species, discuss sites for collecting seeds, identify permit needs for access, and fine-tune collection practices and timing for target species on the Copper River Delta. One of the sites targeted for collection will include the Cordova Native Plant Garden, established in 2013 with support from the PWS RAC.

After discussions with partners and engaged community representatives, CRWP will evaluate native plant communities and potential collection sites. Seeds will then be collected when suitable sites have been selected according to size, density, continuity of populations, and biology of the species sampled, as well as the desired quantity of seed to be obtained and percent density of viable native seeds to be removed from the area without causing a disruption to the current population. CRWP has support from USFS and PWS College to develop a plan to process and store seeds at their facilities.

To help evaluate seeds for future collections, CRWP will work with Alaska Plant Material Center or another private lab to perform germination testing. The purpose of the germination testing is to fine-tune future collection efforts to focus on species that have a high success rate to germinate once harvested, and understand the volume of seed it might take in order to get certain re-growth success. We are requesting funds to support shipping and lab costs for germination testing. Other USFS RAC funds will be used to purchase the supplies required for seed banking, including dehydrators, a

refrigerator, vacuum sealer and bags, storage bins, and an organizational system. CRWP plans to hire two seasonal technicians in the Cordova area to play a part in both invasive plant management and native seed collection. Seasonal staff will aid in the tasks of seed banking including; drying, counting, weighing, packaging, labeling, and storing.

Objective 2: Engage Cordova residents and students in the collection of seeds.

Since seed harvest occurs in the fall and overlaps with the academic school year, this hands-on stewardship activity can be integrated into local school programs. The CRWP team will work with our partners, including NVE, PWSSC, and Cordova School District to identify strategies for plugging native plant and seed collection activities into existing or new place-based programs under the theme of “Seeding Stewardship”. CRWP will also work to create opportunities to engage community members in seed collection through events like Public Lands Day or through Cordova Fungus Festival activities.

There is potential for overlap between the proposed native seed program and the other currently proposed CRWP Cordova RAC project: Engaging Citizens in Invasive Plant Management, where a volunteer will be appointed to an “Adopt a Pest” site that contains an infestation of invasive plants. Their role is to manually or mechanically remove invasive plants and to monitor the site through citizen science surveys. The volunteer lead and its group members can be directed to plant native seed once the invasive plants have been eradicated. CRWP will provide guidance on suitable planting times, best practices for planting, and precautions to keep in mind, for example the cross contamination of invasives from Adopt a Pest sites and unstable weather conditions.

Objective 3: Educate Cordova youth and residents about the importance of native plant species and sourcing seeds locally.

CRWP will review teaching resources from Royal Botanic Gardens Kew Millennium Seed Bank where professional seed scientists have put together free, innovative, curriculum-aligned activities for youth of all ages. Many trainings and studies that have designed seed banking today have come from the scientists inside the Royal Botanic Gardens. CRWP will share these resources with our education program partners for integration into programs supported by this and future efforts.

The CRWP will implement community outreach and educational programming on the importance of native plant populations and sourcing seeds locally. As a result of seed banking efforts for the future, native plant seeds will be distributed by CRWP to residents and local businesses through in-person deliveries, hardware stores, and other community festivals like Salmon Jam or spring plant swaps when appropriate. CRWP will also organize events that engage other volunteers from the community in collection efforts, not only helping achieve project goals of producing seeds, but providing important outreach opportunities about native plants.

Utility companies and local contractors are key players in CRWP’s efforts to spread native seeds. CRWP will locate and contact utility companies in and around the Cordova area to provide seed procurement education on the importance of replenishing native plants after areas are disturbed. An evaluation during year one of this program will allow for the assessment of seed quantity needed to reseed an average distressed area following construction. During year two, CRWP will measure for the number of seeds needed to fill in the average acreage given germination testing successes. For year three, the goal will be to eventually provide CRWP’s locally sourced seeds for as much streambank, roadside, fuel break lines, power lines, and other recently disturbed sites in need of re-introduction of native plants.

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11. Types of Lands Involved?
State/Private/Other lands involved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Land Status:
If Yes, specify: ADOT, Native Village of Eyak, City of Cordova, and private property

12. How does the proposed project meet purposes of the Legislation? (Check at least 1)
<input type="checkbox"/> Improves maintenance of existing infrastructure.
<input checked="" type="checkbox"/> Implements stewardship objectives that enhance forest ecosystems.
<input checked="" type="checkbox"/> Restores and improves land health.
<input type="checkbox"/> Restores water quality

13. Project Type
a. Check all that apply: (check at least 1)
<input type="checkbox"/> Road Maintenance
<input type="checkbox"/> Road Decommission/Obliteration
<input type="checkbox"/> Other Infrastructure Maintenance (specify):
<input checked="" type="checkbox"/> Soil Productivity Improvement
<input type="checkbox"/> Watershed Restoration & Maintenance
<input type="checkbox"/> Fish Habitat Restoration
<input checked="" type="checkbox"/> Reestablish Native Species
<input type="checkbox"/> Implement CWPP Project
<input type="checkbox"/> Trail Maintenance
<input type="checkbox"/> Trail Obliteration
<input checked="" type="checkbox"/> Forest Health Improvement
<input type="checkbox"/> Wildlife Habitat Restoration
<input type="checkbox"/> Control of Noxious Weeds
<input type="checkbox"/> Fuels Management/Fire Prevention
<input type="checkbox"/> Other Project Type (specify):
b. Primary Purpose (select only 1 from above): Reestablish Native Species

14. Identify What the Project Will Accomplish
Miles of road maintained:
Miles of road decommissioned/obliterated:
Number of structures maintained/improved:
Acres of soil productivity improved:
Miles of stream/river restored/improved:
Miles of fish habitat restored/improved:
Acres of native species reestablished: 3 acres per year
Acres of hazardous fuel treatment

Miles of trail maintained:
Miles of trail obliterated:
Acres of forest health improved (including fuels reduction):
Acres of rangeland improved:
Acres of wildlife habitat restored/improved:
Acres of noxious weeds controlled:
Timber volume generated (mbf):
Jobs generated in full time equivalents (FTE) to nearest tenth. One FTE is 52 forty hour weeks: Roughly half 1 FTE, plus two seasonal technicians at 12 weeks each = 0.75 FTE
People reached (for environmental education projects/fire prevention):
Direct economic activity benefit:
Other:

15. Estimated Project Start Date: April 1, 2024	16. Estimated Project Completion Date: December 31, 2026
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17. List known partnerships or collaborative opportunities.

The Copper River Watershed Project will coordinate with the US Forest Service Cordova Ranger District, City of Cordova, Alaska Department of Transportation & Public Facilities (ADOT&PF), Prince William Sound College (PWSC), Prince William Sound Science Center (PWSSC), Cordova School District, and Native Village of Eyak (NVE), The Eyak Corporation (TEC), volunteers from Cordova, and the Prince William Sound Science Center.

18. Identify benefits to communities.

The native seed collection program will engage the Cordova community in efforts to restore and preserve the Copper River Delta. The Native Seed Bank of Cordova will provide the community with native seeds for restoration that will be readily available once the seed bank has been well established. Involving local youth and students will broaden their knowledge on the importance of native plants for pollinators, food security, biodiversity, and overall ecosystem health.

19. How does the project benefit federal lands/resources?

The Cordova Seed Bank will preserve the biodiversity and promote the conservation of Cordova’s Copper River Delta. Using seeds sourced locally post-restoration will ensure seeds are suitable for Cordova’s extreme climate, and reduce the chance of introducing non-native and even invasive species by bringing in outside seed sources. Supporting diverse native plant communities supports the overall health of the ecosystems of Chugach National Forest.

20. What is the Proposed Method(s) of Accomplishment? (check at least 1)	
<input type="checkbox"/> Contract	<input type="checkbox"/> Federal Workforce
<input type="checkbox"/> County Workforce	<input checked="" type="checkbox"/> Volunteers

<input type="checkbox"/> Grant	<input checked="" type="checkbox"/> Agreement
<input type="checkbox"/> Americorps	<input type="checkbox"/> YCC/CCC Crews
<input type="checkbox"/> Job Corps	<input type="checkbox"/> Stewardship Contract
<input type="checkbox"/> Merchantable Timber Pilot	<input type="checkbox"/> Other (specify):

21. Will the Project Generate Merchantable Timber? Yes No

22. Anticipated Project Costs
a. Title II Funds Requested: \$93,851.74
b. Is this a multi-year funding request? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

23. Identify Source(s) of Other Funding:

The Bureau of Land Management has already provided professional development and training funds in a previously acquired grant to build a native seed bank in the Copper Basin. CRWP will also split the costs of seasonal technicians in Cordova between the proposed Cordova Native Seed Bank program and the other currently proposed and ongoing Cordova RAC Invasive Plant Management program.

24. Monitoring Plan (provide as attachment)

- a. Provide a plan that describes your process for tracking and explaining the effects of this project on your environmental and community goals outlined above.
- b. Identify who will conduct the monitoring:
- c. Identify total funding needed to carry out specified monitoring tasks (Worksheet 1, Item k):

25. Identify remedies for failure to comply with the terms of the agreement.

If project cannot be completed under the terms of this agreement:

- Unused funds will be returned to the RAC account.
- Other, please explain:

Project Recommended By:

/s/ (INSERT Signature)
Chairperson

Resource Advisory Committee

Project Approved By:

/s/ (INSERT Signature)
Forest Supervisor

_____ National Forest

Project Cost Analysis Worksheet

Worksheet 1

Please submit this worksheet with your proposal

Item	Column A Fed. Agency Appropriated Contribution	Column B Requested Title II Contribution	Column C Other Contributions	Column D Total Available Funds
a. Field Work & Site Surveys		\$8,9970.00		
b. NEPA/CEQA				
c. ESA Consultation				
d. Permit Acquisition				
e. Project Design & Engineering				
f. Contract/Grant Preparation				
g. Contract/Grant Administration				
h. Contract/Grant Cost				
i. Salaries		\$50,052.21		
j. Materials & Supplies		\$3,500.00		
k. Monitoring		\$9,644.44		
l. Other ex. Partner Indirect Cost		\$21,658.09		
m. Project Sub-Total		\$93,851.74		
n. FS Indirect Costs				
Total Cost Estimate		\$93,851.74		

NOTES :

Col. A: FS costs incurred as part of proposal implementation. Coordinate with FS to identify any FS cost for items in Col. A.

Col. B: Title II funding requested to implement the proposal.

Col. C: Matching funds being contributed by proponent or third parties. Proposals funded with a Participating Agreement will require a minimum 20% match.

Col. D: Sum of columns A, B, and C for each individual row.

Row A: Costs associated with project planning, not project implementation, such as assessment of miles of trail needing maintenance. Assessments and planning needed to develop a specific proposal. For Col. B: proponents must request permission in advance to request Title II funds to complete NEPA/CEQA analyses, as this is expected to be completed prior to proposal submission.

Rows B, C, D, and E: cost associated with environmental compliance and project design. Proponents must request permission in advance to request Title II funds to complete NEPA/CEQA analyses, as this is expected to be completed prior to proposal submission.

Row G: Costs associated with preparation of contract or agreement instruments used to implement the proposal. Contracts used to complete projects have special provisions; contact the FS to identify these early in the process.

Row G: Costs associated with administration of contract or agreement instruments used to implement the proposal.

Row H: Estimated value of any contracts/agreements used to implement proposal. Contracts/agreements used to complete projects have special provisions; contact the FS to identify these early in the process.

Row I: Cost of salaries to implement project

Row L: Examples include overhead charges from other partners, vehicles, equipment rentals, travel, etc.

Row K: Costs associated with performing monitoring described in Items 24a, 24b, and 24c. Amounts should be similar between Item 24 and Row K.

Row N: Forest Service indirect costs, including contracting/grant officer costs if needed.

Monitoring Plan: Cordova Native Seed Collection and Seed Banking

- a. Provide a plan that describes your process for tracking and explaining the effects of this project on your environmental and community goals outlined above.

The Copper River Watershed Project Program Manager will work with a steering committee of partners and content experts to help develop a plan for developing The Cordova Native Seed Bank. This committee will meet at the conclusion of each field season to assess if program objectives were met. In order to monitor the development of the seed bank, we will quantify the volume and number of different species harvested and evaluate germination testing results. We will also document any lessons learned about collecting and processing specific to Cordova's damp climate to inform future efforts and increase effectiveness over time.

To evaluate the success of engaging the youth and volunteers in collection activities, we will track the number of participants, the number of hours volunteered, and the number of partners involved. We will also document which collection strategies operated effectively and which were not executed successfully based on participant responses and engagement with activities.

Additionally, to evaluate education and outreach efforts, we will accumulate a list of the activities hosted, materials developed, and number of people contacted during education programming. We will also discuss with partners the overall implementation and outreach successes while addressing any challenges in need of modifications that can be made in subsequent field seasons.

Finally, the Native Seed Bank will have an extensive organizational system that will help track collection dates, number of seeds, number of species, weight, seed collection location, viability expiration dates, and etc.

- b. Identify who will conduct the monitoring:

The CRWP Program Manager will coordinate the annual partnership evaluation discussion outlined above and document lessons learned in a weekly log format for future conversations.

The CRWP Program Manager and seasonal technicians will be the primary monitors of the Cordova Native Seed Bank. Monitoring techniques will be relayed in an Excel spreadsheet form to help track native seed collection sites health, population, location, observers, number occurrences of use, dates of collection, and etc. Germination testing of the collected seeds will occur through a 3rd party lab for the first year until CRWP has the training and capacity to do so without 3rd party options and costs.

- c. Identify total funding needed to carry out specified monitoring tasks (Worksheet 1, Item k):

Roughly 1/3 of the staff time is allocated for managing the partnership, tracking key metrics, and documenting lessons learned. The amount of \$1,500.00 is also included for germination testing during year 1.