

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): 2022-2025

2. Project Name: Cordova Invasive Plants	3a. State: Alaska 3b. County(s): Cordova
4. Project Submitted By: Copper River Watershed Project	5. Date: 9/23/2021
6. Contact Phone Number: 907-424-3334	7. Contact E-mail: Daniel.schmalzer@copperriver.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 goal of this four-year project is to control and eradicate several invasive plant species in and around the City of Cordova and the Chugach National Forest. Invasive plants threaten fish populations, nesting birds, and other wildlife that use the Copper River Delta and Prince William Sound by reducing spawning and nesting habitat, and reducing critical habitat. The Copper River Watershed Project (CRWP) invasive plant staff aim to prevent the spread of invasive plants to the Chugach National Forest. CRWP staff plan on targeting reed canary grass (*Phalaris arundinacea*), bohemian knotweed (*Polygonum x bohemicum*), oxeye daisy (*Leucanthemum vulgare*), orange hawkweed (*Hieracium aurantiacum*), and butter and eggs (*Linaria vulgaris*) in City of Cordova and DOT rights-of-way. Part of monitoring the current infestations of invasive plants in Cordova includes the Early Detection and Rapid Response (EDRR) of new invasive plant species and infestation locations. This is important when working with species like reed canary grass, which was first found in Cordova in 2005. Once reed canary grass establishes, eradication efforts become more and more difficult. Yet, when infestations are small and undeveloped, they can be controlled before spreading, which make early monitoring, detection and eradication efforts so important.

Once the plants listed above become established, they tend to be difficult to eradicate. Years of repetitive manual and chemical treatments are required to be effective. Over the past 4 years, CRWP has seen positive results from a combination of manual and chemical treatments on reed canary grass infestations; Whiskey Ridge has had a 74% decrease in percent cover, Cedar St. a 49% decrease in percent cover, and 5 Mile Loop an 80% decrease in percent cover. With four years of secured funds for continued project work we can effectively reduce the current infestations, spread, and additionally increase outreach and education.

10. Project Description:

a. Brief: (*in one sentence*) The CRWP intends to continue treatment of several priority infestations of invasive plants in and around the City of Cordova.

b. Detailed:

The CRWP began its invasive plant program in 2011 in Cordova in coordination with the US Forest Service (USFS) Cordova Ranger District. Original surveys in 2011 recorded several populations of invasive plants in and around the City of Cordova, with most of the population along the Copper River Highway. Control and monitoring efforts began shortly after using manual and chemical treatments, however well-established seed banks have resulted in regular regrowth of these populations. Since 2011, large infestations of the reed canary grass have been tarped, mowed, seed heads clipped, and chemically treated along the Copper River Highway reducing but not eliminating the population. In 2013, the Cordova Cooperative Weed Management Area Strategic Plan was created to partner between organizations that would be involved with creating specific goals for invasive plant eradication in the Cordova area. Additionally, in 2017 NEPA was completed by the USFS for the proposed project activities prioritizing high target species and treatment methods (Prince William Sound Zone Terrestrial Invasive Plant Treatment Project EA, Oct. 2017) creating the framework we look to implement now.

The state of Alaska uses a rank-based scale, 0-100, based on initial climatic screening, ecological impacts, biological characteristics, dispersal ability, distribution, and feasibility of control. This allows for land manager to prioritize species for management. As time allows, we will control infestations ranked 60 or higher; here in the Cordova area that includes: reed canary grass, bohemian knotweed, orange hawkweed, butter and eggs and oxeye daisy:

- Bohemian knotweed (*Polygonum x bohemicum*), invasiveness 87, has been located in City of Cordova right-of-way as you drive to ski hill. A combination of tarping, manual, and chemical treatments will be used to control the infestation. The bohemian knotweed infestation in Cordova is .028 acres in size but has the potential to spread. Due to the size the infestation there is a strong potential to be controlled before it expands.
- Reed canary grass (*Phalaris arundunacea*), invasiveness 83, has been found along the Copper River Highway, at the end of Sheridan Glacier Road, One-Eyed Pond campground, 6-Mile subdivision, along Whitshed Road, and scattered throughout town on private property. Reed canary grass is highly invasive, and over the past 10 years of the invasive plants program CRWP has cut seed heads, chemically sprayed, mowed, and tarped infestations. Not only does reed canary grass spread via seed germination, but it spreads through rhizome growth. Reed canary grass has the ability to grow dense rhizome mats that create a monoculture which helps outcompete native species and one of the reasons it is so difficult to remove. These dense rhizome mats are part of what make reed canary grass such a formidable invasive. CRWP plans on multiple treatment styles while working with reed canary grass. Continued mowing before seed germination has shown a reduction of seed head generation; coupled with a translocating systemic herbicide are effective treatments. Larger stands along Eyak Lake and throughout the City of Cordova will also be tarped with light reducing tarps to prevent growth and break down rhizome production. Cordova has 11 acres of reed canary grass to manage.
- Orange hawkweed (*Hieracium aurantiacum*), invasiveness 79, is well established throughout Cordova; totaling 1.4 acres. Orange hawkweed is a fast multiplier and quickly outcompetes native grasses and flowers through seed production and dense rhizome mats. Orange

hawkweed treatments will include deadheading plants before reaching seed and when possible herbicide treatments.

- Butter and Eggs (*Linaria vulgaris*), invasiveness 69, is established sporadically from the Mudhole Smith Airport back to town along the Copper River Highway and along the Orca Adventure Road totaling 3.03 acres. Butter and eggs treatments involve manual removal and disposal of the entire plant.
- Oxeye daisy (*Leucanthemum vulgare*), invasiveness 61, is well established near the 10 Mile Chugach National Forest Sign along the Copper River Highway, additional locations along the Copper River Highways back to Cordova, and small infestations scattered throughout the City of Cordova, in City and DOT right-of-way's and private property; totaling 2.23 acres to be monitored and manually treated. Manual treatment of oxeye daisy involves removing the entire plant, including root system, paired with multiple site visits because the variable emergence of the plant.

The CRWP is proposing a four-year project that is broken into two phases: Phase A and Phase B. With invasive plants becoming a long-term issue that stretches across time and land ownership boundaries, securing long term funds is key to eliminating invasive plants. Phase A would include staff and supplies needed to complete the work in the 2022-2023. Phase B would guarantee invasive plant work being completed in 2024-2025 by funding the remainder of staff time and yearly supply needs.

Starting in 2022, site monitoring of already identified infestations, documenting any new infestations or spread locations, and treatment of these sites will occur. Continued monitoring, and follow up spot treatments of each species, will take place after each initial treatment, since invasive plants often require multiple years of treatments. Treatment efforts will be completed by a partnership of CRWP employees and USFS staff. CRWP staff will be responsible for oxeye daisy, orange hawkweed, butter and eggs, and reed canary grass treatments that occur in the City of Cordova and DOT rights-of-ways. CRWP will partner with USFS Ecology Staff to assist with treatments on USFS lands. The amount of work in the Cordova area requires additional staff to be able to perform proper eradication efforts. By hiring a seasonal employee, the CRWP will be able to increase surveys, monitoring, and eradication efforts in the Cordova area.

Additionally, with this proposal, we look to enhance outreach and education efforts in Cordova. CRWP is looking to update and distribute Invasive Plant Identification Cards. Focusing distribution of the card in high traffic areas, like campgrounds, the three Prince William Sound ferry terminals, and the USFS Cordova Ranger District. Distribution of these materials will help raise awareness to decrease spread to Cordova, Whittier, Valdez, and the more remote parts of Prince William Sound and the Copper River Delta by educating both community members and tourists travelling by car, RV, or boat. By being able to distribute materials in Cordova or the Whittier/Valdez Ferry Terminals the public can familiarize themselves with the plants before arriving in Cordova and then be able to keep an eye out for infestations and know the proper ways of reporting. Time will be set aside to work with people camping in the USFS and City of Cordova Campgrounds to help educate the importance of cleaning vehicles properly and the importance of not transporting plant fragments throughout Prince William Sound and the Copper River Delta.

CRWP invasive plant staff will partner with the Prince William Sound Science Center to spend time with the summer camp programs talking about the importance of invasive species control, and then work promoting native plants in the Native Plant Garden.

Educational signs will also be purchased to install at USFS recreation sites emphasizing the importance of cleaning and removing any invasive plant materials. “Infestation Present” signs will also be purchased to install at various locations along the Copper River Highway, Whitshed Road, and various location throughout town to emphasize where plants are, what they look like, and how the public can help. Additional boot scrapers will be purchased to install/replace damaged ones at the USFS and City of Cordova trail heads.

We aim to purchase more native seed packets and distribute them to local organizations and the public. Native seed packets are an outreach tool that are distributed by the CRWP to involve landowners in identification of non-native species and helping promote native plants. Each packet contains seeds of plants native to the surrounding ecosystem and an Invasive Plant Identification Card. This allows people to learn what plants are invasive, how to remove them, and gives an option to plant native seeds in place. By distributing the packets to land-owners they will hopefully be able to assist with monitoring efforts in the local community through identification of non-native plants, by planting their native seed packets, and help promote native plant growth.

CRWP also plans on a public outreach day to remove invasive plants from the Copper River Delta. The goal of the volunteer day is to recruit volunteers to assist with manual treating for invasive plants throughout the Copper River Delta.

Materials needed for manual and chemical control include: PPE, one new brusher for mowing reed canary grass, fuel, a spill kit, and a new pesticide storage locker. CRWP also looks to purchase additional herbicide, application equipment, and PPE for herbicide applicators. To increase our monitoring efforts, we look to buy an iPad to be able to access ArcGIS and Aneccdata.org for better monitoring and to be able to consolidate photos and GPS points accurately and efficiently. By using these applications, we will strengthen our EDRR and be able to gather a better idea of the infestations around Cordova.

CRWP staff will participate in herbicide certification classes, and receive approvals in the categories necessary to apply herbicide in various environments. Staff will also attend CPR & First Aid courses because of the handling of hazardous materials. CRWP will also attend Weed Free Gravel Inspection courses to assist with USFS and CRWP future projects to promote weed free gravel options from local construction companies, to assist limiting the spread of invasive plants.

11. Types of Lands Involved?

State/Private/Other lands involved? Yes No

Land Status: State, Private, US Forest Service

If Yes, specify: State DOT and City of Cordova Right-of-ways, private property, US Forest Service

12. How does the proposed project meet purposes of the Legislation? (Check at least 1)

Improves maintenance of existing infrastructure.

Implements stewardship objectives that enhance forest ecosystems.

Restores and improves land health.

Restores water quality

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

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: 17.688
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: 17.688
Acres of noxious weeds controlled: 17.688
Timber volume generated (mbf):
Jobs generated in full time equivalents (FTE) to nearest tenth. One FTE is 52 forty-hour weeks: 1.2
People reached (for environmental education projects/fire prevention): 500 each year
Direct economic activity benefit:
Other:

15. Estimated Project Start Date: January 1, 2022	16. Estimated Project Completion Date: December 31, 2025
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17. List known partnerships or collaborative opportunities.

The Copper River Watershed Project will coordinate with the USFS Cordova Ranger District, City of Cordova, Alaska Department of Transportation & Public Facilities, volunteers from Cordova, and the Prince William Sound Science Center.

18. Identify benefits to communities.

The control and elimination of invasive plant species promotes and restores native vegetation and enhances native plant diversity. Removal of invasive plants also prevents introduction and further spread into nearby habitat, such as Prince William Sound and the Copper River Delta. The potential spread of invasive plants to riparian zones and other aquatic sites may degrade overall watershed health. Control of small populations of invasive plants are not only easier to control than large infestations, they additionally reduce the cost of large-scale treatments if populations are left to spread.

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

Cordova is visited frequently during the summer season as a gateway to remote and pristine locations in Prince William Sound and the Copper River Delta. Controlling invasive plant infestations will likely limit or prevent the spread of invasive plants to federal lands, thus protecting the native plant diversity and overall ecosystem health. Costs of invasive plant control in remote sites of Prince William Sound would be significantly greater than in coastal towns such as Cordova. Rapid response to invasive plants and subsequent prevention of spread is critical to successful control and eradication.

20. What is the Proposed Method(s) of Accomplishment? (check at least 1)	
<input type="checkbox"/> Contract	<input checked="" 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: \$462,949.24
b. Is this a multi-year funding request? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

23. Identify Source(s) of Other Funding:

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: Phase A

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				
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	\$5,000.00	\$159,810.32	\$19,407.20	\$184,217.52
j. Materials & Supplies	\$1,000.00	\$23,050.00		\$24,050.00
k. Monitoring				
l. Other ex. Partner Indirect Cost		\$54,858.10		\$54,858.10
m. Project Sub-Total	\$6,000.00	\$182,860.32	\$19,407.20	\$208,267.52
n. FS Indirect Costs				
Total Cost Estimate	\$6,000.00	\$237,718.42	\$19,407.20	\$263,125.62

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.

Project Cost Analysis Worksheet: Phase B

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				
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	\$5,000.00	\$166,164.47		\$171,164.47
j. Materials & Supplies	\$1,000.00	\$7,090.00		\$8,090.00
k. Monitoring				
l. Other ex. Partner Indirect Cost		\$51,976.34		\$51,976.34
m. Project Sub-Total	\$6,000.00	\$173,254.47		\$179,254.47
n. FS Indirect Costs				
Total Cost Estimate	\$6,000.00	\$225,230.82		\$231,230.81

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 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.

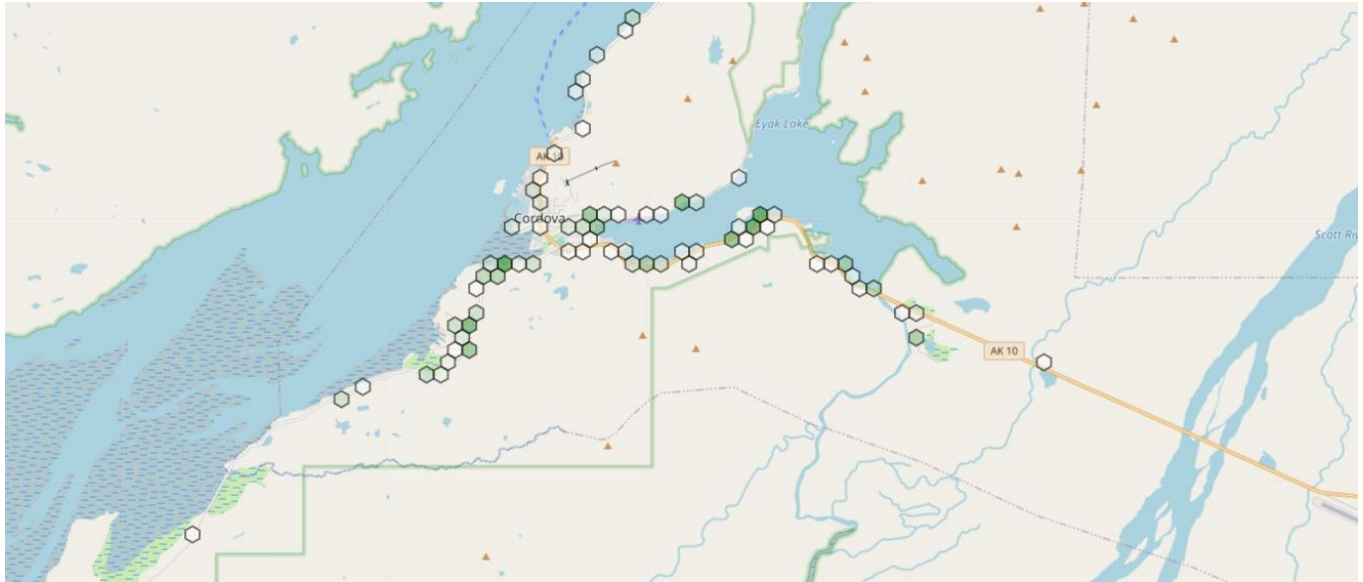
The original 2011 surveys were completed by the US Forest Service Ecology staff of Girdwood and Copper River Watershed Project staff. As surveys continued and the Copper River Watershed Project began treatments; monitoring was then completed by partnered Copper River Watershed and US Forest Service staff. The City of Cordova has been surveyed and all priority invasive plant infestations have been mapped. Copper River Watershed Project staff will continue to monitor these sites during and after treatment starting with the most recent/infectious species i.e. reed canary grass and orange hawkweed. All treated areas will be revisited within the same field season and again the following year to determine treatment efficacy. Pre-treatment data will be compared to post-treatment data at each data point, including infestation area and percent cover. All survey and treatment acreages will be recorded via CRWP's Anecdotal page, and submitted to the Alaska Exotic Plant Information Clearinghouse (a statewide invasive plant database), as well as added to the US Forest Service NRIS corporate database.

- b. Identify who will conduct the monitoring:

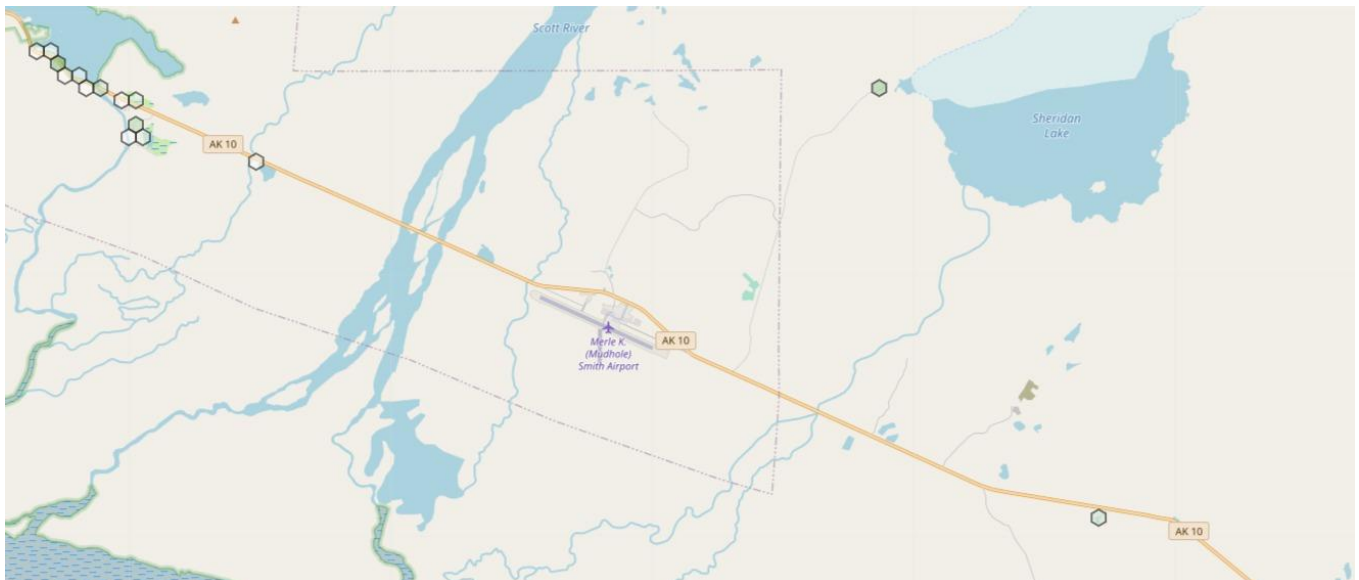
Copper River Watershed Project and US Forest Service Ecology staff.

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

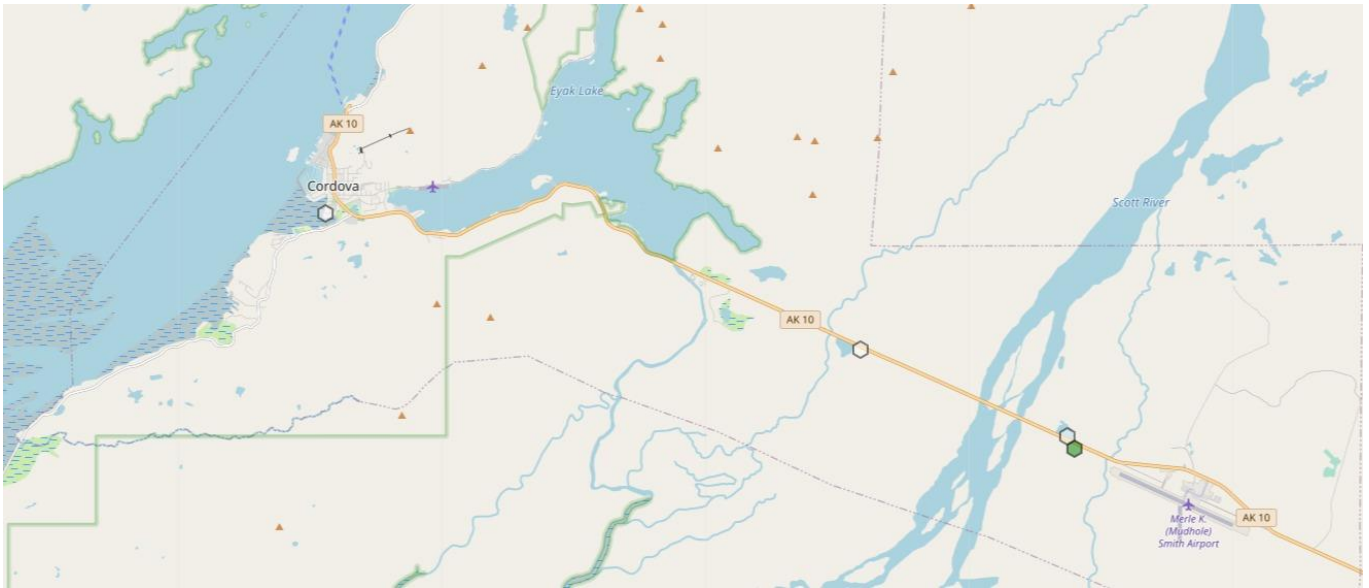
The cost of monitoring is included in salaries requested in the Project Cost Analysis Worksheet.



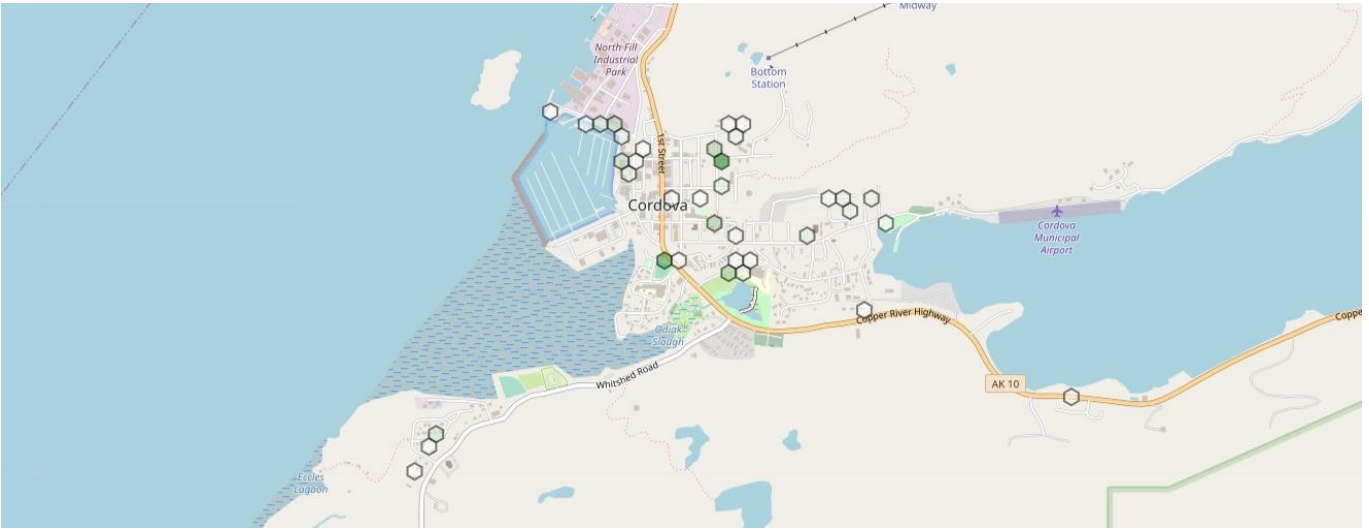
Infestations of reed canary grass around Cordova.
The darker the bubble, the larger the infestation.



Infestations of reed canary grass along the Copper River Highway.
The darker the bubble, the larger the infestation.



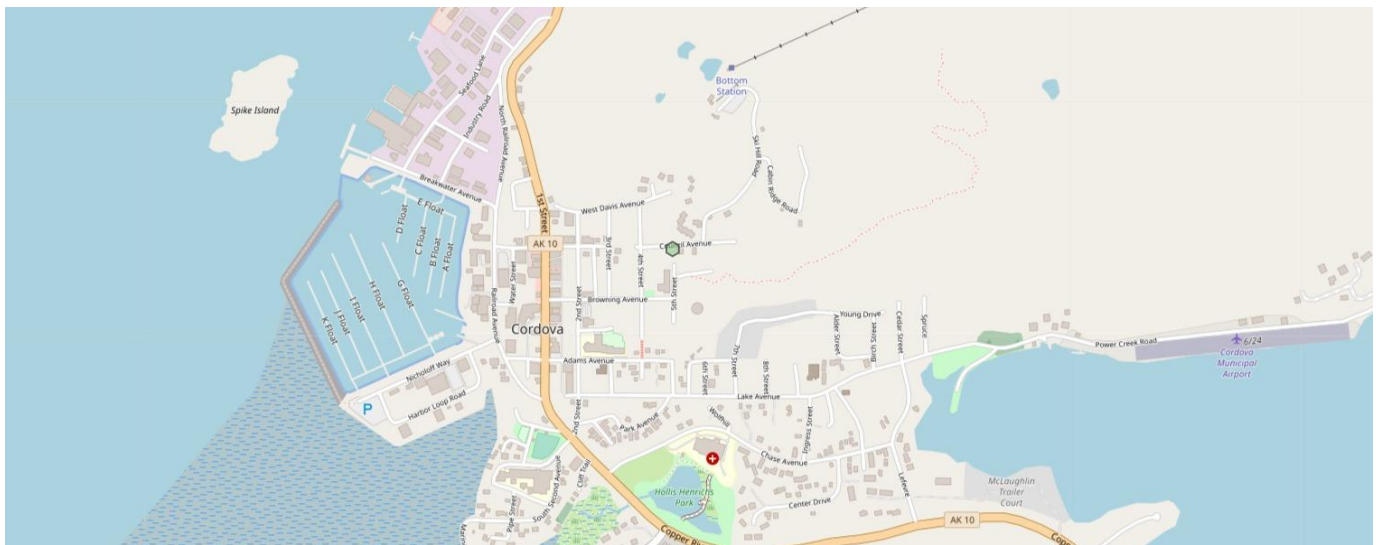
Distribution of oxeye daisy throughout Cordova and along the Copper River Highway.
 The darker the bubble, the larger the infestation.



Infestations of orange hawkweed around Cordova.
 The darker the bubble, the larger the infestation.



Infestations of butter and eggs around Cordova.
The darker the bubble, the larger the infestation.



Infestation of bohemian knotweed in Cordova.