



MODIFICATION OF GRANT OR AGREEMENT

PAGE OF PAGES

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1. U.S. FOREST SERVICE GRANT/AGREEMENT NUMBER: 15-GN-11091300-109	2. RECIPIENT/COOPERATOR GRANT or AGREEMENT NUMBER, IF ANY:	3. MODIFICATION NUMBER: 008
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4. NAME/ADDRESS OF U.S. FOREST SERVICE UNIT ADMINISTERING GRANT/AGREEMENT (unit name, street, city, state, and zip + 4): Tina Smith, Lake States Acquisition Team, 500 Hanson Lake Road, Rhinelander, WI 54501	5. NAME/ADDRESS OF U.S. FOREST SERVICE UNIT ADMINISTERING PROJECT/ACTIVITY (unit name, street, city, state, and zip + 4): Adam Felts, Chequamegon-Nicolet National Forest, 500 Hanson Lake Road, Rhinelander, WI 54501
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6. NAME/ADDRESS OF RECIPIENT/COOPERATOR (street, city, state, and zip + 4, county): Rebecca Diebel Wisconsin Department of Natural Resources P.O. Box 7921 Madison, WI 53707	7. RECIPIENT/COOPERATOR'S HHS SUB ACCOUNT NUMBER (For HHS payment use only):
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8. PURPOSE OF MODIFICATION

CHECK ALL THAT APPLY:	This modification is issued pursuant to the modification provision in the grant/agreement referenced in item no. 1, above.
<input type="checkbox"/>	CHANGE IN PERFORMANCE PERIOD:
<input type="checkbox"/>	CHANGE IN FUNDING:
<input type="checkbox"/>	ADMINISTRATIVE CHANGES:
<input checked="" type="checkbox"/>	OTHER (Specify type of modification): Appendix A – Restoration Projects Operating Plan Year 5, Appendix B – Financial Plan Year 5, and Appendix C – Restoration Projects Statement of Work Project Areas Year 5

Except as provided herein, all terms and conditions of the Grant/Agreement referenced in 1, above, remain unchanged and in full force and effect.

9. ADDITIONAL SPACE FOR DESCRIPTION OF MODIFICATION (add additional pages as needed):

10. ATTACHED DOCUMENTATION (Check all that apply):

<input checked="" type="checkbox"/>	Revised Scope of Work
<input checked="" type="checkbox"/>	Revised Financial Plan
<input type="checkbox"/>	Other:

11. SIGNATURES

AUTHORIZED REPRESENTATIVE: BY SIGNATURE BELOW, THE SIGNING PARTIES CERTIFY THAT THEY ARE THE OFFICIAL REPRESENTATIVES OF THEIR RESPECTIVE PARTIES AND AUTHORIZED TO ACT IN THEIR RESPECTIVE AREAS FOR MATTERS RELATED TO THE ABOVE-REFERENCED GRANT/AGREEMENT.

11.A. WISCONSIN DNR SIGNATURE 	11.B. DATE SIGNED 11/18/19	11.C. U.S. FOREST SERVICE SIGNATURE 	11.D. DATE SIGNED 11/21/19
(Signature of Signatory Official)		(Signature of Signatory Official)	
11.E. NAME (type or print): FRED SOUBA	11.F. NAME (type or print): PAUL I.V. STRONG		
11.G. TITLE (type or print): Chief State Forester	11.H. TITLE (type or print): Forest Supervisor		

12. G&A REVIEW

12.A. The authority and format of this modification have been reviewed and approved for signature by: TINA SMITH U.S. Forest Service Grants & Agreements Specialist	12.B. DATE SIGNED
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Ash Lowland Diversification

Appendix A: Operating Plan

I. Project Description:

Underplant lowland conifers and/or lowland hardwoods in black ash stands (without timber harvest) to establish tree species diversity ahead of Emerald Ash Borer invasion.

II. Forest Service Shall:

1. Provide maps and locations of where to plant the trees.
2. Provide direction on which tree species to plant.
3. Provide the tree species to plant.

III. State Shall:

1. Provide the labor and equipment necessary for planting the tree species in the wetlands.
2. Conduct 1 year and 3 year seedling/sapling survival surveys.
3. Provide a report to the Forest Service of planting success rate.

IV. Goals:

1. Maintain a forest cover on the landscape in the selected stands by planting tree species that are not affected by emerald ash borer.

V. Objectives:

1. Establish non-ash species conifer and hardwood tree species in ash dominated stands prior to emerald ash borer killing the existing overstory ash tree species.

VI. Tasks and Timeline:

The tasks and general timeline for this project are as follows:

Time	Description
Winter/early spring	Forest Service will determine which stands to survey and provide data and information to cooperator
Late spring/early summer	Cooperator will plant tree species.
Summer, year 1 after planting	Cooperator will conduct 1 year survival survey
Summer, year 3 after planting	Cooperator will conduct 3 year survival survey

VII. Long Term Benefits:

Long-term benefits include establishing native tree cover in ash-dominated forests that will keep forest health on the landscape.

**Aspen Stand Assessment
Appendix A: Operating Plan**

I. Project Description:

A survey of the existing older aspen (*Populus tremuloides* and *P. grandidentata*) stands on the forest is needed to determine which aspen stands are still commercially viable to clearcut through a traditional timber sale and which have passed a threshold of economic viability and require mechanical site preparation with or without commercial timber removal to regenerate a healthy fully stocked aspen dominated stand. Regenerating older aspen stands, through manmade disturbance is crucial to maintain early successional species, particularly aspen on the landscape. The Forest has been unable to meet the Forest Plan Goals for regeneration and age class distribution of early successional forests. Early successional forests are in decline and provide important habitat for wildlife species as well as economic opportunities for forest management. Current forest inventory data indicates there are many older (>75 years old) aspen stands scattered across the forest. These stands may be beyond the threshold of commercial timber harvest due to low basal area (< 50 BA) and quality of the stand. This project will identify those stands that are still viable for a commercial timber harvest as well as identify those stands that are not suitable for a commercial timber harvest due to economic reasons, but still have enough aspen basal area (> 10 BA) in the stand to regenerate it. Those stands that are not suitable for a commercial timber harvest would be regenerated in a future project by shearing or some other mechanical treatment in order to stimulate the aspen to re-sprout. This aspen inventory portion of the project will be conducted by the state of Wisconsin utilizing GNA-Program Revenue funds. Future mechanical treatments developed as an outcome of this assessment may be conducted by the State of Wisconsin in a future GNA-Program Revenue project. It is estimated that the assessment of aspen stands will begin in 2019.

II. Forest Service Shall:

1. Prepare and provide maps, shapefiles, work specifications, timing, and desired outcomes of projects to be accomplished.
2. Provide limited field support to support the project and ensure it meets the agreed upon specifications.
3. Provide support and guidance on decisions regarding which stands to conduct non-commercial and commercial timber harvest.
4. Continue via its vegetation management process, implement commercial and non-commercial timber management (where appropriate under the 2004 LMRP as amended) that manages aspen on National Forest lands.

III. State Shall:

1. Provide the personnel necessary for inventorying aspen stands.
2. Coordinate with U.S. Forest Service district personnel on projects to be implemented via GNA on their Districts to ensure full understanding of the projects goals, objectives and anticipated delivery outcome.
3. Be responsible to obtain via the WDNR processes, services (contactors, partners or WDNR staff) necessary to conduct the inventory and aspen harvest work agreed upon under GNA.
4. Be responsible for conducting quality control of work being implemented to ensure it meets descriptions and specifications of the project.

5. For documenting, caring for, and securing any equipment or materials purchased with funds from this agreement.
6. Provide timely and accurate reporting to the US Forest Service as detailed in the SPA or master agreement or as requested by the US Forest Service.

IV. Goals:

1. Maintain the amount and health of aspen forest on the Chequamegon-Nicolet National Forest to obtain forest plan prescribed levels and improve wildlife habitat.
2. Reduce CNNF staff time and costs locating financial resources and obtaining services needed for delivery.
3. Accomplish aspen inventory that is important to the CNNF to support forest plan goals, and benefits to the public.

V. Objectives:

1. Assess current older aspen stands in areas identified as suitable for timber production within management areas with a primary or secondary emphasis of aspen forest type.
2. Determine which aspen stands are candidates for commercial vs. non-commercial timber harvest or have converted to other forest types.

VI. Tasks and Timeline:

The tasks and general timeline for this project are as follows:

Time	Description
2019	WI-DNR will start aspen stand inventory.
July 1, 2020	WI-DNR will complete inventory with recommendations for non-commercial vs. commercial timber harvest.

VII. Long Term Benefits:

Long-term benefits include maintaining healthy vigorous aspen on the landscape by regenerating older aspen stands beyond economic regeneration thresholds that may otherwise convert to another stand type and/or non-forest condition, and improving habitat for wildlife dependent on early successional forest types.

Bat Acoustic Data Analysis

Appendix A: Operating Plan

I. Project Description:

The Chequamegon-Nicolet National Forest (CNNF) has been collecting bat acoustic transect data since 2009. The Wisconsin Department of Natural Resources (WDNR) has been collecting acoustic transect data using a similar protocol since 2013. The CNNF shares all its collected acoustic transect data with the WDNR to contribute to the larger statewide dataset and in an effort to support a better understanding of bat distribution and relative abundance across the species respective ranges. This data is particularly important when considering the devastation that the disease white-nose syndrome has had on many hibernating bats in Wisconsin and providing managers with the ability to track potential changes in species occurrence and distribution over time, better understanding the National Forest's impact when implementing the Forest Plan.

The principal objectives for this project will be: 1) the CNNF will provide the WDNR with all collected acoustic data, 2) the WDNR will analyze the provided acoustic data, and 3) the WDNR will provide the CNNF with deliverables that include maps, ArcGIS shapefiles, and labeled acoustic files.

II. Forest Service Shall:

1. Continue to collect bat acoustic data across the CNNF.
2. Provide the WDNR with the following data and files: collected acoustic data and all associated bat detector and GPS files, scanned copies of completed survey datasheets, and maps and/or shapefiles of any new transects or modifications to existing transects.

III. State Shall:

1. Examine and analyze provided acoustic data and identify the files to species, species groups (e.g., high or low frequency, big brown/silver-haired, etc.), or unknown.
2. Analysis will be conducted by an experienced biologist with expertise in acoustic identification of bats in the eastern United States, specifically Wisconsin.
3. Provide the Forest Service with the following:
 - a. Map of each survey transect (one for each transect replicate) displaying the survey route and location of identified call files.
 - b. ArcGIS shapefiles of identified species/species group locations.
4. Provide the Forest Service with analysis output files and labeled acoustic files.
5. Provide the Forest Service with a copy of any publications or reports that may be generated using this data.

IV. Goals:

1. Increase cooperative relations and data sharing between the Forest Service and WDNR.
2. Leverage shared agency objectives for bat conservation and monitoring.
3. Contribute to increased agency and statewide management effectiveness as well as a better understanding of relative bat species abundance and distribution in Wisconsin.
4. Contribute to a better understanding of the effects of white-nose syndrome, and potential other threats, to bat populations.
5. Collect critically needed data to assess relative abundance and species richness, as well as habitat use by migratory tree bat species, most of which are WI Species of Special Concern.

V. Objectives:

1. CNNF: Complete 11-13 acoustic transects, run three times each, during the established survey season. All collected data and associated data/forms will be provided to the WDNR in a timely manner or previously agreed on time.
2. WDNR: Analyze all provided acoustic files and provide a map for each transect replicate, as well as shapefiles of identified bat locations, and acoustic files labeled with the respective species or species group ID.

VI. Long Term Benefits:

Long-term benefits include increased cooperative relations between the WDNR and CNNF as well as improving a statewide dataset important for monitoring threatened bat populations. Data derived from this cooperative effort will contribute toward improving land and resource management, a better understanding of bats and habitat use within the CNNF and across the state, as well as providing up-to-date information needed for project planning and environmental analysis.

Agreement No. 15-GN-11091300-109
Catastrophic Event Response to Aid Restoration
Appendix A: Operating Plan

I. Project Description:

This project's main purpose is to aid the restoration of the Forest after a large, Forest impacting, natural disaster, e.g., gathering vegetation information and restoring access to aid a restoration response. The WDNR could collect aerial images of select storm-impacted areas along with other useful data or aid with clearing roads to allow for safe restoration activity access. All the activities should support prescription writing updates, inform revegetation needs, and allow the Forest to understand what additional restoration activities are needed.

The DNR shall furnish all personnel, materials, services, and facilities necessary for the project and performance of this contract. The contract includes the contractor furnishing all supervision, labor, equipment (including unmanned aerial vehicles and photographic equipment), tools, and other incidentals, except as otherwise provided by the Forest.

On July 19, strong winds and rain caused significant damage to portions of the Lakewood-Laona Ranger District on the Chequamegon-Nicolet National Forest (the Forest). Thousands of acres have been impacted and this project is an example of a natural disaster in which these activities to aid restoration could occur.

II. Forest Service Shall:

1. Prepare and provide maps, shapefiles, work specifications, timing, and desired outcomes of projects to be accomplished.
2. Provide limited field support to support the project and ensure it meets the agreed upon specifications.

III. State Shall:

1. Provide the personnel and equipment necessary to execute activities like collecting imagery of the impacted areas or clearing debris-filled roads in order to access forest.
2. Coordinate with the Forest Service district personnel on projects to be implemented via GNA on their Districts to ensure full understanding of the project goals, objectives, and anticipated delivery outcome.
3. Be responsible to obtain via the WDNR processes, services (contractors, partners or WDNR staff) necessary to conduct the work agreed upon.
4. Be responsible for conducting quality control of work being implemented to ensure it meets descriptions and specifications of the project.
5. For documenting, caring for, and securing any equipment or materials purchased with funds from this agreement.
6. Provide timely and accurate reporting to the US Forest Service as detailed in the SPA or master agreement or as requested by the Forest Service.

IV. Goals:

1. Update current prescriptions in the impacted area
2. Better understand the restoration needs in the impacted area
3. Better understand the revegetation needs in the impacted area
4. Maintain or enhance the productivity and health of the Forest

V. Long Term Benefits:

This cooperative effort will provide a way to inform prescription writing updates, inform revegetation needs, and allow the Forest to understand what additional restoration activities are needed. In addition, this will aid the Forest's response to future storm events.

Agreement No. 15-GN-11091300-109
Groundwater and Geological Resource Inventory and Investigations
Appendix A: Operating Plan

I. Project Description: Conduct groundwater and geological resource inventories and investigations of identified groundwater/surface water and geological management issues within the Chequamegon-Nicolet National Forest (CNNF). Prepare reports and maps and make this information available to the State of Wisconsin, Forest Service, other stakeholders, and the public.

Proposal: Continue cooperative groundwater and geologic resource inventories and investigations with the Wisconsin Department of Natural Resources (WDNR) Forestry Division and partners in UW Madison, Wisconsin Geological and Natural History Survey (WGNHS). Identified groundwater/surface water and geological investigation projects would build upon and add to existing information and data bases to increase knowledge and understanding of the characteristics and functions of groundwater/surface water interactions in selected watersheds to 1) Increase understanding of the potential effects of changing climate on groundwater dependent resources. 2) Refine mapping and characterization data of the groundwater/surface water interactions and the geological resource to address specific management issues. 3) Provide tabular and mapping data for Forest wide and project planning. 4) Refine management and restoration of important trout habitat. 5) Publish and contribute to building upon the groundwater and geology information available to the public and stakeholders for common stewardship of this important resource.

This work would be conducted on specific watersheds and project areas designated by the CNNF. The project work reports and mapping information would be published by the WGNHS.

Background: The natural resources of the CNNF (soil, fish, wildlife, and forest) are intimately connected to the geology and abundance of water resources including streams, lakes, and wetlands. These surface waters depend on flows of water in the larger forest ecosystem including the recharge and discharge of groundwater. Groundwater discharge is also a primary factor in the establishment, persistence, and survival of groundwater-dependent ecosystems.

In addition, groundwater-derived baseflow is the limiting factor for many recreational uses such as fishing and canoeing. Management of the CNNF would benefit from a better understanding of water sources such as recharge and the sensitivity of the hydrologic system flows and temperature to changes on the landscape. A basic understanding of the groundwater/surface-water system and the effect of land use on the system is important because the CNNF can expect increases in developmental pressure on lands within and near the Forest.

A basic understanding of the geology and hydrologic system is crucial to predicting the hydrologic response to climate change, including a likely increase in heavy rain events and flooding, increasing temperatures, and changes in recharge. Several major storms in the past few years have damaged infrastructure and continue to cause high water tables and flooding. In order to better understand the linkages of water to forest, the linkage of groundwater to surface water,

and to guide future protection and restoration of ecologically important environmental flows, better characterization of the geology and groundwater/surface-water system is needed.

The CNNF has developed aquatic ecological classification units for streams which are premised on the connection between surface and groundwater. Fish and mussel data from this work were used in the US Geological Survey's Aquatic GAP program. However, additional knowledge about the size, location and chemical characteristics of groundwater in the CNNF would improve the aquatic ecological stream segment mapping and interpretation.

This cooperative work supports the implementation of the CNNF 2004 Land and Resource Management Plan, Goals 1 and 2; Ensure Healthy and Sustainable Ecosystems and Provide Multiple Benefits for People with the Capability of Sustainable Ecosystems.

Completed Work: In 2009 a 5-year groundwater inventory of the CNNF was initiated in cooperation with the WGNHS and US Geological Survey to complete a baseline groundwater inventory to characterize and map the groundwater resource across the Forest. This base line inventory also identified gaps in inventory data and provided a baseline for future investigations of specific groundwater/surface water resource issues to improve understanding, protection, and management of this resource. Results of this study were published as a series of peer-reviewed technical reports and mapping data. This baseline inventory work was part of several groundwater/surface water studies that have been done in and around the CNNF.

In 2016-2017 an investigation of the groundwater and fractured bedrock interactions in the Park Falls, Price County Unit bedrock groundwater monitoring well was completed, and a peer reviewed report published about the issue and findings. This investigation contributed significant groundwater well data and analysis to our understanding of the groundwater and fractured bedrock interactions, and groundwater quality and quantity in northern Wisconsin. Results of this study were published as a peer-reviewed technical report.

In 2018-2019 an investigation of surface water/groundwater interactions in the Marengo River headwaters located within the Great Divide Ranger District in Bayfield and Ashland Counties is identifying groundwater inputs on stream segments within the Marengo River watershed to help determine long-term viability of cold water stream habitat for brook trout and determine which stream segments can justify brook trout habitat investments under long-term climate change scenarios. This study is also designed to be used as a template to investigate climate sensitivity of other high-quality trout streams in the CNNF. The WGNHS is also planning a separate project to collect data along several streams in Wisconsin, including the Marengo River. The Marengo River project would work in tandem to produce an additional source of groundwater data.

II. Forest Service Shall:

1. Provide a prioritized list of groundwater and geologic resource projects.
2. Coordinate with WGNHS on project activities to support fieldwork and deliverables.
3. Provide peer review for draft reports.

III. State Shall:

1. The Wisconsin Department of Natural Resources Forestry Division and partners in University of Wisconsin, Division of Extension, Wisconsin Geological and Natural History Survey (WGNHS), work with the CNNF to determine project priorities and timelines.
2. Provide Statements of work, budgets, and timelines for specific phases of project work.
3. Complete annual field work and provide draft reports for peer review.
4. Publish project results and make data available to the public and CNNF.

IV. Goals:

1. Measure, report, and archive groundwater levels in monitoring wells; TA-217 and nested piezometers PR-088 and PR-089 (deep bedrock well). Long term Monitoring well data provides a baseline of water quality for future groundwater/surface water protection, restoration and management activities.
2. Contribute to completion of modern Pleistocene mapping of Bayfield, Ashland, Price, and Sawyer Counties. Modern Pleistocene mapping is needed for; Groundwater GFLOW modeling, terrestrial/aquatic/groundwater inventory, and for Forest-wide and project level planning, management, and restoration activities.
3. Investigate Drummond area seepage lakes surface water/groundwater extreme water level fluctuations and flooding events to understand lake level extreme fluctuations and potential groundwater/surface water level fluctuations under future climate change scenarios. Improve resiliency of infrastructure in the area from future flood events.
4. Improve the performance of the GFLOW model and water quality data of the CNNF where data gaps exist.
5. Complete groundwater baseline study near the Bend ore deposit to support development of future detailed groundwater studies and study designs for the protection and restoration of groundwater/surface water and groundwater dependent ecosystems.
6. Investigate climate sensitivity to help determine long-term viability of high quality, cold water stream habitat for trout species under long-term climate change scenarios. Study results are used to inform high quality trout water restoration projects and protection measures.
7. Protection, restoration, and management of the groundwater/surface water resource and associated groundwater dependent ecosystems.

V. Long Term Benefits:

- a) The Forest Service and WGNHS continue to work together on the understanding, protection, restoration, and management of the groundwater resources within the CNNF.

- b) The work will be published and contribute to the body of knowledge about the groundwater and geological resources of Northern Wisconsin to benefit all landownerships and stakeholders.
- c) The work completed on the CNNF contributes to the general knowledge and understanding of the groundwater/surface water resource and geological resource in northern Wisconsin and is part of the larger on-going effort focusing on characterizing aquatic, groundwater, and geological resources of the State of Wisconsin.
- d) Knowledge gained will better inform CNNF forest-wide and project level planning, environmental effects analysis, restoration, management and protection of the groundwater/surface water and geological resources.

Botanical Surveys, Assessments, and Natural Area Site Visits

Appendix A: Operating Plan

I. Project Description:

Monitoring of existing rare plant populations, along with surveying, is important, so the Chequamegon-Nicolet National Forest (CNNF) can determine whether species populations are increasing, decreasing, or stable. Also, some Research Natural Areas and Special Management Areas are co-designated as State Natural Areas, so WDNR has a vested interest in helping to acquire this data. A large portion of CNNF rare plant populations are located in sensitive natural areas, which allows for more management flexibility outside these sites. In this project, known rare plant populations located in designated natural areas will be monitored. In addition, visits to natural areas will also provide a site 'check up' or monitoring data, documenting the condition of the site and making note of issues needing follow-up actions (such as invasive plants or unauthorized ATV use threatening the species populations). A handful of these sites (i.e. less than 20 total) are in need of some additional ecological (community) inventory. Those sites are identified in the more detailed annual statement of work (all are located on the Nicolet landbase of the CNNF).

Natural areas include (further details about these areas are outline in the CNNF Land and Resource Management Plan): Research Natural Areas, Special Management Areas, and Old Growth & Natural Feature Complexes, which are designated as Management Area 8E, 8F, and 8G, respectively. The State of Wisconsin has co-designated Management areas 8E and 8F as State Natural Areas.

In addition, aquatic plants are an important indicator of water quality and aquatic ecosystem health. Traditionally, most aquatic plant surveys have occurred in larger lakes with boat ramps while smaller, less developed lakes have been under-sampled. For this project, a subset of lakes (mostly those adjacent to or within the boundary of natural areas) will receive an aquatic plant survey to document occurrence of native and non-native aquatic plants.

Conservation assessments, approaches, strategies and agreements guide the restoration and conservation of Regional Forester Sensitive Species in the USDA Forest Service Eastern Region. Providing conservation assessments for sensitive species is one of the long-term priorities of the Eastern Region Threatened and Endangered Species Program. A conservation assessment gathers information on the life history, status, and distribution of a species, species group or ecosystem. The assessment provides information to prepare a restoration or conservation approach for the National Forest. Once a strategy is in place, the Forest Service works with cooperating agencies or organizations to draft a formal conservation agreement that identifies how multiple entities can work together to conserve species, aiding the restoration efforts of many organizations. The Eastern Region of the Forest Service has Conservation Assessments initiated for over half of its Regional Forester Sensitive Species. Some of the existing assessments need to be updated. For example, the existing *Botrychium mormo* conservation assessment was last updated in 2001.

So far the WI DNR botanists monitored 55 known rare plant sites, and discovered 12 new sites. In total, 34 of the rare plant locations found or monitored are Regional Forester Sensitive Species. In addition, they monitored 10 Canada yew sites (a management indicator species) and discovered 22 new yew sites. This work helps the CNNF fulfill our Forest Plan goals and objectives, and helps us better understand population trends. The new findings changed the overall trends for 8 species (7 of which are in a positive direction).

Natural Area checkups involve driving boundary roads, walking trails and old roads, and visiting notable ecosystem features within these, sometimes very large, sites. Issues of concern include invasive plant infestations, human-caused or natural damage, and illegal use of motorized vehicles. WDNR was able to give GPS locations for all of the issues they found.

The CNNF will supply an annual statement of work that lists the specific sites/stands to be surveyed.

II. Forest Service Shall:

1. Provide basic site location data (e.g. like the maps attached) to allow the completion of the surveys and data gathering and
2. Provide details concerning what data is to be gathered and in what formats
3. Provide current conservation assessments, and existing element occurrence information.

III. STATE Shall:

1. Complete data gathering, surveying, or monitoring of plant species on sites or areas supplied by the CNNF and supply completed forms to the CNNF,
2. Maintain data quality standards supplied by the CNNF,
3. Promptly provide, to the CNNF, gathered notes outside of designated forms at the request of the CNNF, and
4. Meet the survey needs of the CNNF.
5. Update conservation assessments for agreed-upon species
 - a. Update section E. Distribution, Abundance, and Status,
 - b. Update Appendix A. EO records,
 - c. Review existing conservation assessment to ensure it is still accurate

IV. Goals:

1. Annually conduct additional acreage of rare plant survey work to continue restoration goals of the CNNF and maintain the implementation of the CNNF Land and Resource Management Plan.
2. Annually conduct site visits to designated natural areas (provide additional community inventory information on a subset sample) to determine condition and identify possible concerns.
3. Annually monitor or 'check-in' on known rare plant populations within designated natural areas to aid in determining species trends and to better inform restoration priorities going forward.

4. Annually conduct aquatic plant surveys (for native and non-native invasive species) in selected lakes within or adjacent to natural areas. This data will provide information to CNNF leadership and program leaders, better shaping future restoration priorities.
5. Annually update conservation assessments of rare flora

V. Objectives:

1. Conduct rare plant survey and inspections in natural areas
2. Conduct rare plant monitoring at known rare plant locations in Management Areas (MA) 8 E (Research Natural Area (RNA)), MA F (Special Management Area (SMA)), and MA G (Old Growth (OG))
3. Conduct aquatic plant (both native and non-native) surveys on smaller lakes, adjacent to or within the boundary of natural areas.
4. Update Conservation assessments sections for selected species
 - a. Distribution, Abundance, and Status,
 - b. Update Appendix A.
 - c. Review existing conservation assessment to ensure it is still accurate

VI. Tasks and Timeline:

The tasks and workload with this project will rotate around the Forest, i.e., starting on the Eagle-River Florence district and going to Lakewood-Laona district, Washburn district, Medford-Park Falls district, and then the Great Divide district. Workloads might fluctuate on each district, but the amount of work should stay relatively the same each year (visiting approximately 75-100 sites/year). The tasks and general timeline for this project are as follows:

Time	Description
Winter/early Spring annually	Forest Service will determine which stands to survey and which conservation assessments to update, and provide data and information to State
Late Spring/Summer/early Fall annually	Rare plant surveys and natural area inspections will be implemented.
December 31 st annually	Final Report due to the CNNF

VII. Long Term Benefits:

Long-term benefits include completed plant surveys allowing the further implementation of the CNNF Land and Resource Management Plan (Forest Plan) and its prescribed vegetative management goals and objectives. In addition, other long-term benefits include allowing increased monitoring of the CNNF's natural areas, known for housing rare plants. This information will aid in more efficiently prioritizing resource management efforts in CNNF's implementation of the Land and Resource Management Plan. For example, this information will aid the CNNF in managing rare plant populations, a better understand where to efficiently supply efforts in treating non-native invasive plants, a better understanding of the current status of rare flora, and a foundation for moving forward on the development of restoration activities.

Appendix A: Operating Plan

I. Project Description:

The Chequamegon-Nicolet National Forest has a long history of collaborating with Wisconsin DNR Bureau of Natural Heritage Conservation to conduct annual American Marten and Bald Eagle/Osprey/Great Blue Heron surveys on National Forest and adjacent lands. In these surveys, the National Forest is trying to better understand presence, absence, and occupation of nest/den sites.

The WDNR as a collaborator in these efforts, has and continues to conduct this survey work with financial assistance from the CNNF. Upon completion of surveys, data has then been provided annually to the CNNF for planning and management purposes.

The Forest and the WDNR has continued interest in sustaining this unprecedented collaboration to achieve landscape scale habitat/species conservation.

II. Forest Service Shall:

1. Collaborate with the WDNR (e.g., Bureau of Natural Heritage Conservation and the Bureau of Wildlife Management) on planning and supporting these surveys with maps and other desired/necessary planning information.
2. Continue to provide field support (when requested) in the implementation of survey elements (e.g., placing/checking cameras, placing bait, and checking gear to ensure security after placement).
 - a. Records (including date and location) for any American marten observed by Forest Service staff during the year.
 - b. A copy of any trail camera pictures for any American marten photographed during the year.
 - c. Information on forest interior road access by American marten (plowed vs. not plowed) for the winter season.
 - d. Records (including date and location) for any new bald eagle, osprey, or heron nest found by Forest Service staff during the survey period.
3. Continue (via its wildlife program and through the implementation of the 2004 Forest Plan) to support/conduct habitat maintenance on CNNF land to support the conservation of these wildlife resources.

III. State Shall:

1. Collaborate with the CNNF on planning and implementation of needed wildlife surveys for these species.
 - Provide analysis and assessment results from conducting these surveys.

- Complete winter snow tracking for mammals
 - Complete winter tracking surveys for each route using the DNR marten tracking data sheets using the established WDNR marten snow tracking protocol.
 - Record GPS locations of all marten tracks encountered during the surveys.
 - Measure the track straddle width (to the nearest millimeter) for marten and fisher tracks encountered during the surveys.
 - Record other mammal species tracks encountered during the surveys on the data sheets.
 - Provide the CNNF's Wildlife Biologist with a digital copy of annual tracking surveys report completed during the year. The report will include specific locations (GPS lat/long) of each verified marten track recorded.
 - The State shall not submit copies of field data sheets, unless specifically requested.
2. Complete American marten trail camera survey and research monitoring
- Complete trail camera monitoring project using DNR established protocols.
 - Record GPS locations of trail camera stations used during the surveys.
 - Record camera station data on location, dates visited, adjacent habitat, etc.
 - Provide the CNNF's Wildlife Biologist with a digital copy of an annual project report. The report will include specific locations of each photographed marten, detection rates, occupancy probabilities, and a population estimate.
3. Complete bald eagle, osprey, and heron nest occupancy surveys
- Complete nest activity surveys each species using low-altitude fixed-winged aerial surveys following the established DNR survey protocol.
 - Record GPS locations of all new bald eagle, osprey, and heron nest observed during the surveys.
 - Record other pertinent nest information including, nest tree species, nest support structure type, status of the tree (alive or snag), and activity status of the birds.
 - Provide the CNNF's Wildlife Biologist with a digital copy of annual Eagle and Osprey nesting surveys report completed each year. The report will include specific locations (GPS lat/long) of each new verified bald eagle, osprey, and heron nest as well as summarized results on total nests by species found on the forest. The State shall not submit copies of field data sheets, unless specifically requested.

IV. Goals and Objectives:

1. Sustain current and increase survey efforts to improve management of these Sensitive species on the CNNF land base, allowing better effects analysis for Forest Plan accomplishment.
2. Increase the ecological understanding and effectiveness of management efforts by improving wildlife habitat conditions at a landscape level.

V. General Tasks and Timeline

Time	Description
Annually beginning FY 2019/2020	
	Continue the analysis and delivery of the survey outcomes annually to CNNF.
	Implement annual or as needed surveys of these Species of Conservation Concern within CNNF boundaries as negotiated.

VI. Long Term Benefits:

Long-term benefits include continued collaboration between the Agencies to maintain successful management of these wildlife species and their associated habitats, allowing continued development of a shared working relationship that benefits wildlife and the public. These additional surveys will allow more work to get accomplished on the CNNF. For example, the more data we have on these sensitive species the better the National Forest can understand the impacts it creates when implementing the Forest Plan.

This project will reduce costly annual coordination in securing Forest Service funding for these surveys. Also, this project will provide more data to better understand monitoring trends for these wildlife species, informing management direction or changes.

Attachment: Exhibit B

USFS Agreement No.: 15-GN-11091300-109
 Cooperator Agreement No.:

Mod. No.: Year 5

Financial Plan Matrix: Note: All columns may not be used. Use depends on source and type of contribution(s).

COST ELEMENTS	FS CONTRIBUTIONS		STATE CONTRIBUTIONS + PI		(e) Total
	(a5) Noncash	(b) Cash to State	(c) Noncash	(d5) PI (from FS tbr) Project Costs	
Direct Costs					
Salaries/Labor	\$79,675.00	\$0.00	\$0.00	\$733,700.00	\$813,375.00
Travel	\$0.00	\$0.00	\$0.00	\$50,000.00	\$50,000.00
Other	\$12,405.50	\$0.00	\$0.00	\$369,000.00	\$381,405.50
Supplies/Materials	\$0.00	\$0.00	\$0.00	\$44,500.00	\$44,500.00
Contracting	\$0.00	\$0.00	\$0.00	\$272,000.00	\$272,000.00
Subtotal	\$92,080.50	\$0.00	\$0.00	\$1,469,200.00	\$1,561,280.50
Coop Indirect Costs		\$0.00	\$0.00	\$0.00	\$0.00
FS Overhead Costs	\$7,366.44				\$7,366.44
Total	\$99,446.94	\$0.00	\$0.00	\$1,469,200.00	
Total Project Value:					\$1,568,646.94

WORKSHEET FOR

FS Non-Cash Contribution Cost Analysis, Column (a5)

Use this worksheet to perform the cost analysis that supports the lump sum figures provided in the matrix. NOTE: This worksheet auto populates the relevant and applicable matrix cells.

Cost element sections may be deleted or lines may be hidden, if not applicable. Line items may be added or deleted as needed. The Standard Calculation sections provide a standardized formula for determining a line item's cost, e.g. $\text{cost/day} \times \# \text{ of days} = \text{total}$, where the total is calculated automatically. The Non-Standard Calculation sections provide a write-in area for line items that require a calculation formula that is other than the standardized formulas, e.g. instead of salaries being calculated by $\text{cost/day} \times \# \text{ of days}$, costs may be calculated simply by a contracted value that is not dependent on days worked, such as $1 \text{ employee} \times \$1,200/\text{contract} = \$1,200$. Be sure to review your calculations when entering in a Non-Standard Calculation, and provide a brief explanation of units used to make calculation, e.g. '1 month contract,' on a line below the figures.

Salaries/Labor				
Standard Calculation				
Job Description		Cost/Day	# of Days	Total
Forest Silviculturist (Overhead/Accomplishr		\$416.00	5.00	\$2,080.00
District Silviculturist (Rx Review)		\$335.00	35.00	\$11,725.00
District TMA (Contract Review/Outyear Pla		\$335.00	25.00	\$8,375.00
Program Database Inputs (Accomplishmen		\$280.00	35.00	\$9,800.00
Appraisal/Billing/Harvest Reporting		\$280.00	15.00	\$4,200.00
Quality Control/Monitoring		\$1,600.00	3.00	\$4,800.00
Quality Control Walkthroughs		\$280.00	5.00	\$1,400.00
Program Management Resource work		\$416.00	30.00	\$12,480.00
Program Management Agreements		\$375.00	20.00	\$7,500.00
Data/File Sharing and Preparation		\$280.00	8.00	\$2,240.00
Implementation Resource Review/Outyear		\$335.00	35.00	\$11,725.00
Assessment/Identification of Project Area		\$335.00	10.00	\$3,350.00
				\$0.00

Non-Standard Calculation				
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Total Salaries/Labor	\$79,675.00
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Travel				
Standard Calculation				
Travel Expense	Employees	Cost/Trip	# of Trips	Total
				\$0.00
				\$0.00

Non-Standard Calculation				
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Total Travel	\$0.00
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Equipment				
Standard Calculation				
Piece of Equipment	# of Units	Cost/Day	# of Days	Total
Fleet	5.00	\$28.85	86.00	\$12,405.50

Non-Standard Calculation				
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Total Equipment	\$12,405.50
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Supplies/Materials			
Standard Calculation			
Supplies/Materials	# of Items	Cost/Item	Total
			\$0.00
			\$0.00
Non-Standard Calculation			
Total Supplies/Materials			\$0.00

Other			
Standard Calculation			
Item	# of Units	Cost/Unit	Total
			\$0.00
Non-Standard Calculation			
Total Printing			\$0.00

Contracting			
Standard Calculation			
Item	# of Units	Cost/Unit	Total
			\$0.00
			\$0.00
Non-Standard Calculation			
Total Other			\$0.00

Subtotal Direct Costs	\$92,080.50
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Forest Service Overhead Costs			
Current Overhead Rate	Subtotal Direct Costs		Total
8.00%	\$92,080.50		\$7,366.44
Total FS Overhead Costs			\$7,366.44

TOTAL COST	\$99,446.94
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Program Income Project Cost Analysis, Column Yr5 (d5)

Program Income Carry over		-\$642,701.25
Program Income	Estimates	Actuals
Timber Value Received	\$2,000,000.00	\$0.00
NFF Payment	\$34,500.00	\$0.00
KV Fund Payments	\$0.00	\$0.00
Local Road Aid Payments	\$30,000.00	\$0.00
SUBTOTAL	\$64,500.00	\$0.00
Proram Income Earned	\$1,935,500.00	\$0.00

GNA Timber Expenses

Salaries (FTE & LTE)	\$440,000.00	
Fringe (FTE & LTE)	\$200,600.00	
Total DNR Salaries/Labor	\$640,600.00	
DNR Travel	\$40,000.00	
DNR Supplies & Services	\$40,000.00	
Contracting Expenses	\$85,000.00	
Other	\$85,000.00	

TOTAL COST	\$890,600.00	\$0.00
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Program Income Projects

Salaries (FTE & LTE)		
Fringe (FTE & LTE)		
Total DNR Salaries/Labor	\$93,100.00	
DNR Travel	\$10,000.00	
DNR Supplies & Services	\$4,500.00	
Contracting Expenses	\$187,000.00	
Other	\$284,000.00	

TOTAL COST	\$627,300.00	\$0.00
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Program Income Balance	-\$225,101.25	-\$642,701.25
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Agreement No. 15-GN-11091300-109
Aspen Stand Assessment
Appendix C: Statement of Work

I. Objectives:

- Assess current older aspen stands in areas identified as suitable for timber production within management areas with a primary or secondary emphasis of aspen forest type.
- Determine which aspen stands are candidates for commercial vs. non-commercial timber harvest or have converted to other forest types.

The U.S. Forest Service has identified 1,062 stands encompassing 21,638 acres to assess for aspen composition and viability using the attached data card. Assessments are anticipated to be complete by 6/30/2020

II. Tasks and Timeline:

The tasks and general timeline for this project are as follows:

Time	Description
2019	WI-DNR will start aspen stand inventory.
July 1, 2020	WI-DNR will complete inventory with recommendations for non-commercial vs. commercial timber harvest.

DISTRICT	STANDS	ACRES	NEEDED BY
Medford-Park Falls	120	2,888	6/30/2020
Great Divide	169	3,985	6/30/2020
Eagle River-Florence	115	1,568	6/30/2020
Lakewood-Laona	216	3,078	6/30/2020
Washburn	349	8,487	6/30/2020
TOTAL	1,062	21,638	

III. Point of Contacts:

- Forest Service: Karl Welch, 715-362-1329, karl.welch@usda.gov
- Wisconsin DNR: Jeff Olsen, 715-892-0699, Jeffrey.olsen@wisconsin.gov

IV. Maps/Diagrams:

WDNR should already have GIS stand data. Stand Assessment in .xls format and individual stand number list are attached electronically.

IV. Maps/Diagrams:

Maps can be provided if requested.

Ash Lowland Diversification

Appendix C: Statement of Work

I. Project Description:

Underplant lowland conifers and/or lowland hardwoods in black ash stands (without timber harvest) to establish tree species diversity ahead of Emerald Ash Borer invasion.

II. Objective:

1. Establish non-ash species conifer and hardwood tree species in ash dominated stands prior to emerald ash borer killing the existing overstory ash tree species.

VI. Tasks and Timeline:

The tasks and general timeline for this project are as follows:

Time	Description
Winter/early spring	Forest Service will determine which stands to survey and provide data and information to cooperator
Late spring/early summer	Cooperator will plant tree species.
Summer, year 1 after planting	Cooperator will conduct 1 year survival survey
Summer, year 3 after planting	Cooperator will conduct 3 year survival survey

Table 1 – Ash dominated stands to be planted in the project area.

District	Stand ID	Acres	Type-Size density	Site Index	DBH
Medford-Park Falls	9130103103003	32	71-6	50	6"
Medford-Park Falls	9130103103008	23	71-6	50	6"
Medford-Park Falls	9130103134012	25	71-5	50	14"
Medford-Park Falls	9130103135025	58	71-5	46	8"
Medford-Park Falls	9130103135022	77	71-6	46	6"
Total		215			

Stands above are all on the Medford land base in Taylor County. Stands were selected due to proximity to campgrounds, site index at least 45, and good road access. Desired planting density is 500 trees/acre (roughly 8' x 10' spacing). Ash swamps typically contain scattered un-plantable, seasonally-flooded areas, so actual planting is closer to a 6' x 7' spacing on the high ground areas.

VI. Point of Contact:

- Forest Service: Jerry VanCleve, 715-685-2671, jerry.vanleve@usda.gov
- Wisconsin DNR: Mike Lietz, 715-422-1260, Michael.lietz@wisconsin.gov

Program Revenue Projects

	Biotic Surveys - NHC	APHIS contract	Bat	Ash	Aspen	Event Response	WGNHS	Prescription Writing	Wildlife Surveys	
salary				\$2,000	\$60,000					\$62,000.00
fringe				\$900	\$27,200					\$28,100.00
total salary/fringe			\$3,000	\$2,900	\$87,200					\$93,100.00
travel					\$10,000					\$10,000.00
supplies/services			\$200	\$1,200	\$3,100					\$4,500.00
contracting		\$187,000								\$187,000.00
other										
Estimate	\$ 60,000	\$187,000	\$3,200	\$4,100	\$100,300	\$10,000	\$190,000	\$48,700	\$24,000	\$627,300.00

Aspen Stand Assessment List

Stand ID by Ranger District

Medford/Park Falls	Great Divide	Eagle River/Florence	Lakewood/Laona	Washburn
9130101003020	9130200001002	9130302034006	9130404002003	9130500007011
9130101004013	9130200003004	9130302034046	9130404002009	9130500008001
9130101005035	9130200003005	9130302035010	9130404003003	9130500008006
9130101005041	9130200003007	9130302114025	9130404003017	9130500008009
9130101007003	9130200003011	9130302115038	9130404003024	9130500008012
9130101014018	9130200003020	9130302116013	9130404003032	9130500008018
9130101015009	9130200003027	9130302125040	9130404005001	9130500008027
9130101015037	9130200004026	9130302149010	9130404025032	9130500009002
9130101016006	9130200004035	9130302149013	9130404027002	9130500009011
9130101016021	9130200005032	9130302150038	9130404028003	9130500009036
9130101017003	9130200005052	9130302150042	9130404029027	9130500009039
9130101029009	9130200009018	9130302153022	9130404029043	9130500009040
9130101035032	9130200075046	9130302153028	9130404030008	9130500009048
9130101042008	9130200076032	9130302154004	9130404030016	9130500009052
9130101045012	9130200083011	9130302154010	9130404031041	9130500010008
9130101046040	9130200084004	9130302155015	9130404031049	9130500010012
9130101058008	9130200103060	9130302166007	9130404033005	9130500010037
9130101058020	9130200105051	9130302171013	9130404034007	9130500011001
9130101059004	9130200105066	9130302172001	9130404034033	9130500011007
9130101060002	9130200106007	9130303002019	9130404034059	9130500013018
9130101060004	9130200106038	9130303003005	9130404034062	9130500014019
9130101060010	9130200106049	9130303003006	9130404034082	9130500016002
9130101060012	9130200107018	9130303003014	9130404039006	9130500016007
9130101062038	9130200107062	9130303004005	9130404040002	9130500016015
9130101066018	9130200108022	9130303004018	9130404040003	9130500016021
9130101069002	9130200110001	9130303004024	9130404046027	9130500018007
9130101069004	9130200111001	9130303004025	9130404047015	9130500018011
9130101070001	9130200113005	9130303004026	9130404047018	9130500018012
9130101070044	9130200113011	9130303004030	9130404048026	9130500020011
9130101071005	9130200115019	9130303004031	9130404048039	9130500020014
9130101071026	9130200115027	9130303005006	9130404055018	9130500020038
9130101071034	9130200119034	9130303005011	9130404108012	9130500020044
9130101071046	9130200124012	9130303005013	9130404108016	9130500021004
9130101071055	9130200124036	9130303006019	9130404108017	9130500021029
9130101072018	9130200125003	9130303006031	9130404108018	9130500027020
9130101072020	9130200125023	9130303006032	9130404109014	9130500028009
9130101073005	9130200137013	9130303006033	9130404112003	9130500028035
9130101073024	9130200138027	9130303016015	9130404113002	9130500029019
9130101073032	9130200140018	9130303016023	9130404121008	9130500030008
9130101074004	9130200141012	9130303019038	9130404135006	9130500030014
9130101074014	9130200141023	9130303021008	9130404135014	9130500031006
9130101076004	9130200142002	9130303021038	9130404135017	9130500040025
9130101076006	9130200142016	9130303022009	9130404135018	9130500040035
9130101076032	9130200142017	9130303022019	9130404135022	9130500040036
9130101077054	9130200145002	9130303022040	9130404135025	9130500040037
9130101078013	9130200145004	9130303023004	9130404135028	9130500042014
9130101078015	9130200145020	9130303023019	9130404135029	9130500043014
9130101078029	9130200147015	9130303024002	9130404136002	9130500043031
9130101080066	9130200149019	9130303024034	9130404136009	9130500044008
9130101082021	9130200149026	9130303025008	9130404136011	9130500044017
9130101082023	9130200152004	9130303025019	9130404151015	9130500045002
9130101082025	9130200154021	9130303033020	9130404152004	9130500045018
9130101083011	9130200155008	9130303034007	9130404152035	9130500048008
9130101084007	9130200155014	9130303034013	9130404155010	9130500048011
9130101084008	9130200156006	9130303034020	9130404155012	9130500048017
9130101085013	9130200156015	9130303034024	9130404155021	9130500048022

Medford/Park Falls	Great Divide	Eagle River/Florence	Lakewood/Laona	Washburn
9130101088027	9130200156023	9130303035005	9130404155045	9130500050006
9130101091025	9130200156025	9130303035019	9130404155046	9130500050008
9130101100003	9130200157007	9130303036023	9130404155048	9130500050014
9130101100027	9130200159002	9130303036029	9130404156017	9130500050015
9130101100033	9130200170065	9130303036031	9130404158006	9130500050026
9130101101010	9130200171007	9130303036034	9130404158009	9130500050032
9130101101012	9130200181001	9130303037001	9130404159026	9130500050034
9130101101018	9130200181004	9130303038035	9130404159045	9130500050036
9130101102015	9130200181020	9130303041025	9130404161032	9130500052020
9130101102018	9130200181023	9130303042019	9130404161037	9130500052023
9130101102022	9130200181027	9130303042022	9130404164006	9130500071008
9130101102026	9130200183001	9130303042024	9130404164007	9130500071013
9130101103005	9130200183002	9130303043005	9130404164014	9130500071015
9130101103010	9130200183003	9130303043007	9130404164025	9130500072005
9130101103014	9130200183004	9130303043015	9130404164026	9130500072013
9130101103042	9130200183006	9130303058008	9130404164027	9130500073003
9130101104006	9130200183008	9130303059023	9130404169037	9130500073005
9130101104013	9130200183009	9130303069044	9130404169041	9130500073013
9130101106007	9130200183010	9130303070018	9130404169042	9130500073015
9130101106021	9130200183011	9130303071020	9130404169043	9130500073018
9130101115002	9130200183012	9130303071021	9130404170015	9130500073019
9130101115022	9130200183014	9130303072009	9130404171036	9130500073020
9130101119001	9130200183015	9130303072013	9130404172007	9130500073023
9130101120011	9130200183016	9130303072014	9130404173026	9130500073037
9130101121019	9130200183017	9130303072016	9130404173030	9130500074018
9130101126001	9130200183023	9130303113013	9130404174014	9130500074021
9130101143022	9130200183026	9130303113015	9130404177027	9130500074025
9130101143023	9130200184002	9130303114024	9130404181025	9130500074027
9130101144030	9130200184003	9130303115022	9130404181054	9130500074042
9130103008008	9130200184005	9130303118018	9130404182006	9130500074052
9130103008027	9130200184006	9130303120005	9130404182029	9130500076001
9130103061016	9130200184009	9130303120012	9130405002019	9130500076003
9130103061017	9130200184010	9130303125033	9130405004013	9130500076010
9130103061019	9130200184011	9130303128007	9130405007022	9130500076020
9130103061025	9130200184012	9130303130017	9130405007030	9130500076022
9130103061030	9130200184019	9130303132009	9130405007040	9130500076034
9130103061032	9130200184020	9130303132011	9130405008051	9130500076046
9130103063030	9130200184022	9130303149005	9130405010051	9130500077009
9130103072045	9130200184025	9130303149013	9130405010052	9130500077012
9130103101001	9130200184028	9130303149014	9130405011007	9130500077019
9130103101005	9130200184030	9130303149021	9130405012011	9130500077022
9130103103025	9130200184031	9130303151028	9130405016003	9130500077027
9130103103028	9130200184035	9130303152017	9130405016006	9130500077029
9130103103033	9130200184038	9130303154028	9130405016008	9130500078010
9130103103073	9130200185001	9130303154033	9130405017019	9130500078019
9130103103074	9130200185005	9130303156016	9130405019003	9130500078023
9130103103077	9130200185019	9130303156019	9130405019010	9130500078042
9130103109014	9130200185024	9130303159015	9130405019012	9130500079021
9130103115008	9130200185032	9130303166009	9130405019013	9130500079038
9130103118012	9130200185036	9130303167011	9130405019018	9130500080015
9130103133008	9130200186026	9130303168009	9130405019024	9130500080016
9130103133010	9130200186030	9130303168014	9130405020012	9130500080031
9130103133028	9130200186040	9130303170007	9130405020014	9130500080033
9130103134043	9130200187010	9130303170049	9130405026003	9130500080036
9130103149001	9130200189006	9130303170061	9130405032021	9130500080044
9130103150001	9130200189017	9130303172013	9130405034003	9130500080045
9130103159002	9130200189027	9130303174011	9130405034005	9130500080054
9130103160010	9130200189031	9130303174030	9130405034022	9130500080055

Medford/Park Falls	Great Divide	Eagle River/Florence	Lakewood/Laona	Washburn
9130103161039	9130200189037	9130303177025	9130405034032	9130500081013
9130103162013	9130200189039		9130405034034	9130500081021
9130103162014	9130200190004		9130405037010	9130500081028
9130103162018	9130200191022		9130405037023	9130500091004
9130103162059	9130200201032		9130405039013	9130500091008
9130103164004	9130200201033		9130405041014	9130500091016
	9130200201035		9130405057039	9130500091022
	9130200223004		9130405057048	9130500091027
	9130200223007		9130405057052	9130500095026
	9130200224007		9130405058010	9130500095027
	9130200225001		9130405058020	9130500101009
	9130200225026		9130405062004	9130500103016
	9130200226011		9130405063004	9130500103025
	9130200226021		9130405063020	9130500103030
	9130200226025		9130405063022	9130500103033
	9130200333052		9130405063023	9130500104018
	9130200334026		9130405064023	9130500104019
	9130200335004		9130405066006	9130500105004
	9130200335011		9130405072024	9130500105006
	9130200335022		9130405074022	9130500105009
	9130200335028		9130405078004	9130500106006
	9130200335029		9130405079001	9130500106008
	9130200335030		9130405079020	9130500107030
	9130200337008		9130405081020	9130500107037
	9130200340037		9130405081021	9130500108005
	9130200341001		9130405081038	9130500108006
	9130200342044		9130405083014	9130500108008
	9130200343025		9130405085001	9130500108022
	9130200344019		9130405086004	9130500109041
	9130200344033		9130405086008	9130500110004
	9130200344053		9130405087016	9130500111002
	9130200344054		9130405087021	9130500111006
	9130200344065		9130405088012	9130500111007
	9130200344066		9130405089008	9130500111008
	9130200344068		9130405089035	9130500111021
	9130200345010		9130405092003	9130500111023
	9130200345011		9130405092010	9130500112009
	9130200350014		9130405092011	9130500112028
	9130200350032		9130405100010	9130500112039
	9130200350034		9130405116019	9130500112041
	9130200350037		9130405117003	9130500112043
	9130200351008		9130405118006	9130500113002
	9130200351024		9130405119018	9130500114003
	9130200358015		9130405122005	9130500114005
	9130200360016		9130405122009	9130500114006
	9130200360047		9130405123003	9130500114012
	9130200369033		9130405123013	9130500114016
	9130200372042		9130405123018	9130500117004
	9130200381019		9130405125001	9130500117010
	9130200382009		9130405125003	9130500118006
	9130200382010		9130405125006	9130500118008
	9130200383027		9130405125007	9130500118012
	9130200391001		9130405127004	9130500118016
	9130200391020		9130405127018	9130500119005
	9130200396010		9130405129002	9130500119014
			9130405129003	9130500119027
			9130405129008	9130500119032
			9130405129011	9130500119035

Medford/Park Falls	Great Divide	Eagle River/Florence	Lakewood/Laona	Washburn
			9130405129013	9130500119048
			9130405129015	9130500120002
			9130405130016	9130500120021
			9130405130023	9130500120060
			9130405131035	9130500120062
			9130405131036	9130500120068
			9130405135013	9130500120069
			9130405135021	9130500120073
			9130405136014	9130500121004
			9130405136025	9130500122021
			9130405137033	9130500122022
			9130405144003	9130500122049
			9130405144022	9130500122050
			9130405144024	9130500122054
			9130405147006	9130500122055
			9130405147007	9130500122056
			9130405147019	9130500123001
			9130405150012	9130500123029
			9130405151013	9130500123036
			9130405168009	9130500123045
			9130405169001	9130500123048
			9130405169011	9130500124037
			9130405169013	9130500125018
			9130405169014	9130500125028
			9130405169016	9130500125031
			9130405170006	9130500127001
			9130405171002	9130500127006
			9130405172009	9130500127010
			9130405175005	9130500127017
			9130405192001	9130500127018
			9130405196012	9130500127019
			9130405198004	9130500127020
			9130405199019	9130500127021
			9130405201016	9130500127023
			9130405221007	9130500127029
			9130405221008	9130500127030
			9130405221017	9130500127031
			9130405236013	9130500128018
			9130405239041	9130500128029
			9130405242001	9130500128040
			9130405242010	9130500128046
			9130405242052	9130500128052
			9130405242056	9130500129007
			9130405251013	9130500129008
				9130500129010
				9130500129035
				9130500130002
				9130500130005
				9130500130010
				9130500130017
				9130500130018
				9130500130019
				9130500130034
				9130500130040
				9130500130052
				9130500130053
				9130500130054
				9130500131005

Medford/Park Falls	Great Divide	Eagle River/Florence	Lakewood/Laona	Washburn
				9130500131011
				9130500131021
				9130500131023
				9130500131029
				9130500145026
				9130500145039
				9130500146012
				9130500147014
				9130500147019
				9130500147022
				9130500147025
				9130500147032
				9130500147033
				9130500147035
				9130500147039
				9130500147041
				9130500147059
				9130500148002
				9130500148003
				9130500148006
				9130500148008
				9130500148016
				9130500148025
				9130500149002
				9130500149006
				9130500149011
				9130500149022
				9130500149026
				9130500149027
				9130500149032
				9130500149033
				9130500150022
				9130500150028
				9130500150045
				9130500150053
				9130500151028
				9130500151030
				9130500152031
				9130500152032
				9130500158008
				9130500158059
				9130500160008
				9130500160020
				9130500161012
				9130500161014
				9130500162007
				9130500162022
				9130500163018
				9130500163021
				9130500164011
				9130500164015
				9130500165019
				9130500165020
				9130500165025
				9130500165032
				9130500166024
				9130500167009
				9130500167019

Medford/Park Falls	Great Divide	Eagle River/Florence	Lakewood/Laona	Washburn
				9130500179012
				9130500179056
				9130500180023
				9130500182017
				9130500182020
				9130500182037
				9130500183018
				9130500183023
				9130500183035
				9130500184033
				9130500185003
				9130500185013
				9130500185019
				9130500185036
				9130500185046
				9130500186006
				9130500186010
				9130500186015
				9130500186040
				9130500187005
				9130500188024
				9130500198019
				9130500199004
				9130500200003
				9130500201002
				9130500202001
				9130500202002
				9130500202009
				9130500205021
				9130500205034
				9130500205043
				9130500205048
				9130500205050
				9130500206010
				9130500206021
				9130500206026
				9130500206032
				9130500207008
				9130500207018
				9130500207023
				9130500207031
				9130500210031
				9130500210037
				9130500211016
				9130500213009
				9130500213013
				9130500213025
				9130500215002
				9130500215003
				9130500217001
				9130500218006
				9130500219003
				9130500219014
				9130500219026
				9130500221003
				9130500221040
				9130500224010
				9130500224018

Medford/Park Falls	Great Divide	Eagle River/Florence	Lakewood/Laona	Washburn
				9130500224027
				9130500225006
				9130500225010

Aspen Stand Revitalization Quick Assessment

Compartement #	<input type="text"/>	Ranger District	<input type="text"/>
Stand #	<input type="text"/>	Examiner	<input type="text"/>
Current Forest Type	<input type="text"/>	Date	<input type="text"/>
Size Density	<input type="text"/>	Habitat Type	<input type="text"/>
Year of Origin	<input type="text"/>	Acres	<input type="text"/>
Average Estimated Overstory BA	<input type="text"/>	Aspen BA	<input type="text"/>
% Aspen BA affected by <i>Phellinus</i>	<input type="text"/>		
Regenerate Aspen; Commercial Harvest (Y/N)*	<input type="text"/>		
Regenerate Aspen; Non-Commercial Site Prep (Y/N)	<input type="text"/>		
Allow Natural Conversion (Y/N) Identify Future Forest Type and Existing Condition ie understory stems of desired species established**	<input type="text"/>		

*Commercial Harvest requires minimum of 12 cords per acre (>40 Sqft/acre of 12 - 16 inch dbh with 5-6 sticks per tree or equivalent) sound merchantable volume to remain in 5 years from exam date, economic access and normal expectation of salability in the market.

**The purpose of the project is to identify opportunities to maintain aspen on the landscape in stands currently beyond extended rotation ages. Conversion is anticipated to the exception. Recommendations for conversion should also indicate the likelihood of success or failure of mechanical site prep in an attempt to regenerate coppice aspen regeneration at desired densities of 2,000+ stems per acre

Bat Acoustic Data Analysis

Appendix C: Statement of Work

I. Objectives:

The CNNF will provide the WDNR with all collected acoustic data, the WDNR will analyze the provided acoustic data, and the WDNR will provide the CNNF with deliverables that include maps, ArcGIS shapefiles, and labeled acoustic files. Specifically:

- The CNNF will complete 11-13 acoustic transects, run three times each, during the established survey season. All collected data and associated data/forms will be provided to the WDNR in a timely manner or previously agreed on time.
- The WDNR will analyze all provided acoustic files and provide a map for each transect replicate, as well as shapefiles of identified bat locations, and acoustic files labeled with the respective species or species group ID.

II. Tasks and Timeline:

The tasks and general timeline for this project are as follows:

Time	Description
June-July Year 1	CNNF: Complete all survey transects starting June 1 and ending July 15.
August Year 1	CNNF: Provide WDNR with all collected acoustic data and associated files.
August-October Year 1	WDNR: Analyze acoustic data and provide maps, shapefiles, and labeled acoustic files.

III. Budget:

The estimated budget, including indirect and fringe costs, is as follows:

Cost	Description of Expenditures
\$3,200	Approx. 60 hours of analysis, mapping, creating shapefiles, and data management.
	Purchase of electronic media (ex. USB drive) to provide and receive data between cooperators.

III. Point of Contacts:

- Forest Service: Brian Herringa, 715-373-2667 x5234, brian.heeringa@usda.gov
- Wisconsin DNR: J. Paul White, 608-267-0813, John.White@wi.gov

IV. Maps/Diagrams:

No maps needed.

Agreement No. 15-GN-11091300-109
Catastrophic Event Response to Aid Restoration
Appendix C: Statement of Work

I. Project Description:

This project's main purpose is to aid the restoration of the Forest after a large, Forest impacting, natural disaster, e.g., gathering vegetation information and restoring access to aid a restoration response. The WDNR could collect aerial images of select storm-impacted areas along with other useful data or aid with clearing roads to allow for safe restoration activity access. All the activities should support prescription writing updates, inform revegetation needs, and allow the Forest to understand what additional restoration activities are needed.

II. Objectives:

1. Conduct aerial reconnaissance of large event affected acres and clear access roads to impacted areas.

III. Tasks and Timeline:

The tasks and general timeline for this project are as follows:

Timeline	Task Description (Cost estimates)
Fall/Winter 2019	Gather aerial data after location of reconnaissance is known (\$10,000)
	Supply data to the Forest Service
	Clear access roads for restoration needs

DNR staff would use an unmanned aerial vehicle (UAV or "drone") to reconnoiter areas specified by the Forest Service. Following the flights, the DNR staff would provide Forest Service contacts with aerial imagery and associated GPS files. Cost estimate assumes 2 personnel at \$250 each per day working for 15 work days. In addition, vehicle costs and drone time is assumed at \$2,500.

DNR staff will communicate with Lakewood-Laona District to understand where road clearing needs to occur to facilitate restoration needs.

IV. Point of Contacts:

- **Forest Service: Lakewood-Laona District, Zach Parmentier, 715-674-4481x6240, zachary.m.paramettier@usda.gov**
- **Wisconsin DNR: Rich Lietz, 715-850-2770, Richard.Lietz@wi.gov**

V. Maps/Diagrams:

Maps/diagrams will be provided by the district if needed.

Agreement No. 15-GN-11091300-109
Groundwater and Geological Resource Inventory and Investigations
Phase 1

Appendix C: Statement of Work

I. Project Description: Conduct groundwater and geological resource inventories and investigations of identified groundwater/surface water management issues within the Chequamegon-Nicolet National Forest (CNNF). Prepare reports and maps and make this information available to the Forest Service and public.

Phase 1 includes two years of work for projects that are planned to begin in FY2020. A separate statement of work will be provided for future phases.

II. Forest Service Shall:

1. Coordinate with WGNHS on project activities to support field work and deliverables.
2. Provide peer review for draft reports.

III. State Shall:

Complete the proposed project activities for three projects: 1) Investigation of hydrogeology in the Bayfield Peninsula, 2) Drummond area water level investigation, and 3) Groundwater level monitoring. See below for study tasks and timeline. The projected project end date for this phase of the work is June 2021

IV. Goals:

1. Investigate hydrogeology including groundwater elevation and flow direction, geologic deposits, and connectivity in the Bayfield Peninsula.
2. Support concurrent mapping of glacial geology in Bayfield County. This project will significantly increase the amount of available data on the geologic material at depth in the Bayfield Peninsula.
3. Measure, report, and archive groundwater levels in monitoring wells; TA-217 and nested piezometers PR-088 and PR-089 (deep bedrock well).
4. Protect and manage the groundwater/surface water resource and associated ecosystems.
5. Investigate Drummond area seepage lakes water level fluctuations.

V. Objectives:

1. The sand barrens along the Bayfield Peninsula is an important recharge area for Bayfield County that contributes groundwater to many wells near Lake Michigan. However, the lack of hydrogeologic data in this location makes it difficult to ascertain the subsurface geologic materials, bedrock depth, hydrogeologic connectivity, groundwater levels, and groundwater flow direction. Data are in particular lacking at depth, which is problematic because the bedrock is expected to be more than 400 feet below ground surface. Collecting information on the area's hydrogeology will significantly improve the ability to manage the ecosystem and understand the potential impacts of contaminant transport.

2. Continue funding for US Geological Survey to measure, report, and archive groundwater levels in monitoring wells; TA-217 (Bend well) in the Medford Unit, Taylor County, and nested piezometers PR-088 and PR-089 (deep bedrock well) in the Park Falls Unit, Price County. The water quality/level data will be published on the statewide monitoring level network website.
3. Drummond area seepage lakes investigation of the wide fluctuation in lake levels from apparent wide fluctuation in groundwater levels in response to extreme precipitation events. Record high water levels in Pigeon lake and area lakes caused historic flooding and damage to road infrastructure and private residences.

VI. Tasks and Timeline:

The tasks and general timeline are as follows.

State FY 2020 (Begin July 2019): Total Budget \$187,288

1. Bayfield Peninsula Hydrogeology (year 1 of 2): Budget \$148,776
 - a. Drill up to two rotosonic cores in the Bayfield Peninsula to approximately 200 feet depth. A single, deeper core may be drilled if the water level is deeper than anticipated.
 - b. Complete geophysical logging in both of these locations.
 - c. Install nested monitoring wells in both of these locations and monitor water levels.
 - d. Sample groundwater for isotopes and water quality.
 - e. Log and interpret the core.
 - f. Complete grain size analysis.
2. Drummond area water level investigation: Budget \$38,512 (includes Task 3)
 - a. Install Drummond area lakes piezometers
 - b. Monitor piezometers
3. Groundwater level monitoring: Budget \$1,550 (included in Task 2, total)
 - a. USGS will continue to monitor TA-217 (Bend well) in the Medford Unit, Taylor County, and nested piezometers PR-088 and PR-089 (deep bedrock well) in the Park Falls Unit, Price County from January to June 2020 (already funded through December 2019).

State FY 2021: Total budget \$91,955

1. Bayfield Peninsula Hydrogeology (year 2 of 2): Budget \$74,053
 - a. Use data from rotosonic cores to inform 1:100,000 scale Pleistocene mapping. A map and accompanying report will be completed and published as part of a separate project.
 - b. Evaluate hydrogeology in the vicinity of the two wells, such as horizontal and vertical gradient, baseline water chemistry, findings from geophysical logging, and type and consistency of glacial deposits.
 - c. Publish a technical report of findings. Draft reports will be provided to USFS for peer review.

2. Drummond area water level investigation: Budget \$17,902 (Includes Task 3)
 - a. Continue monitoring water levels in Drummond area
3. Groundwater level monitoring: Budget \$3,100 (included in Task 2 total)
 - a. USGS to monitor TA-217 and nested piezometers PR-088 and PR-089 for fiscal year.

For context, the below table inserts the above specific tasks with the tasks expected to be completed during the full lifetime of the project.

Time	Description	Phase
FY 2020 Projects	Bayfield Peninsula hydrogeology field data collection core drilling and cross section as part of WGNHS Pleistocene geologic mapping inventory for Bayfield County.	1
	Drummond area seepage lakes investigation of water level fluctuations. Install piezometers, collect data.	1
	Continue annual funding for US Geological Survey to measure, report, and archive groundwater levels in monitoring wells; TA-217 (Bend well) in the Medford Unit, Taylor County, and nested piezometers PR-088 and PR-089 (deep bedrock well) in the Park Falls Unit, Price County. The water quality/level data will be published on the statewide monitoring level network website.	1
FY 2021 Projects	2nd year Bayfield Peninsula hydrogeology data analysis bore hole(s) and cross section as part of WGNHS Pleistocene geologic mapping inventory for Bayfield County.	1
	2nd year Drummond area seepage lakes investigation water level fluctuations.	1
	Measure, report, archive monitoring wells; TA-217, PR-088 and PR-089.	1
	Pleistocene mapping 1:100,000 scale CNNF lands Bayfield County.	
FY 2022 Projects	Pleistocene mapping 1:100,000 scale in Ashland County.	
	Measure, report, archive monitoring wells; TA-217, PR-088 and PR-089.	
	3rd year Drummond area seepage lakes investigation water level fluctuations.	
	Bend Site groundwater baseline study.	
FY 2023 Projects	Pleistocene mapping 1:100,000 scale in Sawyer County.	
	Measure, report, archive monitoring wells; TA-217, PR-088 and PR-089.	
	4th year Drummond area seepage lakes investigation water level fluctuations.	
	2nd year Bend Site groundwater baseline study.	
FY 2024 Projects	Pleistocene mapping 1:100,000 scale in Price County.	
	Measure, report, archive monitoring wells; TA-217, PR-088 and PR-089.	
	5th year Drummond area seepage lakes investigation water level fluctuations.	

	3rd year Bend Site groundwater baseline study.	
	Begin investigation of surface water/groundwater interactions in the Elvoy and Brule creeks watershed located within the Eagle River/Florence Ranger District in Vilas and Forest Counties.	
FY 2025 Projects	Pleistocene mapping 1:100,000 scale in Price County.	
	Measure, report, archive monitoring wells; TA-217, PR-088 and PR-089.	
	2 year investigation of surface water/groundwater interactions in the Elvoy and Brule creeks watershed located within the Eagle River/Florence Ranger District in Vilas and Forest Counties.	

IV. Point of Contacts:

- Forest Service: Greg Knight, 715-748-4875, greg.knight3@usda.gov
- Wisconsin DNR: Rebecca Diebel, 608-444-5774, Rebecca.diebel@wisconsin.gov
- Wisconsin Geological and Natural History Survey: Anna Fehling, anna.fehling@wisc.edu

Botanical Surveys, Assessments, and Natural Area Site Visits

FY20

Appendix C: Statement of Work

I. Objectives:

Visit known rare plant locations in natural areas and perform site condition “check up” (attached) on the Laona-Lakewood Ranger District. Determine current status of rare plant population while also documenting condition of natural area on a “check up” form (attached). A small number of sites will need natural community inventory documentation.

- **Chequamegon Rare Plant Survey** (project 1): DNR’s Bureau of Natural Heritage Conservation (NHC) will visit natural areas on Washburn District of the Chequamegon-Nicolet National Forest (CNNF). There are two objectives for this work. First, they will complete “check ups” of each natural area, focusing on identifying disturbances (natural or anthropogenic) to the site. Secondly, NHC will revisit known rare plant populations throughout the district and document on NHC’s rare plant reporting form.
- **Nicolet Rare Plant Survey** (project 2): Due to a windstorm in July 2019, NHC was unable to complete work on the Lakewood-Laona District. NHC will visit natural areas on Laona-Lakewood District of the CNNF. There are two objectives for this work. First, they will complete “check ups” of each natural area, focusing on identifying disturbances (natural or anthropogenic) to the site. Secondly, NHC will revisit known rare plant populations throughout the district and document on NHC’s rare plant reporting form.
- **Aquatic Plant Lake Survey** (project 3): NHC will conduct Aquatic Plant surveys (on Lakes) that are within/adjacent to designated natural areas on the Eagle River-Florence and Laona-Lakewood Ranger District. This will allow for early detection/rapid response of invasive aquatic plants and will also provide an assessment of aquatic integrity.
- **Natural Area Survey** (project 4): Conduct ecological assessment of 20 designated natural areas in the Eagle River-Florence and Laona-Lakewood Ranger Districts. Use standard NHI methodology.
- **Updated Conservation Assessment** (project 5): Update conservation assessments for selected species. Distribution, Abundance, and Status: update Appendix A in existing assessments, and review existing conservation assessment to ensure it is still accurate.

II. Tasks and Timeline:

Deliverables:

- Project 1 & 2: The NHC will submit a “check up” form for each site visited in the Laona-Lakewood District to CNNF. The focus of these forms is to identify any disturbances, particularly from human use but also natural disturbances such as windthrow. NHC will also submit rare plant reports on any CNNF sensitive species revisited in 2019, including any previously unknown populations. NHC will use a rare plant form designed by NHC. The CNNF will provide:
 - Chequamegon Rare Plant Survey:

- A list and maps for the Washburn District natural areas (attached)
 - Locator map of natural areas on the Chequamegon side (attached)
 - Rare plant trend information (attached)
 - List of rare plants that occur in natural areas on the Washburn District (attached)
 - Geodatabase with rare plant occurrences. (attached)
 - Template/form for reporting natural area conditions. (attached)
 - Past natural area check-up forms for reference. (attached)
 - A USFS Yale key for access (requires the State to sign a USDA-Forest Service Personal Custody Property Receipt and acknowledge financial responsibility for the value of items lost or damaged).
- Nicolet Rare Plant Survey:
 - Locator map of natural areas on Nicolet side (Eagle River-Florence and Laona-Lakewood Districts (attached)
 - List of rare plants that occur in natural areas on LA-LK District (attached)
 - List of rare plants that occur in natural areas on LA-LK District (attached)
- Project 3: NHC will provide a list of aquatic species and relative abundance of that species for each lake surveyed (noting invasive species). The CNNF will provide:
 - Surveys for both non-native and native plants in 91 lakes greater than 10 acres that are within or adjacent to designated natural areas on the Eagle River-Florence Ranger Districts. List of lakes to be surveyed (attached).
 - Project 4: NHC will complete NHI community inventory forms for the sites that are surveyed. The CNNF will provide:
 - Botanical/community inventory in 20 natural areas that currently lack adequate documentation.
 - List of natural areas needing community inventory (attached).
 - Project 5: (Conservation Assessments) NHC will update the Botrychium mormo conservation assessment providing current information about distribution, abundance, and status. Also, assessment Appendix A should be updated and existing conservation assessment should be reviewed to ensure it is still accurate.

The tasks and general timeline for this project are as follows:

Time	Description
Winter/early Spring annually	Forest Service will determine which stands to survey and provide data and information to cooperator
Late Spring/Summer/early annually	State will conduct rare plant surveys and inspect Natural Areas of interest.
December 31 st annually	Final Report Due

Deadline for work: December 31st, 2020.

District	Project Area	Acres	Cost Estimate
Lakewood-Laona	Rare Plant monitoring in Natural Areas (MA 8 EFG - RNA, SMA, Old Growth areas); also complete monitoring "check up" at each	Complete work on sites that were not accessible in 2019 due to windstorms. There are 63 natural areas (42, 680 acres) with approximately 120 rare	\$28,000

	natural area visited	plant locations on this district. Of these, 53 sites and at least 50 rare plant populations were not able to be surveyed in 2019 due to the storm.	
Eagle River Florence & Laona- Lakewood Ranger Districts	Aquatic Plant Surveys of lakes (NNIS and native plants)	21 lakes	\$16,000
Eagle River Florence & Laona- Lakewood	Botanical and community assessment and documentation	20 existing natural areas (which lack adequate inventory/documentation)	\$11,000
Species Range-wide	Botrychium mormo Conservation Assessment Update	1 Conservation Assessment Update	\$4,500

III. Point of Contacts:

- Forest Service: Linda Parker, 715-762-5169, lrparker@usda.gov
- Wisconsin DNR: Kevin Doyle, 608-416-3377, KevinF.Doyle@wisconsin.gov

IV. Maps/Diagrams:

See attachments.

Agreement No. 15-GN-11091300-109
CNNF Wildlife Species of Concern Survey Project

Appendix C: Statement of Work

I. Project Description:

The Chequamegon-Nicolet National Forest (CNNF) has a long history of collaborating with Wisconsin DNR Bureau of Natural Heritage Conservation to conduct annual American Marten and Bald Eagle/Osprey/Great Blue Heron surveys on National Forest and adjacent lands. In these surveys, the National Forest is trying to better understand presence, absence, and occupation of nest/den sites.

II. Objectives:

1. Sustain current and increase survey efforts to improve management of these Sensitive species on the CNNF land base, allowing better effects analysis for Forest Plan accomplishment.
2. Increase the ecological understanding and effectiveness of management efforts by improving wildlife habitat conditions on the Forest at Landscape levels beyond CNNF ownership.

III. Tasks and Timeline

Timeline	District	Project Description	Area	Cost Estimate
June 2020	Eagle River-Florence, and Great Divide	Winter snow tracking for mammals - survey 10 routes annually covering approx. 220 miles of forest service roads within each Marten Protection Area using established protocols	Survey routes include plowed forest service roads throughout both districts covering an area of approximately 340,000 acres.	\$6,000
June 2020	Eagle River-Florence	American marten trail camera survey and research - 14-week field season with DNR checking 120 camera sites checked annually following protocol	Camera stations are located at 120 sites providing survey coverage of ~13,500 acres.	\$13,000
June 2020	All districts	Bald eagle, osprey, and heron nest occupancy surveys - Survey all known eagle, osprey, and heron nests within CNNF once during nesting season using established DNR protocols	Survey known and reported nests for these bird species found across entire CNNF property area.	\$5,000

IV. Point of Contacts:

- Forest Service: Dan Eklund, 715-762-5194, deklund@usda.gov
- Wisconsin DNR: Jim Woodford, 715-365-8856, james.woodford@wisconsin.gov

V. Maps/Diagrams:

Local districts will provide maps or diagrams if needed.

Agreement No. 15-GN-11091300-1096
Coldwater Community Restoration and Maintenance
Appendix C: Statement of Work

I. Objectives/Project Description:

Restore and protect coldwater ecosystems by implementing beaver management on selected wild rice beds and other infrastructure.

Streamline the existing cooperative beaver management program among USDA FS, WDNR and USDA-WS, to 1) gain efficiency in the restoration and protection of coldwater stream systems, 2) accomplish in-stream habitat improvement projects, 3) protect infrastructure (road-stream crossings, impoundments, etc) and 4) protect wild rice resources.

Maintain approximately 560 miles of free flowing streams on National Forest lands.

II. Tasks and Timeline:

The tasks below are expected to occur annually for the life of the agreement (unless the USDA Forest Service or the WDNR choose otherwise) and the money amount on the financial plan is a per year amount. The per year cost is currently estimated at \$187,000.

The tasks and general timeline for this project are as follows:

Time	Description
Around January (occurs annually)	Have signed agreement with USDA-Wildlife Services for beaver control activities on CNNF lands. Beaver controls starts in the Spring.
Around Oct./Nov. (occurs annually)	Conduct fall beaver colony surveys (flights) in-coordination with USDA-Wildlife Services.

III. Point of Contacts:

- Forest Service: **Sue Reinecke**, 715-762-5185, sue.reinecke@usda.gov
- Wisconsin DNR: **Rebecca Diebel**, 608-444-5774, Rebecca.diebel@wisconsin.gov

Agreement No. 15-GN-11091300-1096
Prescription Writing
Appendix C: Statement of Work

The U.S. Forest Service has identified six timber sales for which detailed silvicultural prescriptions are needed during calendar year 2020. These sales will be marked during FY 2021, either by Forest Service timber markers or by contract timber markers, and offered for sale in 2021 or later. Prescriptions for two of the sales are needed by June 30, 2020.

Prescriptions will be written using the 2015 Chequamegon-Nicolet Rx Template, incorporating all applicable Forest Plan Standards and Guidelines, as well as any additional requirements set forth in the project-level NEPA document.

The tasks and general timeline for this project are as follows:

DISTRICT	TIMBER SALE	PROJECT	STANDS	ACRES	NEEDED BY
Medford-Park Falls	Hammerhead	Park Falls Hdwds EIS	7	255	6/30/2020
Medford-Park Falls	Spring Creek	Park Falls Hdwds EIS	10	419	6/30/2020
Great Divide	Labyrinth	Black Torch EA	7	231	6/30/2020
Great Divide	Lunker	Black Torch EA	22	581	6/30/2020
Great Divide	Midnight Moose	Black Torch EA	18	560	6/30/2020
Washburn	Haugenss Heroes	Cheq Red Pine EA	6	456	6/30/2020
TOTAL			70	2,502	