



**STATE OF MINNESOTA
GRANT AGREEMENT
FEDERAL SUB-AWARD AGREEMENT**

This grant agreement is between the State of Minnesota, acting through its Commissioner of the Natural Resources, Division of Ecological and Water Resources, and Minnesota's Lake Superior Coastal Program ("State") and City of Duluth, 411 West 1st Street, Duluth MN 55802 ("Grantee").

Recitals

1. Under Coastal Zone Management Administration Awards, U.S. Department of Commerce; National Oceanic and Atmospheric Administration, CFDA 11.419, NA17NOS4190062, the State received a federal award on July 1, 2017 for Implementation of Minnesota's Lake Superior Coastal Program (Attachment A, attached and incorporated into this grant agreement). This is not a research and development award.
2. The State sub-awards a total of \$99,078.00 to the Grantee DUNS 077627883. In this agreement, the State is sub-awarding \$10,000.00 to the Grantee for the purpose of conducting Minnesota's Lake Superior Coastal Program's FFY17 Task 306-05K: Hartley Natural Area Plant Community Survey in the manner described in the Minnesota Department of Natural Resources' federal cooperative agreement which is incorporated by reference and as provided in [Minn.Stat. § 84.026](#).
3. The Grantee represents that it is duly qualified and agrees to perform all services described in this grant agreement to the satisfaction of the State.

Grant Agreement

1. Term of Grant Agreement

- 1.1. **Effective date.** March 1, 2019, or the date the State obtains all required signatures under [Minn. Stat. §16B.98, Subd. 5](#), whichever is later. Per, [Minn.Stat. §16B.98 Subd. 7](#), no payments will be made to the Grantee until this grant agreement is fully executed. **The Grantee must not begin work under this grant agreement until this agreement is fully executed and the Grantee has been notified by the State's Authorized Representative to begin the work.**
- 1.2. **Expiration date.** August 31, 2019, or until all obligations have been satisfactorily fulfilled, whichever occurs first.
- 1.3. **Survival of Terms.** The following clauses survive the expiration or cancellation of this grant agreement: 9 Liability; 10 Audits; 11 Government Data Practices and Intellectual Property; 13 Publicity and Endorsement; 14 Governing Law, Jurisdiction, and Venue; 16 Data Disclosure; 19 Monitoring; and 24 Additional Program Requirements.
- 1.4. **Incur Expenses.** Notwithstanding [Minn. Stat. § 16A.41](#), expenditures made on or after March 1, 2019 or the date the State obtains all required signatures are eligible for reimbursement.

2. Grantee's Duties

The Grantee, who is not a state employee, will:

- a) Comply with required grants management policies and procedures set forth through [Minn.Stat. § 16B.97](#), Subd.4(a)(1).
- b) Perform the duties specified in Attachment B, which is attached and incorporated into this grant agreement.
- c) Complete the project in accordance with the approved budget and within the period specified in the grant agreement. Any material change in the grant agreement will require an amendment by the State (see Section 7.2).
- d) Be responsible for the administration, supervision, management, record keeping, and project oversight required for the work performed under this agreement.
- e) Maintain an adequate conflict of interest policy (Attachment C, which is attached and incorporated into this grant agreement). Throughout the term of this agreement, the Grantee must monitor and report any actual, potential, or perceived conflicts of interest to the State's Authorized Representative.
- f) Ensure that all work be conducted in accordance with appropriate Federal, state, and local laws and will follow recognized best practices for minimizing impacts to the human and natural environment.

3. Time

The Grantee must comply with all the time requirements and deadline dates described in this grant agreement. The State is not obligated to extend the grant period.

4. Consideration and Payment

4.1. **Consideration.** The State will pay for all services performed by Grantee under this grant agreement as follows:

- (A) **Compensation.** The Grantee will be paid \$10,000.00 according to the breakdown of costs contained in Attachment B. The Grantee may redistribute grant funds between approved budget categories up to ten percent, \$1,000.00, without permission from the State's Authorized Representative.
- (B) **Matching Requirements.** The total project cost is \$12,500.00. Grantee will provide at least \$2,500.00 or 20% of project-related costs from non-federal sources.
- (C) **Indirect Cost Rate.** The federal indirect cost rate for the State's federal award is 17.54%. The Grantee's indirect cost rate is 0% for this sub-award agreement.
- (D) **Travel Expenses.** Reimbursement for travel and subsistence expenses actually and necessarily incurred by the Grantee as a result of this grant agreement will not exceed \$0.00. The Grantee will be reimbursed for travel and subsistence expenses in the same manner and in no greater amount than provided in the current "[Commissioner's Plan](#)" promulgated by the Commissioner of Minnesota Management and Budget (MMB). The Grantee will not be reimbursed for travel and subsistence expenses incurred outside Minnesota unless it has received the State's prior written approval for out of state travel.
- (E) **Total Obligation.** The total obligation of the State for all compensation and reimbursements to the Grantee under this grant agreement will not exceed **ten thousand dollars and zero cents**.

4.2. **Payment.** The State will disburse funds to the Grantee pursuant to this agreement on a reimbursement basis. The Grantee must submit reimbursement requests with required expenditure documentation. Reimbursement requests will be accepted upon completion of the project or expiration of this grant agreement. The Grantee must use the State's Financial Reporting Form, which documents grant expenses and non-federal contributions (match). A current progress report must be on file with the State before requests will be processed, see Section 18.1.

4.2.1. **Financial Reports.** Financial Reporting Forms summarizing grant expenditures to date, must be submitted in a form and manner prescribed by the State and includes the following:

- a) Reimbursement of approved expenditures will be made based on expenditures reported. Reimbursement for expenditures deemed allowable, allocable, and reasonable will be made within 30 days of receipt of a complete request. The state reserves the right to withhold payment for any reimbursement request deemed to be in question of being allowable, allocable, and reasonable, or for which adequate supporting documentation does not exist.
- b) Financial documentation to support expenditures incurred under this award must be maintained by the Grantee and provided to the State upon request.
- c) Financial Reporting Forms must be received by the State within thirty (30) days of expiration (see Section 1). Financial Reporting Forms received after that date will not be eligible for reimbursement.

4.2.2. **Federal funds.** Payments under this grant agreement will be made from federal funds obtained by the State through “Implementation of Minnesota’s Lake Superior Coastal Program”, CFDA number 11.419 of the Coastal Zone Management Act of 1972, as amended, administered by the Office for Coastal Management, National Oceanic and Atmospheric Administration, U.S. Department of Commerce. The Grantee is responsible for compliance with all federal requirements imposed on these funds and accepts full financial responsibility for any requirements imposed by the Grantee’s failure to comply with federal requirements.

5. Conditions of Payment

All services provided by the Grantee under this grant agreement must be performed to the State’s satisfaction, as determined at the sole discretion of the State’s Authorized Representative and in accordance with all applicable federal, state, and local laws, ordinances, rules, and regulations. The Grantee will not receive payment for work found by the State to be unsatisfactory or performed in violation of federal, state, or local law. The State will withhold ten percent of the grant amount pending receipt of final report, products, and match documentation.

6. Authorized Representative

The State's Authorized Representative is Amber Westerbur, Coastal Program Manager, 1568 Highway 2, Two Harbors, MN 55616, 218-834-1445, amber.westerbur@state.mn.us, or her successor, and has the responsibility to monitor the Grantee’s performance and the authority to accept the services provided under this grant agreement. If the services are satisfactory, the State's Authorized Representative or her designee will certify acceptance on each reimbursement submitted for payment.

The Grantee Authorized Representative is Theresa Bajda, Project Technician, Duluth Parks and Recreation, 411 West First Street, Duluth MN 55802, 218-730-4317, tbajda@duluthmn.gov, or their successor. If the Grantee’s Authorized Representative changes at any time during this grant agreement, the Grantee must immediately notify the State’s Authorized Representative.

7. Assignment, Amendments, Waiver, and Grant Agreement Complete

- 7.1. **Assignment.** The Grantee cannot assign or transfer any rights or obligations under this grant agreement without the prior consent of the State and a fully executed Assignment Agreement, executed and approved by the same parties who executed and approved this grant agreement, or their successors in office.
- 7.2. **Amendments.** Any amendment to this grant agreement must be in writing and will not be effective until it has been executed and approved by the same parties who executed and approved the original grant agreement, or their successors in office.
- 7.3. **Waiver.** If the State fails to enforce any provision of this grant agreement, that failure does not waive the provision or its right to enforce it.

- 7.4. **Grant Agreement Complete.** This grant agreement contains all negotiations and agreements between the State and the Grantee. No other understanding regarding this grant agreement, whether written or oral, may be used to bind either party.

8. Subcontractors, Contracting, and Bidding Requirements

The Grantee agrees that if it subcontracts any portion of this project to another entity, the agreement with the subcontractor will contain all provisions of the agreement with the State. The Grantee also agrees to comply with [Title 2 Code of Federal Regulations \(CFR\) 200.318](#) through 2 CFR 200.326.

- 8.1. **Uniform Municipal Contracting Law.** Per [Minn.Stat. § 471.345](#), Grantees that are municipalities as defined in Subd. 1 must follow the law.
- 8.1.1. Any services and/or materials that are expected to cost less than \$3,000 (\$2,000 for acquisitions of construction that are subject to the [Davis-Bacon Act](#) and \$2,500 for the acquisition of services subject to the [Service Contract Act](#)) do not require the solicitation of competitive quotations in accordance with [2 CFR 200.320\(b\)](#). The Grantee must make an effort to equitably distribute these purchases.
- 8.1.2. For projects that include construction work of \$25,000 or more, prevailing wage rules apply per [Minn.Stat. § 177.41](#) through [177.44](#) consequently, the bid request must state the project is subject to *prevailing wage*. These rules require that the wages of laborers and workers should be comparable to wages paid for similar work in the community as a whole.
- 8.1.3. The Grantee must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible as outlined in [2 CFR 200.321](#).
- [State Department of Administration's Certified Targeted Group, Economically Disadvantaged and Veteran-Owned Vendor List](#)
- 8.1.4. The Grantee must not contract with vendors who are suspended or debarred in MN: <http://www.mmd.admin.state.mn.us/debarredreport.asp>

9. Liability

The Grantee must indemnify, save, and hold the State, its agents, and employees harmless from any claims or causes of action, including attorney's fees incurred by the State, arising from the performance of this grant agreement by the Grantee or the Grantee agents or employees. This clause will not be construed to bar any legal remedies the Grantee may have for the State's failure to fulfill its obligations under this grant agreement.

10. Audits (State and Single)

Under [Minn.Stat. § 16B.98](#), Subd.8, and Code of Federal Regulations [2 CFR 200.331](#), the Grantee's books, records, documents, and accounting procedures and practices relevant to this grant agreement are subject to examination by the State and/or the State Auditor or Legislative Auditor, as appropriate, for a minimum of six years from the end of this grant agreement.

All state and local governments, colleges and universities, and non-profit organizations that expend \$750,000 or more of Federal awards in a fiscal year must have a single audit according to the OMB Uniform Guidance: Cost Principles, Audit, and Administrative Awards Requirements for Federal Awards. This is \$750,000 total Federal awards received from all sources. If an audit is completed, forward a copy of the report to both the State's Authorized Representative and the State Auditor.

11. Government Data Practices and Intellectual Property

- 11.1. **Government Data Practices.** The Grantee and State must comply with the Minnesota Government Data Practices Act, [Minn.Stat. § 13](#), as it applies to all data provided by the State under this grant agreement, and as

it applies to all data created, collected, received, stored, used, maintained, or disseminated by the Grantee under this grant agreement. The civil remedies of [Minn.Stat. § 13.08](#) apply to the release of the data referred to in this clause by either the Grantee or the State. If the Grantee receives a request to release the data referred to in this clause, the Grantee must immediately notify the State. The State will give the Grantee instructions concerning the release of the data to the requesting party before the data is released. The Grantee's response to the request must comply with applicable law.

11.2. **Intellectual Property.**

11.2.1. **Intellectual Property Rights.** The Grantee owns all rights, title, and interest in the works created under this grant agreement, including copyrights, patents, trade secrets, trademarks and service marks. Works means all inventions, improvements or discoveries (whether or not patentable), geospatial data, databases, computer programs, reports, notes, studies, photographs, negatives, designs, drawings, specifications, materials, tapes, disks and videos, conceived, reduced to practices, created or originated by the Grantee, its employees, and subcontractors, either individually or jointly with others, in the performance of the grant agreement. The federal awarding agency (U.S. Department of Commerce) may receive royalty-free, non-exclusive and an irrevocable right to reproduce, publish, or otherwise use the work for Federal purposes, and to authorize others to do so as noted in [2 CFR 200.315](#).

11.2.2. **Obligations.**

- (A) **Notification.** Whenever any invention, improvement, or discovery (whether or not patentable) is made or conceived for the first time or actually or constructively reduced to practice by the Grantee, including its employees and subcontractors, in the performance of this agreement, the Grantee will immediately give the State's Authorized Representative written notice thereof, and must promptly furnish the Authorized Representative with complete information and/or disclosure thereon.
- (B) **Representation.** The Grantee represents and warrants that the Works do not and will not infringe upon any intellectual property rights of other persons or entities. Notwithstanding Clause 9, the Grantee will indemnify; defend, to the extent permitted by the Attorney General; and hold harmless the State, at the Grantee's expense, from any action or claim brought against the State to the extent that it is based on a claim that all or part of the Works infringes upon the intellectual property rights of others. The Grantee will be responsible for payment of any and all such claims, demands, obligations, liabilities, costs, and damages, including but not limited to, attorney fees. If such a claim or action arises, or in the Grantee's or the State's opinion is likely to arise, the Grantee must, at the State's discretion, either procure for the State the right or license to use the intellectual property rights at issue or replace or modify the allegedly infringing Works as necessary and appropriate to obviate the infringement claim. This remedy of the State will be in addition to and not exclusive of other remedies provided by law. Nothing in this article constitutes or should be construed to constitute a waiver by either the State or the Grantee of the sovereign immunity of each party from certain suits or remedies relating to infringement claims. The Grantee may assert the immunities of the State in connection with the Grantee's defense of any infringement claim brought against the State. The State must reasonably cooperate with the Grantee in connection with the Grantee's defense of any claim or suit, and the State will discontinue use of any allegedly infringing works at Grantee's reasonable request.
- (C) **License to State.** The Grantee gives to the State a perpetual, irrevocable, no-fee right and license to make, have made, reproduce, modify, distribute, perform, and otherwise use the works for any and all purposes, in all forms and manners that the State, in its sole discretion, deems appropriate.

The Grantee must, upon the request of the State, execute all papers and perform all other acts necessary, to document and secure the State's right and license to the works. At the request of the State, the Grantee will permit the State to inspect the original works.

12. Workers' Compensation

The Grantee certifies that it is in compliance with [Minn.Stat. § 176.181](#), subd. 2, pertaining to workers' compensation insurance coverage. The Grantee's employees and agents will not be considered State employees. Any claims that may arise under the Minnesota Workers' Compensation Act on behalf of these employees and any claims made by any third party as a consequence of any act or omission on the part of these employees are in no way the State's obligation or responsibility.

13. Publicity and Endorsement

Any publicity regarding the subject matter of this grant agreement must identify the sponsoring agencies; and must not be released without prior written approval from the State's Authorized Representative or her designee. For purposes of this provision, publicity includes websites, notices, informational pamphlets, press releases, research, reports, signs, and similar public notices prepared by or for the Grantee individually or jointly with others, or any subcontractors, with respect to the program, publications, or services provided resulting from this grant contract. Publication of methods and results derived from this project in theses, academic or professional journals or their presentation at symposia or scholarly meetings is hereby authorized, provided they contain the required acknowledgment of funding support and necessary steps have been taken to protect copyright and other intellectual property rights resulting from the project.

The Grantee must not claim that the State endorses its products or services and the Grantee must adhere to the terms of [2 CFR 200.315](#).

- 13.1. **Acknowledgement:** The cover of the title page (or other prominent location) of all reports, studies, or other documents, and acknowledgement on websites/webpages, videos, and other media, published or distributed electronically or hardcopy, must acknowledge both the State and the financial assistance provided by the Coastal Zone Management Act of 1972, as amended, administered by the Office for Coastal Management, National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce. Every publication of material based on, developed under, or otherwise produced under this grant agreement, except scientific article or papers appearing in scientific, technical or professional journals, must contain the following:

This [report/video/workshop/brochure/etc.] was prepared by [recipient name] using Federal funds under award NA17NOS4190062 from the Coastal Zone Management Act of 1972, as amended, administered by the Office for Coastal Management, National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce provided to the Minnesota Department of Natural Resources (MNDNR) for Minnesota's Lake Superior Coastal Program. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of NOAA, the U.S. Department of Commerce, or the MNDNR.

- 13.2. **Professional Publications.** Publications of methods and results derived from this project in theses, academic or professional journals or presentations at symposia or scholarly meetings must acknowledge both the State and the financial assistance provided by the Coastal Zone Management Act of 1972, as amended, administered by the Office for Coastal Management, National Oceanic and Atmospheric Administration (NOAA):

This [study/etc.] was funded in part by the Coastal Zone Management Act of 1972, as amended, administered by the Office for Coastal Management, National Oceanic and Atmospheric Administration under Award NA17NOS4190062 provided to the Minnesota Department of Natural Resources for Minnesota's Lake Superior Coastal Program.

14. Governing Law, Jurisdiction, and Venue

Minnesota law, without regard to its choice-of-law provisions, governs this grant agreement. Venue for all legal proceedings out of this grant agreement, or its breach, must be in the appropriate state or federal court with competent jurisdiction in Ramsey County, Minnesota.

15. Termination

- 15.1. **Termination by the State.** The State may immediately terminate this grant agreement with or without cause, upon 30 days' written notice to the Grantee. Upon termination, the Grantee will be entitled to payment, determined on a pro rata basis, for services satisfactorily performed.
- 15.2. **Termination for Cause.** The State may immediately terminate this grant agreement if the State finds that there has been a failure to comply with the provisions of this grant agreement, that reasonable progress has not been made or that the purposes for which the funds were granted have not been or will not be fulfilled. The State may take action to protect the interests of the State of Minnesota, including the refusal to disburse additional funds and requiring the return of all or part of the funds already disbursed.
- 15.3. **Termination for Insufficient Funding.** The State may immediately terminate this grant agreement if:
 - a) Funding for Grant No. NA17NOS4190062 is withdrawn by the U.S. Department of Commerce; or
 - b) If funding cannot be continued at a level sufficient to allow for the payment of the services covered here. Termination must be by written or fax notice to the Grantee. The State is not obligated to pay for any services that are provided after notice and effective date of termination. However, the Grantee will be entitled to payment, determined on a pro rata basis, for services satisfactorily performed to the extent that funds are available. The State will not be assessed any penalty if the agreement is terminated because of the decision of the Minnesota Legislature, or other funding source, not to appropriate funds. The State must provide the Grantee notice of the lack of funding within a reasonable time of the State's receiving that notice.

16. Data Disclosure

Under [Minn.Stat. § 270C.65](#), Subd. 3, and other applicable law, the Grantee consents to disclosure of its social security number, federal employer tax identification number, and/or Minnesota tax identification number, already provided to the State, to federal and state tax agencies and state personnel involved in the payment of state obligations. These identification numbers may be used in the enforcement of federal and state tax laws which could result in action requiring the Grantee to file state tax returns and pay delinquent state tax liabilities, if any.

17. American Disabilities Act

The Grantee must comply with the 2010 American Disabilities Act Standards for Accessible Design and all applicable regulations and guidelines.

18. Reporting Requirements

- 18.1. **Progress Reports.** Grantee must submit Progress Reports, in a form and manner prescribed by the State. Progress Reports are due twice, June 15, 2019 and September 15, 2019.
- 18.2. **Financial Reports.** Financial Reporting Forms summarizing grant expenditures to date, must be submitted in a form and manner prescribed by the State (see Section 4.2).

- 18.3. **Final Report.** The State must receive the Final Report, which summarizes activities conducted during the entire award, and Products, as identified in Attachment B, within thirty days of expiration (see Section 1). The Grantee must submit one electronic and one hard copy.

19. Monitoring

The State will be allowed at any time to conduct periodic site visits and inspections to ensure work progress in accordance with this grant agreement, including a final inspection upon program completion.

Following closure of the project, the State's authorized representatives will be allowed to conduct post-completion inspections of the site to ensure that the site is being properly operated and maintained and that no conversion of use has occurred.

20. Invasive Species Prevention

The State requires Grantees and subcontractors to take active steps to prevent or limit the introduction, establishment, and spread of invasive species. The Grantee shall prevent invasive species from entering into, spreading within, or leaving a project site by cleaning equipment prior to arriving at and leaving the project site.

Invasive species are present in the coastal zone. The Grantee shall be responsible for communicating any precautions needed to staff and sub-contractors. Parking, staging areas, and travel routes shall not be within known infestations.

For resources and best practices, please reference <http://www.dnr.state.mn.us/invasives/dnrlands.html> or contact the State's Authorized Representative.

21. Pollinator Best Management Practices

Habitat restorations and enhancements conducted on any lands using state funds are subject to pollinator best management practices and habitat restoration guidelines pursuant to [Minn.Stat. § 84.973](#). Best practices and guidelines ensure an appropriate diversity of native species to provide habitat for pollinators through the growing season.

22. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions

- 22.1. The prospective lower tier participant certifies, by submission of this agreement, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 22.2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant must attach an explanation to this agreement.

23. Whistleblower Protection Rights

Recipient Employee Whistleblower Rights and Requirement to Inform Employees of Whistleblower Rights

- a) This award and employees working on this financial assistance agreement will be subject to the whistleblower rights and remedies in the pilot program on Award Recipient employee whistleblower protections established at [41 U.S.C. 4712](#) by section 828 of the National Defense Authorization Act for Fiscal Year 2013 (Pub.L. 112-239)
- b) The Award Recipient shall inform its employees in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C. 4712
- c) The Award Recipient shall insert the substance of this clause, including this paragraph (c), in all subawards or subcontracts over the simplified threshold. 42 CFR & 52.203-17 (as referenced in 42 CFR & 3.908-9)

24. Additional Program Requirements

The Grantee must comply with the following as well as the terms and conditions for closeout of the sub-award.

- 24.1. The Grantee must attend a grant administration workshop or receive grant administration instruction.
- 24.2. The Grantee is responsible for safety in the project, including the safety of project personnel, associates, visitors, and volunteers.
- 24.3. ***Non-Discrimination Requirements.*** No person in the United States must, on the ground of race, color, national origin, handicap, age, religion, or sex, be excluded from participation in, be denied the benefits of, or be subject to discrimination under, any program or activity receiving Federal financial assistance. Including but not limited to:
 - a) Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq.) and DOC implementing regulations published at 15 C.F.R. Part 8 prohibiting discrimination on the grounds of race, color, or national origin under programs or activities receiving Federal financial assistance;
 - b) Title IX of the Education Amendments of 1972 (20 U.S.C. § 1681 et seq.) prohibiting discrimination on the basis of sex under Federally assisted education programs or activities;
 - c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), and DOC implementing regulations published at 15 C.F.R. Part 8b prohibiting discrimination on the basis of handicap under any program or activity receiving or benefiting from Federal assistance.
 - d) The Age Discrimination Act of 1975, as amended (42 U.S.C. § 6101 et seq.), and DOC implementing regulations published at 15 C.F.R. Part 20 prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance; and
 - e) Any other applicable non-discrimination law(s).
- 24.4. The Grantee may not issue a subaward or contract to any Federal employee, department, or agency, without advance permission from the State's Authorized Representative.
- 24.5. ***Scientific Integrity.***
 - a) *Maintaining Integrity.* The Grantee shall maintain the scientific integrity of research performed pursuant to this grant including the prevention, detection, and remediation of any allegations regarding the violation of scientific integrity or scientific and research misconduct, and the conduct of inquiries, investigations, and adjudications of allegations of violations of scientific integrity or scientific and research misconduct. All the requirements of this provision flow down to subrecipients.
 - b) *Peer Review.* The peer review of the results of scientific activities under this award shall be accomplished to ensure consistency with NOAA standards on quality, relevance, scientific integrity, reproducibility, transparency, and performance. NOAA will ensure that peer review of "influential scientific information" or "highly influential scientific assessments" is conducted in accordance with the Office of Management and Budget (OMB) Final Information Quality Bulletin for Peer Review and NOAA policies on peer review, such as the Information Quality Guidelines.
 - c) In performing or presenting the results of scientific activities under this award and in responding to allegations regarding the violation of scientific integrity or scientific and research misconduct, the Grantee and all subrecipients shall comply with the provisions herein and [NOAA Administrative Order 202-735D](#), Scientific Integrity, and its Procedural Handbook, including any amendments thereto.
 - d) *Primary Responsibility.* The Grantee shall have the primary responsibility to prevent, detect, and investigate allegations of a violation of scientific integrity or scientific and research misconduct. Unless otherwise instructed, the Grantee shall promptly conduct an initial inquiry into any allegation of such misconduct and may rely on its internal policies and procedures, as appropriate, to do so.
 - e) By executing this grant, the Grantee provides its assurance that it has established an administrative process for performing an inquiry, investigating, and reporting allegations of a violation of scientific

integrity or scientific and research misconduct; and that it will comply with its own administrative process for performing an inquiry, investigation, and reporting of such misconduct.

24.6. **Environmental Data.**

- a) *Data Sharing.* Environmental data collected or created under this Grant Agreement must be made publicly visible and accessible in a timely manner, free of charge or at minimal cost that is no more than the cost of distribution to the user, except where limited by law, regulation, policy, or security requirements. Data are to be made available in a form that would permit further analysis or reuse: data must be encoded in a machine-readable format, preferably using existing open format standards; data must be sufficiently documented, preferably using open metadata standards, to enable users to independently read and understand the data. The location (internet address) of the data should be included in the final report. Pursuant to [NOAA Information Quality Guidelines](#), data should undergo quality control (QC) and a description of the QC process and results should be referenced in the metadata. Failure to perform quality control does not constitute an excuse not to share data. Data without QC are considered "experimental products" and their dissemination must be accompanied by explicit limitations on their quality or by an indicated degree of uncertainty.
- b) *Timelines.* Data accessibility must occur no later than publication of a peer-reviewed article based on the data, or two years after the data are collected and verified, or two years after the original end date of the grant (not including any extensions or follow-on funding), whichever is soonest, unless a delay has been authorized by the NOAA funding program.
- c) *Disclaimer.* Data produced under this award and made available to the public must be accompanied by the following statement: "These data and related items of information have not been formally disseminated by NOAA, and do not represent any agency determination, view, or policy."
- d) *Failure to Share.* Failing or delaying to make environmental data accessible in accordance with the Data Management Plan (Attachment D, attached and incorporated in this grant agreement), unless authorized, may lead to enforcement actions, and will be considered when making future award decisions. Grantees are responsible for ensuring these conditions are also met by sub-recipients and subcontractors.
- e) *Acknowledgement.* Federal funding sources shall be identified in all scholarly publications. An Acknowledgements section shall be included in the body of the publication stating the relevant Grant Programs and Award Numbers. In addition, funding sources shall be reported during the publication submission process using the [FundRef](#) mechanism if supported by the Publisher.
- f) *Submission.* The final pre-publication manuscripts of scholarly publications produced shall be submitted to the [NOAA Institutional Repository](#) after acceptance, and no later than upon publication, of the paper by a journal. NOAA will produce a publicly-visible catalog entry directing users to the published version of the article. After an embargo period of one year after publication, NOAA shall make the manuscript itself publicly visible, free of charge, while continuing to direct users to the published version of record.
- g) *Citation.* Publications based on data, and new products derived from source data, must cite the data used according to the conventions of the Publisher, using unambiguous labels such as Digital Object Identifiers (DOIs). All data and derived products that are used to support the conclusions of a peer-reviewed publication must be made available in a form that permits verification and reproducibility of the results.

24.7. **Geospatial Data.** Geospatial data and information must include compliant metadata: [Minnesota Geographic Metadata Guidelines](#) and [Metadata Resources](#); Federal Geographic Data Committee's [FGDC-STD-001-1998: Content Standard for Digital Geospatial Metadata](#) (revised June 1998); or the proposed North American Profile of the ISO (International Organization for Standardization) 19115. The metadata must include the endorsements for both publications (Section 13.1) and environmental data described in Section 24.6(c).

Attachments:

- X A. Award Notice
- X B. Task Description
- X C. Conflict of Interest Disclosure
- X D. Data Management Plan

Signatures:

1. STATE ENCUMBRANCE VERIFICATION

Individual certifies that funds have been encumbered as required by Minn. Stat. §§ 16A.15 and 16C.05

Signed: _____

Date: _____

SWIFT Contract/PO No(s). _____

2. GRANTEE

The Grantee certifies that the appropriate person(s) have executed the grant contract on behalf of the Grantee as required by applicable articles, bylaws, resolutions, or ordinances.

By: _____

Title: _____

Date: _____

By: _____

Title: _____

Date: _____

Distribution:
Agency
Grantee
State's Authorized Representative

3. STATE AGENCY

By: _____
(with delegated authority) Steve Colvin

Title: Director, Ecological & Water Resources

Date: _____

Attachment A

FORM CD-450 (REV 12/14)	U. S. DEPARTMENT OF COMMERCE FINANCIAL ASSISTANCE AWARD	<input type="checkbox"/> GRANT <input checked="" type="checkbox"/> COOPERATIVE AGREEMENT
RECIPIENT NAME NATURAL RESOURCES, MINNESOTA DEPARTMENT OF	FEDERAL AWARD ID NUMBER NA17NOS4190062	
	PERIOD OF PERFORMANCE 07/01/2017-12/31/2018	
STREET ADDRESS 500 LAFAYETTE RD N	FEDERAL SHARE OF COST \$484,500.00	
CITY, STATE, ZIP CODE SAINT PAUL MN 55155-4002	RECIPIENT SHARE OF COST \$484,500.00	
AUTHORITY 16 U.S.C. 1455 and 1455a	TOTAL ESTIMATED COST \$969,000.00	
CFDA NO. AND NAME 11.419 , Coastal Zone Management Administration Awards		
PROJECT TITLE Implementation of Minnesota's Lake Superior Coastal Program		
<p>This Award Document (Form CD-450) signed by the Grants Officer constitutes an obligation of Federal funding. By signing this Form CD-450, the Recipient agrees to comply with the Award provisions checked below and attached. Upon acceptance by the Recipient, the Form CD-450 must be signed by an authorized representative of the Recipient and returned to the Grants Officer. If not signed and returned without modification by the Recipient within 30 days of receipt, the Grants Officer may unilaterally withdraw this Award offer and de-obligate the funds.</p> <p><input checked="" type="checkbox"/> DEPARTMENT OF COMMERCE FINANCIAL ASSISTANCE STANDARD TERMS AND CONDITIONS (DECEMBER 2014)</p> <p><input type="checkbox"/> R & D AWARD</p> <p><input type="checkbox"/> FEDERAL-WIDE RESEARCH TERMS AND CONDITIONS, AS ADOPTED BY THE DEPT. OF COMMERCE</p> <p><input checked="" type="checkbox"/> BUREAU-SPECIFIC ADMINISTRATIVE STANDARD AWARD CONDITIONS</p> <p><input checked="" type="checkbox"/> SPECIAL AWARD CONDITIONS</p> <p><input checked="" type="checkbox"/> LINE ITEM BUDGET</p> <p><input checked="" type="checkbox"/> 2 CFR PART 200, UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS, AS ADOPTED PURSUANT TO 2 CFR § 1327.101</p> <p><input type="checkbox"/> 48 CFR PART 31, CONTRACT COST PRINCIPLES AND PROCEDURES</p> <p><input type="checkbox"/> MULTI-YEAR AWARD (PLEASE SEE THE MULTI-YEAR SPECIAL AWARD CONDITION.)</p> <p><input checked="" type="checkbox"/> DEPARTMENT OF COMMERCE PRE-AWARD NOTIFICATION REQUIREMENTS FOR GRANTS AND COOPERATIVE AGREEMENTS (REF:79 FR 78390 DECEMBER 30, 2014)</p> <p><input checked="" type="checkbox"/> OTHERS(S): CZM Program regulations at 15 C.F.R. Part 923</p>		
SIGNATURE OF DEPARTMENT OF COMMERCE GRANTS OFFICER Stacy Tedder Grants Officer		DATE 06/26/2017
PRINTED NAME, PRINTED TITLE AND SIGNATURE OF AUTHORIZED RECIPIENT OFFICIAL Mr. Luke Skinner		DATE 07/11/2017

Attachment A

FORM CD-451 (REV 10-98) LF DAO 203-26		[] GRANT [X] COOPERATIVE AGREEMENT		
U. S. DEPARTMENT OF COMMERCE		ACCOUNTING CODE		
AMENDMENT TO FINANCIAL ASSISTANCE AWARD		AWARD NUMBER		
		NA17NOS4190062		
RECIPIENT NAME NATURAL RESOURCES, MINNESOTA DEPARTMENT OF		AMENDMENT NUMBER		
		2		
STREET ADDRESS 500 LAFAYETTE RD N		EFFECTIVE DATE		
		01/01/2019		
CITY, STATE, ZIP CODE SAINT PAUL MN 55155-4002		EXTEND WORK COMPLETION TO		
		06/30/2020		
CFDA NO. AND PROJECT TITLE 11.419 Implementation of Minnesota's Lake Superior Coastal Program				
COSTS ARE REVISED AS FOLLOWS	PREVIOUS ESTIMATED COST	ADD	DEDUCT	TOTAL ESTIMATED COST
FEDERAL SHARE OF COST	\$980,000.00	\$0.00	\$0.00	\$980,000.00
RECIPIENT SHARE OF COST	\$980,000.00	\$0.00	\$0.00	\$980,000.00
TOTAL ESTIMATED COST	\$1,960,000.00	(\$-0.00)	\$0.00	\$1,960,000.00
REASON(S) FOR AMENDMENT				
1. To extend the award period 18 months per the recipient's request dated 01/16/2018, which is incorporated by reference.				
2. To revise NOAA Administrative Standard Award Conditions.				
This Amendment approved by the Grants Officer is issued in triplicate and constitute an obligation of Federal funding. By signing the three documents, the Recipient agrees to comply with the Amendment provisions checked below and attached, as well as previous provisions incorporated into the Award. Upon acceptance by the Recipient, two signed Amendment documents shall be returned to the Grants Officer and the third document shall be retained by the Recipient. If not signed and returned without modification by the Recipient within 30 days of receipt, the Grants Officer may unilaterally terminate this Amendment.				
[] Special Award Conditions (Attachment B)				
[] Line Item Budget (Attachment A)				
[] Other(s)				
SIGNATURE OF DEPARTMENT OF COMMERCE GRANTS OFFICER		TITLE		DATE
Stacy Tedder		Grants Officer		01/29/2018
TYPE NAME AND SIGNATURE OF AUTHORIZED RECIPIENT OFFICIAL		TITLE		DATE
Amber Westerbur		Program Manager		01/29/2018

US Department of Commerce, Financial Assistance Award

Award Number: NA17NOS4190062

Recipient: Minnesota Department of Natural Resources

CFDA No. and Name: 11.419, Coastal Zone Management Administration Awards

Project Title: Implementation of Minnesota's Lake Superior Coastal Program

Award Period: July 1, 2017 – June 30, 2020

SUBRECIPIENT

Task: Hartley Natural Area Plant Community Survey

Project Number: 17-306-05K

Timeframe: March 2019 – August 2019

Description

The City of Duluth's Duluth Natural Areas Program is an initiative to permanently protect and preserve Duluth's natural heritage established under ordinance. Hartley Nature Area (Hartley), a 620-acre area, is nominated for inclusion in the program. Hartley has been provisionally designated as a DNAP and now must develop a natural resource management plan as part of the nomination process. Hartley conducted large-scale plant surveys in the past, but they need to be updated for use in the plan.

In the spring and summer of 2019, the City (subrecipient), along with the Hartley Nature Center and the University of Minnesota's Natural Resources Research Institute, will complete a plant community survey. This includes aerial image (drone/unmanned aerial vehicle) collection and analysis, as well as field sampling to quantify plant community types, vegetation composition, structure, and other landscape attributes.

This survey will guide the plan's strategies and actions to manage and protect plant communities for ecosystem resiliency.

There is a data management plan for this project.

Methods

Hartley location: 3001 Woodland Av, Duluth MN.

Coordinates: 46° 50'18.82N, 92° 04'58.38W.

Timing

The drone survey will occur both during leaf-off, no-snow conditions (late April, early May) and full leaf expression (July, August) between 10:00 am – 2:00 pm. Field sampling will be done one - two weeks after the aerial imagery is processed and available for field checking to calibrate and verify. The field survey crew will be conducting surveys for about 10 to 12 days, covering 40 to 50 acres each day; sampling will be done between sunrise and sunset (specific times to be determined by the field sampling crew).

Site Access

Access for all activities will be via established Hartley trails or open areas. No vegetation or human/wildlife activities will be disturbed.

Tools/Equipment

Drone and laptop: Drone survey attached.

The Natural Resources Research Institute will use an eBee-Ag Unmanned Aerial Vehicle (UAV) with high resolution RGB and multispectral cameras. It has an automated pilot system, so the user simply creates a route in the eMotion3 software, and the drone flies itself. Flight mission adjustments and certain commands can be given through eMotion (via radio communication between laptop and drone) while in flight such as abort mission, land, go to waypoint, etc. The UAV images can be used to derive indices of plant health, defoliation, differentiate species or plant community types and quantify vegetation composition, structure, and other landscape attributes.

Field sampling: Field crew (2 surveyors) will take paper field forms on clipboards to document plant community composition, printed copies of drone imagery for notes, GPS units to document locations documented, and cameras to take a few photos of plant community types documented and rare or invasive plants. The field crew will carry plastic bags for collecting any unknown or uncertain plants that require laboratory identification with a microscope and taxonomic keys.

Significant Habitats

Hartley is one of the largest areas of remaining and significant natural communities in Duluth. The diversity of community types (two types of northern hardwood forest, three types of lowland forest, pine forest, wet meadow, willow swamp, etc.) is in and of itself significant.

Significant native plant communities include:

- 14 high-quality occurrences totaling approximately 488 acres of different undisturbed and viable native plant communities are present.
- The Sugar Maple-Basswood-(Bluebead Lily) MHn56 forest type is one of the largest remaining remnants of northern hardwoods in Duluth.
- The large wet meadow (WMn82b) and willow swamp (WMn1a) complex is second in size only to a few wet meadows along the St. Louis River.
- The eastern white pine trees have the highest natural resistance to white pine blister rust of any trees ever found in Minnesota.

A 2004 survey estimated 117 acres of plant communities are considered significant as these remnants are among the best remnants of natural vegetation in Duluth.

Task Outcomes

1. **Aerial Image Collection and Analysis** – using a UAV, collect imagery across Hartley. Collect leaf-off (April) and leaf-on (June/July); use Pix4D to export the outputs, most of which can be viewed and analyzed in ArcMap or similar software. Outputs generally are the orthomosaic, digital terrain model, digital surface model, contour lines, calculated indices, and 3D point cloud and textured mesh. Interpret images to identify zone of homogeneous vegetation; create a digital 3D model of the area with photogrammetric point cloud data; the 3D mesh can be uploaded and viewed online at Sketchfab.com; develop a Canopy Height Model to characterize heights of different vegetation classes; develop metadata for geodatabase. Present findings to workgroup.

Outcome End Date: June 2019

Attachment B

- 2. Field Sampling** – conduct vegetation surveys; search for and document any state-listed endangered, threatened, or special concern plant species, and/or invasive plants that can be identified from May through July; refine plant community polygons; create metadata; and develop a brief report describing the methods and results of the vegetation surveys.

Outcome End Date: August 2019

Products

- Geodatabase
- Summary Report

Task Funding

Grant (federal): \$10,000.00
Match (non-federal): \$2,500.00
Total: \$12,500.00

Name	Grant	Match	Total
Personnel			
Fringe			
Equipment			
Travel			
Supplies			
Subcontract	10,000	2,500	12,500
Construction			
Other			
Indirect			
Total	\$10,000	\$2,500	\$12,500

Drone Survey Procedure

Project Description

The City of Duluth's Natural Areas Program is an initiative to permanently protect and preserve Duluth's natural heritage. Hartley Nature Area (Hartley) is nominated for inclusion in the program. Once designated, the Park must develop a comprehensive management plan. A plant community survey is an important component for prioritizing sites and tasks associated with building plant community viability and resiliency. This work will provide an up to date understanding of plant community types, sizes, and rankings.

In the spring and summer of 2019, the City, along with the Hartley Nature Center and the University of Minnesota's Natural Resources Research Institute, will complete a plant community survey. This includes aerial image collection and analysis, as well as field sampling to quantify plant community types, vegetation composition, structure, and other landscape attributes.

Attachment B

This survey will guide the management plan strategies and action to manage and protect plant communities for ecosystem resiliency.

Need for the drone: Many areas of the Hartley Nature Center are sensitive or difficult to access due to topography, presence of wetlands, and sensitive aquatic features. The amount of land that can be surveyed is limited compared with the complete coverage that can be provided by a drone.

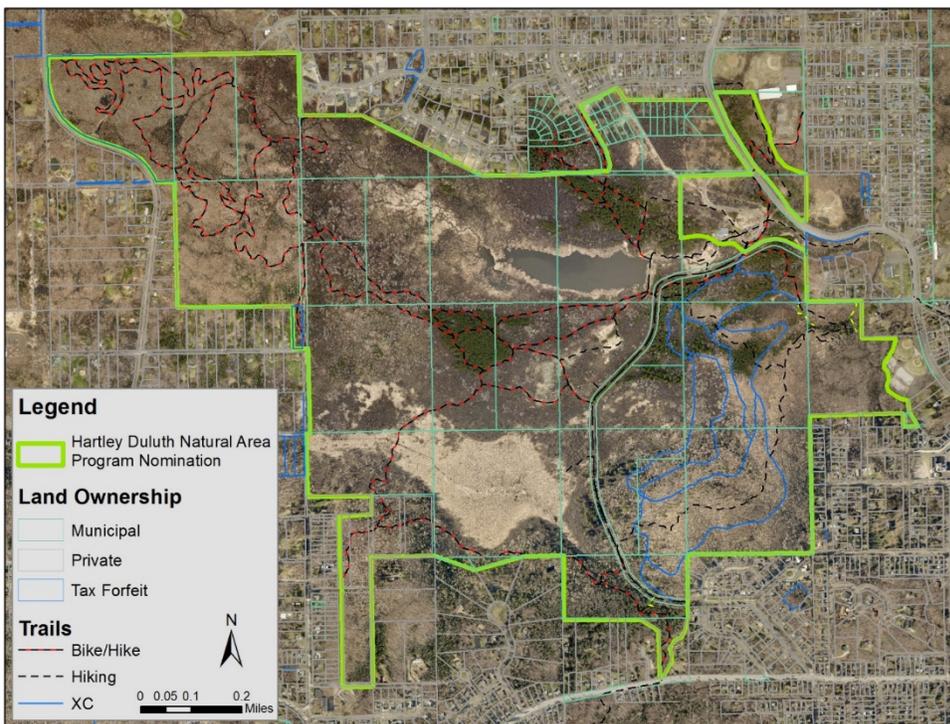
Methods: To the degree possible, we will create a comprehensive aerial photographic coverage and 3D point cloud for the Hartley Nature Center. Pix4D is used to export the outputs, most of which can be viewed and analyzed in ArcMap or similar software. Outputs include orthomosaic, digital terrain model, digital surface model, contour lines, calculated indices, and 3D point cloud and textured mesh.

These data will be used to identify and classify polygons according to their plant community classification. We will also develop a Canopy Height Model to characterize heights of different vegetation classes to better understand species and age diversity. Metadata will be developed within a geodatabase to incorporate maps for the management plan.

Equipment: The Natural Resources Research Institute will use, an eBee-Ag Unmanned Aerial Vehicle (UAV) with high resolution RGB and multispectral cameras. It has an automated pilot system, so the user simply creates a route in the eMotion3 software, and the drone flies itself. Flight mission adjustments and certain commands can be given through eMotion (via radio communication between laptop and drone) while in flight, such as abort mission, land, go to waypoint, etc. The UAV images can be used to derive indices of plant health, defoliation, differentiate species or plant community types and quantify vegetation composition, structure, and other landscape attributes.

Location

3001 Woodland Ave, Duluth MN; 46° 50'18.82N 92° 04'58.38W.



Attachment B

Date/Time

We will collect data during leaf-off, no-snow conditions (late April, early May) as well as under full leaf expression (June). To minimize complications from shadows, flights will be conducted in mid-day hours, typically between 10:00 am – 2:00 pm, or under lightly overcast conditions.

Duration

Given battery capacity, a typical flight lasts 20-25 minutes and covers 40-50 acres; the battery is then swapped with a replacement to continue the mission. We can conduct 4-5 missions per day, and therefore, it will take approximately 3 days of flights to cover the area.

Flight Elevation

To obtain acceptable resolution, flights will be conducted at 300-400 feet. Due to FAA regulations, we do not fly above 400 ft.

Additional Equipment

No ground control points are needed. The drone has an automated pilot system, so the user simply creates a route in the eMotion3 software, and the drone flies itself. Flight mission adjustments and certain commands can be given through eMotion (via radio communication between laptop and drone) while in flight, such as abort mission, land, go to waypoint, etc.

Environmental Impact

We will use established trails and safe open launch sites that do not interfere with vegetation or people. Drones are a comparatively non-invasive means of conducting environmental assessments. At 300-400 feet, drone noise is negligible.



Conflict of Interest Disclosure - Grantee

Minnesota Department of Natural Resources

Conflict of Interest:

A conflict of interest (actual, potential, or perceived) occurs when a person has actual or apparent duty or loyalty to more than one organization and the competing duties or loyalties may result in actions which are adverse to one or both parties. A conflict of interest exists even if no unethical, improper, or illegal act results from it.

Actual Conflict of Interest:

An actual conflict of interest occurs when a decision or action would compromise a duty to a party without taking immediate appropriate action to eliminate the conflict. Examples include, but are not limited to:

- One party uses his or her position to obtain special advantage, benefit, or access to the other party's time, services, facilities, equipment, supplies, badge, uniform, prestige, or influence.
- One party receives or accepts money (or anything else of value) from another party or has equity or a financial interest in or partial or whole ownership of the other party's organization.
- One party is an employee, board member or family member of the other party.

Potential Conflict of Interest:

A potential conflict of interest may exist if one party has a relationship, affiliation, or other interest that could create an inappropriate influence if the person is called on to make a decision or recommendation that would affect one or more of those relationships, affiliations, or interests. For example, when one party serves in a volunteer capacity for another party, it has the potential to, but does not necessarily, create a conflict of interest, depending on the nature of the relationship between the two parties. A disclosed potential conflict of interest warrants additional discussion in order to identify the nature of the relationship, affiliation, or other interest and take action to mitigate any potential conflicts.

Perceived Conflict of Interest:

A perceived conflict of interest is any situation in which a reasonable third party would conclude that conflicting duties or loyalties exist. A disclosed perceived conflict of interest warrants additional discussion in order to identify the nature of the relationship, affiliation, or other interest and take action to mitigate any potential conflicts.

Organizational Conflict of Interest:

A conflict of interest can also occur with an organization that is a grant applicant or grantee of a state agency.

Organizational conflicts of interest occur when:

- A grantee is unable or potentially unable to render impartial assistance or advice to the State due to competing duties or loyalties.
- A grantee's objectivity in carrying out the grant is or might be otherwise impaired due to competing duties or loyalties.
- A grantee or potential grantee has an unfair competitive advantage through being furnished unauthorized proprietary information or source selection information that is not available to all competitors.

Attachment C

Certification

This section to be completed by Grantee's Authorized Representative (AR):

I certify that we will maintain an adequate Conflict of Interest Policy and throughout the term of our agreement we will monitor and report any actual, potential, or perceived conflicts of interest to the State's Authorized Representative.

I also certify that I have read and understand the description of conflict of interest above and as of this date (check one of the two boxes below):

- I do not have any conflicts of interest relating to this project.
- I have an actual, potential, perceived, or organizational (select one) conflict of interest. The nature of the conflict is as follows:

If at any time during the grant project I discover a conflict of interest, I will disclose that conflict immediately to the State's Authorized Representative.

Organization Name: _____

Project Name: Hartley Natural Area Plant Community Survey

Grantee AR's Printed Name: _____ Date: _____

Grantee AR's Signature: _____

Legal Citation: Not Applicable

For State Use Only:

I certify that I have received and reviewed the Grantee's Conflict of Interest Disclosure.

State AR's Printed Name: Amber A. Westerbur Date: _____

State AR's Signature: _____