

**Grant All-Detail Report**

**Watershed Based Implementation Funding Phase I 2020**

**Grant Title -** 2020 Lake Superior North Watershed Plan Implementation Funding

**Grant ID** - C20-9793

**Organization -** Cook SWCD

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| Original Awarded Amount | $269,259.00 | Grant Execution Date | 3/20/2020 |
| Required Match Amount | $26,925.90 | **Original Grant End Date** | 12/31/2022 |
| Required Match % | 10% | **Grant Day To Day Contact** | Ilena Hansel |
| Current Awarded Amount | $269,259.00 | **Current End Date** | 12/31/2022 |

## Budget Summary

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|  | Budgeted | Spent | Balance Remaining\* |
| Total Grant Amount | $269,259.00 | $11,940.69 | $257,318.31 |
| Total Match Amount | $27,000.00 | $0.00 | $27,000.00 |
| Total Other Funds | $0.00 | $0.00 | $0.00 |
| **Total** | **$296,259.00** | **$11,940.69** | **$284,318.31** |

*\*Grant balance remaining is the difference between the Awarded Amount and the Spent Amount. Other values compare budgeted and spent amounts.*

## Budget Details

| Activity Name | Activity Category | Source Type | Source Description | Budgeted | Spent | Last Transaction Date | Matching Fund |
| --- | --- | --- | --- | --- | --- | --- | --- |
| City of Two Harbors Stormwater Management Plan  | Planning and Assessment | Current State Grant | 2020 Lake Superior North Watershed Plan Implementation Fundi.. | $31,500.00  | $2,683.85  | 12/31/2020 | N |
| City of Two Harbors Urban Stormwater Management Practices  | Urban Stormwater Management Practices | Current State Grant | 2020 Lake Superior North Watershed Plan Implementation Fundi.. | $60,600.00  | $1,276.26  | 12/31/2020 | N |
| Coastal erosion - sediment reduction mapping project  | Inventory/Mapping | Current State Grant | 2020 Lake Superior North Watershed Plan Implementation Fundi.. | $35,000.00  | $2,927.36  | 12/31/2020 | N |
| Education and Outreach  | Education/Information | Current State Grant | 2020 Lake Superior North Watershed Plan Implementation Fundi.. | $35,000.00  |   |  | N |
| Grant Administration & Coordination  | Administration/Coordination | Current State Grant | 2020 Lake Superior North Watershed Plan Implementation Fundi.. | $42,000.00  | $3,810.42  | 12/31/2020 | N |
| Match for projects  | Administration/Coordination | Landowner Fund | Funding will come from a variety of sources: volunteers, landowners, local match, state match and federal match | $27,000.00  |   |  | Y |
| Private Forest Stewardship Plan Development and Outreach  | Administration/Coordination | Current State Grant | 2020 Lake Superior North Watershed Plan Implementation Fundi.. | $5,370.00  |   |  | N |
| Urban Green Infastructure BMP Installation  | Urban Stormwater Management Practices | Current State Grant | 2020 Lake Superior North Watershed Plan Implementation Fundi.. | $59,789.00  | $1,242.80  | 12/31/2020 | N |

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## Activity Details Summary

| Activity Details | Total Action Count  | Total Activity Mapped  | Proposed Size / Unit | Actual Size / Unit |
| --- | --- | --- | --- | --- |

**Proposed Activity Indicators**

| Activity Name | **Indicator Name** | **Value & Units** | **Waterbody** | **Calculation Tool** | **Comments** |
| --- | --- | --- | --- | --- | --- |
| Urban Green Infastructure BMP Installation  | VOLUME REDUCED (ACRE-FEET/YEAR) | 0.6091 ACRE-FEET/YR | Lake Superior | MIDS | Bioretention basin with underdrain, 3800 sf |
| City of Two Harbors Urban Stormwater Management Practices  | VOLUME REDUCED (ACRE-FEET/YEAR) | 0.5 ACRE-FEET/YR | Lake Superior | MIDS | Biofiltration basin. Not yet calculated/designed but anticipated. |
| Urban Green Infastructure BMP Installation  | PHOSPHORUS (EST. REDUCTION) | 1.56 LBS/YR | Lake Superior | MIDS | Bioretention basin with underdrain, 3800 sf |
| City of Two Harbors Urban Stormwater Management Practices  | PHOSPHORUS (EST. REDUCTION) | 1.7 LBS/YR | Lake Superior | MIDS | Biofiltration basin. Not yet calculated/designed but anticipated.  |
| Urban Green Infastructure BMP Installation  | SEDIMENT (TSS) | 0.3231 TONS/YR | Lake Superior | MIDS | Bioretention basin with underdrain, 3800 sf; tree trench system |
| City of Two Harbors Urban Stormwater Management Practices  | SEDIMENT (TSS) | 0.2 TONS/YR | Lake Superior | MIDS | Bifiltration basin. Not yet calculated/designed but anticipated.  |

## Final Indicators Summary

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| Indicator Name | Total Value  | Unit  |

## Grant Activity

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| **Grant Activity - City of Two Harbors Stormwater Management Plan**  |
| Description | Development of a Two Harbors Stormwater Management Plan, including technical review of critical infrastructure, hydrological and hydraulic model development, preliminary water quality improvements, GIS interoperability, and project identification, exhibits and reports. Technical services for stormwater planning will follow MIDS-LIDS standards and recommendations as outlined by the Minnesota Stormwater Manual for non-MS4 urban stormwater communities. Modeling of urban stormwater systems will be conducted by a technical assistance provider with appropriate credentials for practice design, investigation, and construction: a team of licensed professional engineers at Bolton & Menk. Stormwater planning and modeling will occur with Autodesk Storm and Sanitary Analysis (SSA), which allows ease of export and interoperability with EPA SWMM 5.0 and XPSSWMM modeling platforms. Planning will be overseen by a licensed professional engineer at Lake SWCD, Derrick Passe, with training in hydrologic systems and MIDS, and by engineering professionals at Technical Service Area III.  |
| Category | PLANNING AND ASSESSMENT |
| Start Date | 20-Mar-20 | **End Date** |  |
| Has Rates and Hours? | Yes  |
| Actual Results | 12/30/2020 Two Harbors Stormwater Management Plan is in the draft form and will be completed in March 2021. TSA and Lake SWCD provided survey data for stormwater modeling. Army Corp of Engineers will be providing a sediment study of Skunk Creek and using this funding as match.  |

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| **Grant Activity - City of Two Harbors Urban Stormwater Management Practices**  |
| Description | Complete the installation of stormwater practices within the City of Two Harbors. Phosphorous, sediment, and volume reductions are anticipated with the installation of this BMP (indicators included), but MIDS load reductions have not yet been calculated or designed. When completed, design and install will follow standards from the Minnesota Stormwater Manual and adhere to the Field Office Technical Guide and Practices 806M Turf Management, 803M-Infiltration Trench, 412 Grassed Waterways and Swales, 393 Filter Strips, or 712M Bioretention Basin, dependent on the design. Technicians with appropriate JAA or a professional engineering license at Lake SWCD, Cook SWCD and TSA III will oversee adherence to standards and provide project management. Further credentials can be viewed at organization’s respective offices.  |
| Category | URBAN STORMWATER MANAGEMENT PRACTICES |
| Start Date | 1-Nov-20 | **End Date** |  |
| Has Rates and Hours? | Yes  |
| Actual Results | 12/30/2020 Staff time for discussing and assessing areas of Two Harbors that could be potential locations for BMPs. Waiting for the Stormwater Management Plan to be completed to direct project implementation.  |

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| **Grant Activity - Coastal erosion - sediment reduction mapping project**  |
| Description | The project is an updated, interactive coastal erosion hazard map that is being developed to aid individuals to better plan for development and work with erosion issues along the coastal shoreline. The first phase of gathering data and completing an online data source, interactive tool and inventory was completed with FY 2018 funding to help determine erosion rates. Data gathered will now be used for developing methodology for modeling and a robust tool to be used for determining erosion rates that will be used for landuse determinations. The activity is the second phase of a three part phase of the project. Staff will continue to be involved to provide continuity through interaction, local knowledge, and support of this project. The project has been contracted out to a GIS specialists. SWCD staff and County staff along with several other partners are providing technical support. The project is a larger part of a partnership and collaborative effort with the North Shore Management Board, SWCDs and Counties.  |
| Category | INVENTORY/MAPPING |
| Start Date | 20-Mar-20 | **End Date** |  |
| Has Rates and Hours? | Yes  |
| Actual Results | 12/30/2020 Continued work and collaboration with Cook, Lake SWCD, Cook County, Lake County, and partners on the Coastal Zone Erosion Hazard Mapping Project.  |

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| **Grant Activity - Education and Outreach**  |
| Description | Provide education and outreach throughout the watershed to various audiences through a variety of outreach strategies to maximize impact. Both SWCD staff will work together to accomplish outreach efforts throughout the watershed that are similar to share a common message across the watershed. Funding for speakers, supplies and meeting needs.  Outreach opportunities will include watershed based presentations to community members encouraging engagement in watershed; wetland site visits with a focus on educating landowners and wetland presentations to accompany the site visits; invasive species workshops to promote native species and watershed health to maintain water quality and soil health.  |
| Category | EDUCATION/INFORMATION |
| Start Date |  | **End Date** |  |
| Has Rates and Hours? | Yes  |
| Actual Results | 12/30/2020 No work has been done under this grant category to date  |

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| **Grant Activity - Grant Administration & Coordination**  |
| Description | Provide grant administration and coordination throughout the life of the grant by Cook and Lake SWCD staff. Cook SWCD staff is the lead and fiscal agent for administration of the funds.  |
| Category | ADMINISTRATION/COORDINATION |
| Start Date | 20-Mar-20 | **End Date** |  |
| Has Rates and Hours? | Yes  |
| Actual Results | 12/30/2020 Lake and Cook County SWCDs have administered, managed, and coordinated the grant.  |

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| **Grant Activity - Match for projects**  |
| Description | Match for projects with this funding will be met meeting a variety of sources, volunteers, landowners, local match, state match and federal match. Match will meet at minimum the required 10% match. Further documentation of match will be provided as projects are completed.  |
| Category | ADMINISTRATION/COORDINATION |
| Start Date | 20-Mar-20 | **End Date** |  |
| Has Rates and Hours? | No  |
| Actual Results | 12/30/2020 Match will be obtained and tracked with projects during the grant funding.  |

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| **Grant Activity - Private Forest Stewardship Plan Development and Outreach**  |
| Description | Staff time will be used to work together to connect with landowners and to conduct outreach to increase and encourage forest stewardship plan information in the Lake Superior North Watershed plan area. Staff credentials include: Tim Byrns (Certified Forest Planner, JAA for 490 and 666), Mackenzie Hogfeldt, and Michaela Clingaman, both with JAA in process.  |
| Category | ADMINISTRATION/COORDINATION |
| Start Date |  | **End Date** |  |
| Has Rates and Hours? | Yes  |
| Actual Results | 12/30/2020 No work has been done under this grant category to date  |

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| **Grant Activity - Urban Green Infastructure BMP Installation**  |
| Description | This project will implement a completed design for the practice. The project, once installed, will stabilize the drainage outlet from development to Skunk Creek. It will intercept roof runoff that is currently saturating the banks of Skunk Creek. Currently the entire townhome runoff ("Rustic Creek" Site location) is concentrated down an eroding clay bank that has an average grade of 10%. An infiltration channel will convey lawn and building drainage to the basin constructed in conjunction with the drainage outlet. Technical services for 712M Bioretention Basin and 412 Grassed Waterway (filtration channel) stormwater management practices following the Field Office Technical Guide Standards will be provided by technicians with appropriate JAA at the Lake SWCD and TSA III. Services will be consistent with MIDS recommendations from the Minnesota Stormwater Manual. Staff credentials include a professional engineering licensures of Matias Valero (TSA III) and Derrick Passe (Lake SWCD), which can be further viewed at their respective offices. Staff will be responsible for all project management.  |
| Category | URBAN STORMWATER MANAGEMENT PRACTICES |
| Start Date | 20-Mar-20 | **End Date** |  |
| Has Rates and Hours? | Yes  |
| Actual Results | 12/30/2020 Rustic Creek Riparian Stabilization and Stormwater Green Infrastructure project has been detailed and designed. Construction will occur in summer 2021.  |

## Grant Attachments

| Document Name | Document Type | Description |
| --- | --- | --- |
| 2020 Watershed Based Implementation Funding | Grant Agreement | 2020 Watershed Based Implementation Funding - Cook SWCD |
| 2020 Watershed Based Implementation Funding EXECUTED | Grant Agreement | 2020 Watershed Based Implementation Funding - Cook SWCD |
| All Details Report | Workflow Generated | Workflow Generated - All Details Report - 01/29/2021 |
| Application | Workflow Generated | Workflow Generated - Application - 01/22/2020 |
| FY 18 LSNW Plan Imp R1 | Grant | 2020 Lake Superior North Watershed Plan Implementation Funding |
| FY 20 LSNW Implementation Budget | Grant | 2020 Lake Superior North Watershed Plan Implementation Funding |
| FY 20 Policy Committee Meeting Minutes Sept. 2019 approval of workplan | Grant | 2020 Lake Superior North Watershed Plan Implementation Funding |
| FY 2020 LSNW Milestones | Grant | 2020 Lake Superior North Watershed Plan Implementation Funding |
| Financial Report  | Grant | 2020 Lake Superior North Watershed Plan Implementation Funding |
| Work Plan | Workflow Generated | Workflow Generated - Work Plan - 11/30/2020 |
| Work Plan | Workflow Generated | Workflow Generated - Work Plan - 12/30/2020 |
| Work Plan | Workflow Generated | Workflow Generated - Work Plan - 02/21/2020 |
| draft policy | Grant | 2020 Lake Superior North Watershed Plan Implementation Funding |
| policy | Grant | 2020 Lake Superior North Watershed Plan Implementation Funding |