Duluth Urban Area Goals

Surface Water Quality Goals – Duluth Urban Area

X% of municipalities with identified bacteria impairments are implementing plans to reduce bacteria in surface waters.

- Replace/upgrade 14 of the identified 21 sewer lines in Keene Creek subwatershed
- Address sanitary sewer stream crossings within the City of Hermantown and City of Duluth.

Manage chlorides reaching surface and ground water from road salts and water softener salts by ensuring X% of municipalities have Smart Salt Certified Staff, X% Communities achieved Level 2 Certified & education & outreach to X% of priority landowners.

- Targeted outreach to property owners with three acres or more of impervious surface
- Review Chloride TMDL for Keene Creek for potential implementation projects
- Provide cost share for staff smart salt training
- Promote purchase of salt reducing equipment, like brine application
- Evaluate County's salt training with Smart Salt training and identify gaps.
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- Provide cost share for staff smart salt training
- Educate large property owners on salt use and promote smart salt training

Land Use Goals – Duluth Urban Areas

Promote the implementation of low impact development techniques to reduce stormwater runoff, volume and rate control in x% of communities

- Review ordinances and remove barriers to low impact development.
- Develop stormwater management plans for high priority areas
- Continue to participate and support both the DUWAC and RSPT
- Cost share vacuum street sweeper equipment
- Develop and implement an educational and outreach campaign for the effects of stormwater on Keene Creek that includes TV and radio commercials and post signage in public spaces. Share the results of the TMDL and new impairments.
- Utilize the DUWAC (Duluth urban watershed advisory committee) and RSPT (Regional Stormwater Protection Team) to coordinate the actions of MS4 agencies in the Keene Creek watershed.
- Develop a Stormwater Management Plan for Keene Creek Watershed. Keene Creek may have a different stormwater watershed than surface water watershed. This needs to be considered.
- Incorporate stormwater implementation into planned road construction projects
- Monitor effectiveness of BMP implementation
- Promote and educate public on project success, such as the restoration of the coastal wetland
- Develop education/outreach campaign to municipalities
- Work with the State of MN to ensure NPDES permits and guidelines are followed for construction and industrial sources of stormwater.
- Develop an education and outreach campaign to urban landowners on stormwater BMPs

Altered Hydrology Goals – Duluth Urban Area

Reconnect X miles of priority streams and tributaries to benefit aquatic life and improve water quality.

- Outreach to local groups for Dog Park pond project
- Complete designs for 2 priority connectivity projects in Keene Creek
- Construct two connectivity projects in Keene Creek
- Design 4 high priority fish friendly crossings in the Sucker Watershed
- Construct 4 fish friendly culverts in the Sucker River subwatershed
- Incorporate check dams in road ditches to help slow the flow

Restore stream reaches that have been altered by human activity, including impounded, straightened, and incised stream reaches on X Linear Feet of high priority streams and tributaries.

- Complete designs for 4 priority stream restoration projects in Keene Creek
- Construct 4 stream restoration projects in Keene Creek
- Complete feasibility studies on 4 prioritized stream projects in Sucker River
- Coordinate with the City of Duluth to lower/address the concrete utility encasement below Grand Avenue
- Complete designs for 3 prioritized projects in Sucker River
- Construct 3 stream projects in Sucker River
- Coordinate with MN Power/Allete to develop a long-term plan to protect the stream and riparian area on their property in Keene Creek
- Coordinate with CN to remove the failing railroad crossing below Grand Avenue
- Work with the city of Duluth to address the utility crossing causing laminar flow and a barrier below Grand Avenue.
- Coordinate with MNDOT to remove the low-head dam within the City of Duluth park in conjunction with stream restoration work in that area.

Increase X acre/feet of watershed storage by restoring wetlands in identified priority areas where they have been lost and/or altered due to ditching or development activities.

- Modeling study to determine the amount of storage needed to protect resources in Keene Creek
- Protect non-developed land for watershed storage.
- Evaluate the beneficial use of beaver for watershed storage
- Inventory small hand dug ditches in priority areas to identify potential wetland banking opportunities or wetland restoration projects.

Habitat Goals – Duluth Urban Area

Protect & manage X acres of private owned forests in areas that protect surface water, drinking/groundwater water quality and riparian habitat.

- Develop woodland stewardship plans for 10 parcels
- Protect 2050 acres of private forests with SFIA, 2C or Easements
- Conduct 10 workshops for woodland land owners
- Develop and Implement an outreach campaign to forest landowners

Protect/Restore x% of high priority wild rice stands/populations (water levels, disturbance, shoreland development).

- Restore 5-10 acres of wild rice at the mouth of Keene Creek

Identify and manage X % of high priority sites/resources for invasive species.

- Work with 10 landowners on invasive species management in forests
- Support, develop, and continue efforts to prevent, control or extirpate invasive species and weeds
- Implement the St. Louis County Aquatic Invasive Species Prevention Aid program.
- Education and Outreach on Aquatic Invasive Species prevention

X % (or feet) of shoreline in prioritized lakes and streams have natural buffers and near shore areas are protected and restored to reduce erosion using bank stabilization, bioengineering, etc. techniques

- Complete 4 shoreline stabilization projects in conjunction with stream restoration projects.in Keene Creek
- Complete 3 stream stabilization projects in conjunction with stream restorations in Sucker River
- Implement tax incentive program to incentivize natural shorelines
- Enforce shoreland setbacks/buffers in all parts of the watershed
- Develop a BMP education and outreach campaign to shoreline landowners in targeted areas.
- Implement a visual preference study with landowners