

District of Muskoka

Environmental Programs and Partnerships

Latonnell 2023
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Background: Muskoka

Muskoka River Watershed

District Municipality of Muskoka

Town of
Bracebridge

Town of
Gravenhurst

Township of
Muskoka Lakes

Town of
Huntsville

Township of
Lake of Bays

Township of
Georgian Bay

District of Parry Sound

County of Haliburton

Township of
Algonquin Highlands

Municipality of
Dysart et al

Town of
Kearney

Township
of Perry

Township
of Seguin

Township of
McMurrich/Monteith

Township of the
Archipelago

Municipality of
Highlands East

Township of
Minden Hills

Ontario
Conservation
Authorities



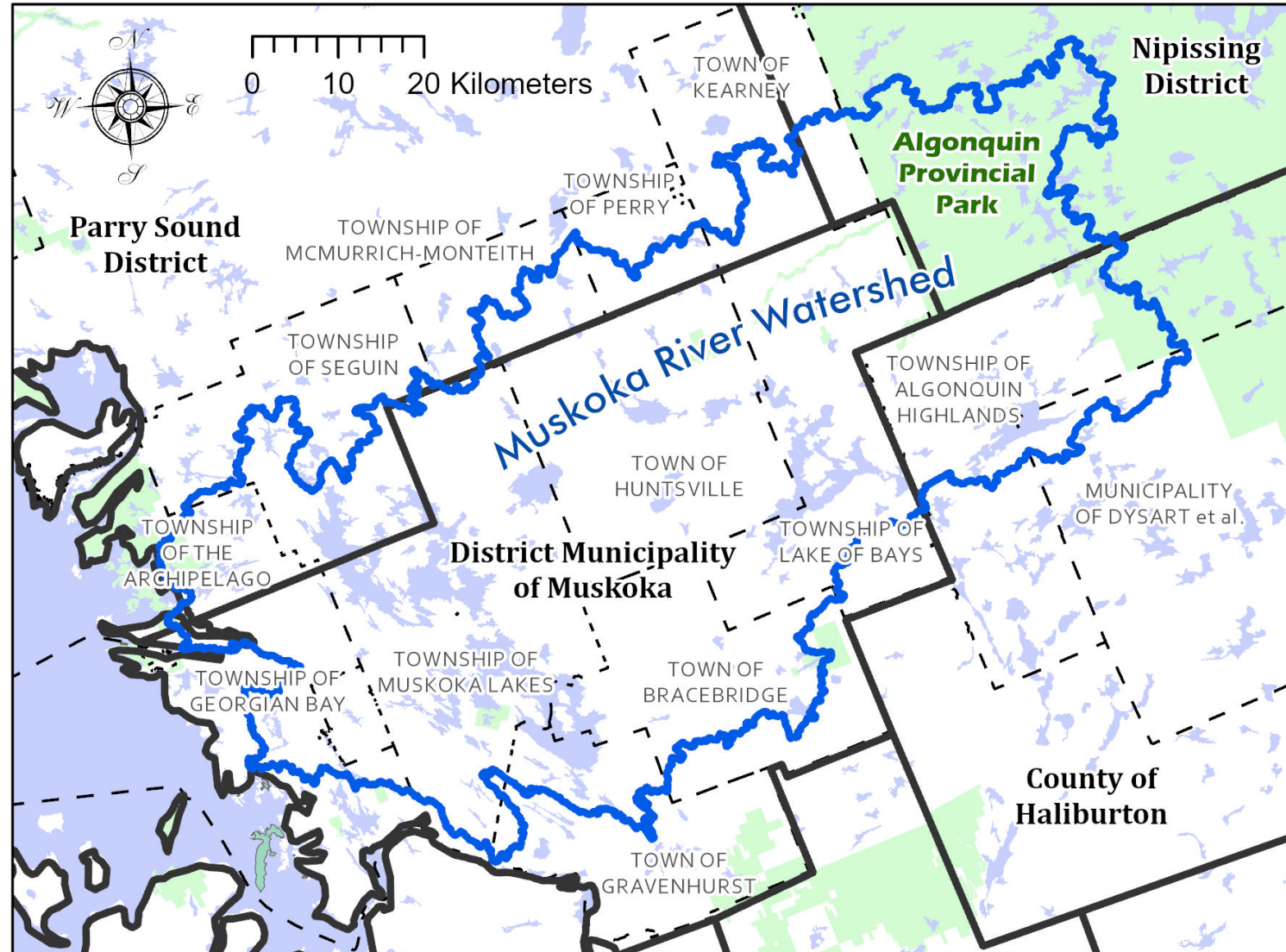


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Muskoka River Watershed
5,100 km²

District of Muskoka
3,890 km²



District Municipality of Muskoka

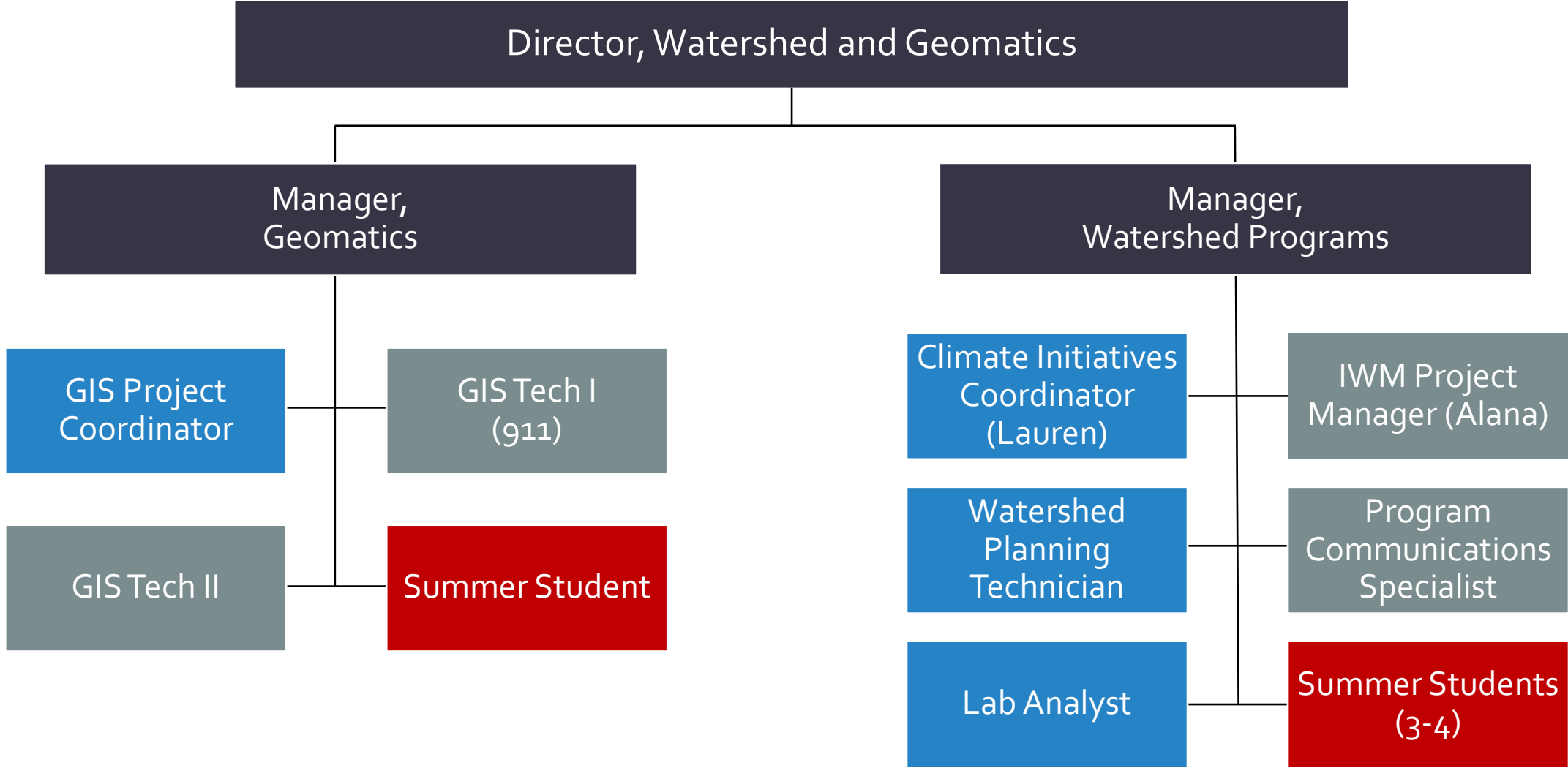
Climate Change

Integrated
Watershed
Management
(IWM)

Watershed
Programs

Geomatics





Permanent



Temporary



Seasonal



Key Climate Plans

New Leaf Climate Action Plan

- Includes 112 corporate and community actions, employing finance-driven strategies.
- We are currently actively engaged in over 70% of actions.

Greenhouse Gas Inventory and Reduction Plan

- Goal is to achieve a 50% reduction by 2030 and net-zero emissions by 2050.
- The action plans for how we will meet these targets, both corporately and in the community, are set to be finalized by the end of 2023.

Area Municipality Regional Climate Adaptation Plans

- Municipalities within the District have approved their Adaptation Plans and committed to taking actions.



Key Climate Initiatives

Fleet Decarbonization Plan

- The action plan will be used as the District's roadmap to reducing GHG emissions of the District's fleet by 50% by 2030 and working towards net-zero by 2050.

Net Metering Solar Farm

- The District commissioned a solar farm at one of our wastewater treatment plants in Huntsville, which offsets the site's energy requirements and GHG emissions by roughly 45% annually

Affordable Housing Energy Upgrades

- Increasing the energy efficiency and reducing energy costs in the District's affordable housing units through appliance replacements and other upgrades through the Save on Energy program.



Integrated Watershed Management

•April 20, 2021 - Initial investment of over **\$4.25 million** to fund projects to help reduce the impacts of flooding and address the health of the Muskoka River Watershed.

District of Muskoka managed **12 technical projects**, launched in Spring 2021

The funding allowed the District to support the formation of a **Community Round Table, Project Task Forces, and Communications initiatives**

In Spring 2023, the Province agreed to **amend the overall project timelines** to permit the spending of remaining funds.

The initial IWM projects will wrap up in **Fall 2023**.



12 IWM Projects

- Floodplain Mapping
- Structural Mitigation
- Flood Modifications
- Operational Adjustments
- Scoping Study

Flooding



- Natural Capital Inventory
- Erosion Survey

Natural Features



- Land Use Policy Review
- Public Access Inventory

Policy



- Watershed Health Indicators
- Water Quality Indicators

Monitoring



Watershed Programs

Recreational Water Quality Monitoring Program

- 40 years of **monitoring** at 193 sites located across 164 lakes on a rotational basis.
- **Partnership with the Dorset Environmental Science Centre (MECP).**

Shoreline Assessments

- Supported by the Canadian Wildlife Federation and Watersheds Canada.
- Provide landowners with **personalized property reports** and recommendations for improving lake health.

Support for Community

- Provide **presentations** to local schools, lake associations, and at public events.
- Provide **staff support** for Muskoka Watershed Council.

Floodplain Mapping

- First two phases complete
- Third and final phase to be **completed in 2023-24** and most of the Muskoka Watershed will be completely mapped.



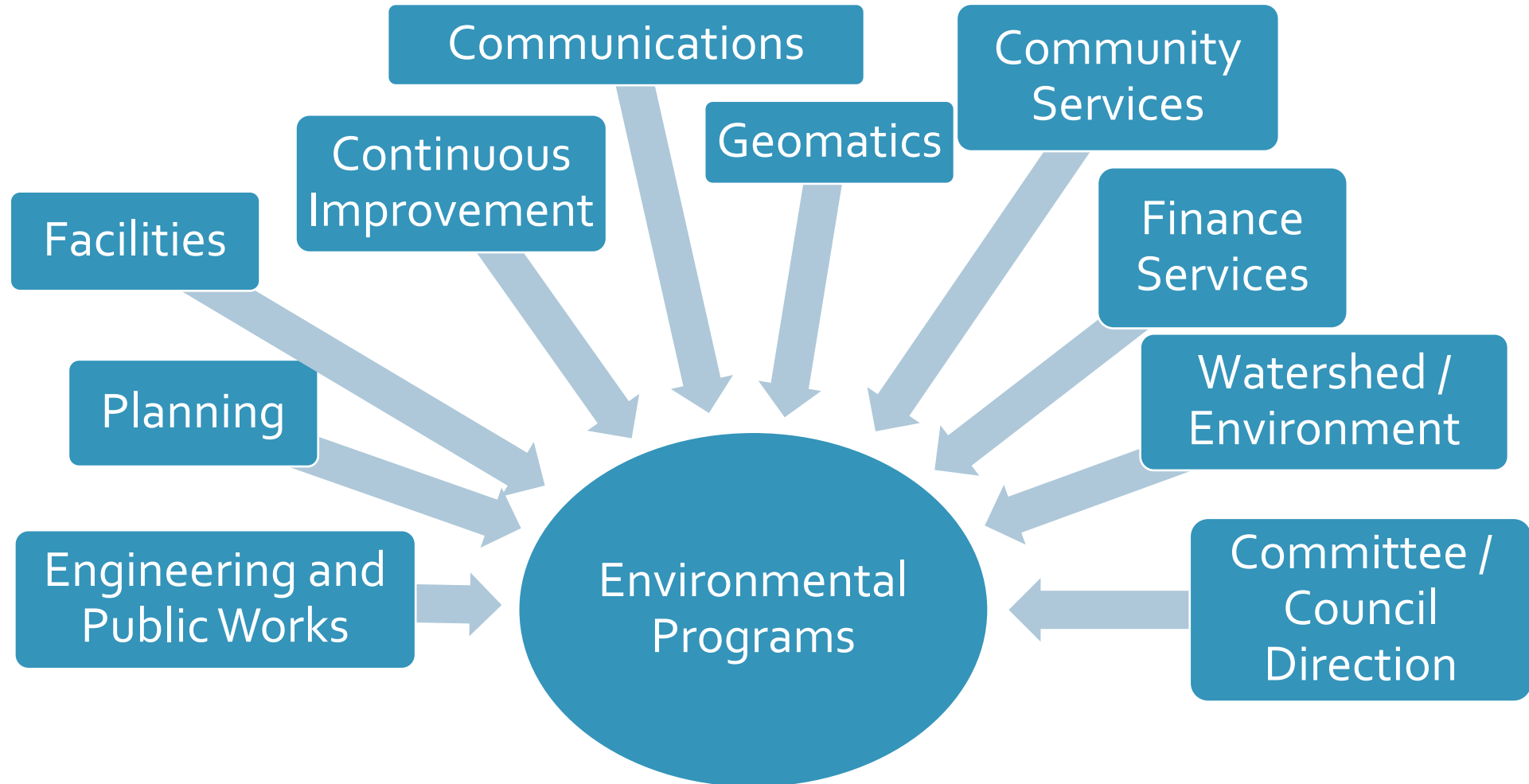
DMM – Geomatics

- Provide GIS support to all District departments, lower tier municipalities, and the public.
- Manage Muskoka GeoHub online portal and Open Data catalogue.
- Other key programs include:
 - Air photo acquisition
 - 911 civic addressing
 - Project specific spatial analysis
 - LiDAR survey hosting
 - Data maintenance and editing

Check out the GeoHub: map.muskoka.on.ca



DMM Internal Involvement



External Partnerships

Watershed Municipalities

- 3 Upper Tier
- 13 Lower Tier

Federal and Provincial Government

- Ministry of Natural Resources & Forestry
- Ministry of Environment, Conservation & Parks
- Natural Resources Canada

Community Organizations

- Muskoka Watershed Council
 - Community Round Table (IWM)
- Technical Working Groups
- Ontario Federation of Anglers and Hunters (OFAH)
- Georgian Bay Biosphere
- Dorset Environment Science Centre
- Friends of Muskoka Watershed
- Simcoe Muskoka District Health Unit
- Climate Action Muskoka
- ReThink Green



Challenges

- Consistency of funding & resources
- Community organizations are largely volunteer-based with limited resources
- Involvement of multiple levels of government can lead to complex and cumbersome processes
- Long timelines
- Competing priorities



Successes

- Strong partnership with community organizations
- Significant positive engagement from the community through participation on climate change initiatives and outreach events.
- Developing partnership with First Nations communities
- Support from partners has contributed to many project successes
 - Majority of Muskoka's vulnerable floodplains mapped
 - One of the longest-running recreational water quality datasets in Canada
 - 12 extensive IWM projects completed
 - Citizen-scientist involvement in technical projects (erosion, monitoring)



**Thank you!
Questions?**

**Visit us online for more information:
EnviroHub: *muskoka.on.ca/EnviroHub*
GeoHub: *map.muskoka.on.ca***