



EXECUTIVE SUMMARY
GREAT LAKES
REGIONAL GREEN
INFRASTRUCTURE
POLICY ANALYSIS:
ADDRESSING BARRIERS
TO IMPLEMENTATION

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Great Lakes Commission
Credit Valley Conservation



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EXECUTIVE SUMMARY

Throughout the Great Lakes basin, communities are faced with growing stormwater management challenges. Green infrastructure (GI) can serve as a key aspect of local stormwater solutions by decreasing the volume of water running into sewers and streams and improving water quality by trapping sediment and nutrients. GI includes a broad variety of stormwater management tactics like natural features and rain gardens, green roofs, and porous pavement, that mimic nature and increase infiltration of stormwater.

Local communities are generally at the forefront of stormwater management, challenges, and innovation, but municipalities' capacity to develop GI is heavily influenced by federal, state, and provincial policy. Many policies and funding programs can foster GI implementation, while others either do little to incentivize GI or amplify unnecessary barriers. This report is targeted to federal, state, and provincial policymakers that can help create enabling conditions for local GI progress. The key policy recommendations identified below are designed to reduce barriers and provide a stronger foundation for communities to advance GI.

United States Federal Policy

Recommendation: Fully fund the Clean Water State Revolving Fund (CWSRF) and incentivize GI projects through prioritization, interest rate reductions, and extension of funding eligibility for qualified projects to operations and maintenance (O&M).

Rationale: In the United States, the Clean Water State Revolving Fund (CWSRF) is the most promising source of funding for GI, but dedicated sustainability funding is underutilized for GI. Maintaining this funding is critical and a focus should be placed on increasing the prevalence of GI developments. Because uncertainty surrounding the O&M of new technologies is a barrier to implementation, allowing funding to be used for O&M will further foster GI projects.

Recommendation: Establish minimum performance-based standards to address runoff volume and water quality. Regulatory programs should support local watershed conditions through science-based approaches that address local challenges while also working toward water quality standards.

Rationale: Currently, the extent of enforceable federal authority on stormwater management is limited to consent decrees issued to permit holders in violation of the permit terms. This approach has a narrow scope and is reactionary. Defined performance standards will foster innovation in green infrastructure to meet permit requirements before they are violated. Many states have developed performance requirements, but a federally-defined minimum requirement should be established. Requirements should be oriented toward watershed

outcomes and allow for flexibility in achieving goals to accommodate local conditions and resource objectives.

Recommendation: Promote and coordinate the integration of GI into permitting, planning, research, technical assistance, and funding programs.

Rationale: The Environmental Protection Agency (EPA) and other federal agencies, such as the Departments of Transportation and Housing and Urban Development, administer a variety of planning, permitting, and other programs that directly or indirectly affect stormwater or its management. EPA’s existing interagency coordination efforts should be expanded to various federal planning and permitting programs, technical assistance, and funding opportunities. Promoting green infrastructure across multiple federal agencies will develop a culture that facilitates local GI implementation. Advancing research and technical assistance can demonstrate and thereby increase confidence in performance, enabling more widespread adoption.

United States State Policy

Recommendation: Require consideration or, preferably, incorporation, of GI to meet best management practices (BMP) and public education requirements in state administration of National Pollutant Discharge Elimination System (NPDES) program. Similar to the federal recommendation, states should develop performance-based runoff control standards that align with watershed goals.

Rationale: Many communities lack familiarity of GI, so if it is not explicitly stated as an option it may not be considered. To go further, states can define a preference for GI, require that communities consider GI in their planning, or require some incorporation of GI in BMPs. Currently, the extent of enforceable regulations on stormwater management is limited to consent decrees issued to permit holders in violation of the permit terms. Though consent decrees often prompt innovation, this approach is not desired, as it reacts to water quality issues rather than preventing them.

Recommendation: Dedicate funding to GI planning, implementation, O&M, and research. Where it is a barrier, amend state legislation to explicitly allow municipalities to establish stormwater utilities and/or levy fees.

Rationale: Funding is a pre-requisite to GI progress. The clear authority for municipalities to establish stormwater utilities will reduce uncertainty and allow for increased funding streams and incentives for green infrastructure.

Canadian Federal Policy

Recommendation: *Prioritize GI projects under Infrastructure Canada’s Funding Programs. In addition to GI implementation, funds can be allocated toward research on long-term performance, lifecycle costs and benefits gained by protecting natural GI assets.*

Rationale: Infrastructure Canada’s Funding Programs, such as the Federal Gas Tax Fund and Municipal Asset Management Program, could be key sources of investment in GI, as they are already an important source of funding for implementing municipal infrastructure projects.

Canadian Provincial Policy

Recommendation: *Include GI in municipal asset management plans, policies, and strategies.*

Rationale: In Québec, GI has started to become a mandatory component of municipal asset management. By including GI in the definition of ‘core infrastructure assets’ in Ontario under the *Asset Management – Infrastructure for Jobs and Prosperity Act*, the applicability of policies (including municipal asset management) would be expanded and additional funding opportunities would become available.

Recommendation: *Create new funding mechanisms to support capital and operating costs for GI.*

Rationale: A significant challenge in the Canadian portion of the Great Lakes Basin is a lack funding. Utilizing municipal stormwater fees, development charges in Ontario, incentive programs, and/or public-private partnerships can provide critical funding for GI advancement.

On both sides of the border, GI implementation is limited by funding, lack of familiarity with GI practices, and uncertainty around performance. Because there are no requirements that actively compel GI investment under current policy, local advances in GI depend on motivated leadership. The recommendations outlined above and discussed in more detail in the report provide federal, state, and provincial actions to reduce barriers and increase the use of GI in local communities.

Read or download the full report at <https://www.glc.org/wp-content/uploads/GI-policy-analysis.pdf>.