

Burt Lake Watershed Management Plan:
DRAFT Goals and Objectives
+Implementation Step examples
June 2016

Douglas Lake Improvement Assn (DLIA) and UMBS Input in bold Italics

Thank you for providing feedback on the following goals, objectives, and implementation steps. The goals, objectives, and implementation steps (noted as bullet points) have been suggested as starting points. They can be revised or omitted, however the advisory committee sees appropriate.

Goals should be broad and reflect what the committee hopes to accomplish as a result of the watershed management plan.

Objectives should reflect the general actions necessary to obtain the goals.

Implementation steps are specific actions that are measurable and can have estimated costs, anticipated project partners, and rough schedules. The implementation steps should be steps the committee wishes to see happen over the next ten years. There is no minimum or maximum number of implementation steps.

Please consider what steps you feel are important to protect the Burt Lake Watershed.

Questions? Please contact Jen G. or Grenetta at 231-347-1181 or jen@watershedcouncil.org or grenetta@watershedcouncil.org.

Thank you!!!

Goal 1: Protect water quality of the Watershed's lakes and streams

Objectives:

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- 1.1 Reduce nutrient and sediment inputs through restoration of natural shorelines on lakes where shore surveys indicate greenbelts are "poor", erosion is moderate or severe, or hardened shoreline structures are present.
- Develop and implement ***practical/affordable*** cost/share greenbelt program
 - Broadly promote Michigan Shoreland Stewards program (***Does this replace shoreline surveys?***)
- 1.2 Reduce nutrient inputs through maintenance or replacement of nonfunctioning septic systems
- Adopt septic ordinances (time of transfer, mandatory inspection, mandatory pumping, etc.) in at least three townships within the Watershed.
 - ***Work with State of Michigan to develop state wide septic ordinance (with ML&SA?)***
 - ***Develop and distribute information about proper septic maint., inspection.***

- 1.3 Balance the management of lake levels, where applicable, to reduce the risk of erosion due to widely fluctuating water levels. **NA for Douglas Lake?**
- Convene Watershed-wide lake level working group to evaluate current management efforts and the potential need for more thorough review
- 1.4 Broadly implement riparian property best management practices throughout the Watershed
- **Develop and distribute best practices for planting greenbelts, septic maintenance, lawn care and stormwater runoff using website, eNews, newsletter, and handouts to DLIA members. Note:BLPA.org homepage example.**
- 1.5 Manage stormwater in developed areas **NA for Douglas Lake?**
- Install stormwater best management practices, including rain gardens, oil/grit separators, and other structures in Alanson (East St.), Indian River (drainage basin to Sturgeon River), and Spring Lake (near M-119).
- 1.6 Conduct resource inventories and monitor water quality on a regular basis to assess conditions that may be affecting water quality.
- Continue comprehensive water quality monitoring program (TOMWC)
 - Expand volunteer lake **and lake inlet** monitoring program (TOMWC). **Beavertail Creek and Bessie Creek into Douglas Lake**
 - Expand volunteer stream monitoring program (TOMWC)

Goal 2: Protect and restore aquatic and riparian habitats

Objectives:

- 2.1 Retain or install natural shorelines
- Develop and implement **practical and affordable** cost/share greenbelt program
 - Broadly promote Michigan Shoreland Stewards program, **and the use of Michigan certified natural shoreline professional landscape sources.**
 - **Organize shoreline demonstration site gatherings to share information and results.**
- 2.2 Manage priority invasive species throughout the Watershed
- Work with both Northeast Michigan Cooperative Invasive Species Management Area (CISMA) and C.A.K.E CISMA to inventory, prioritize, and manage invasives species throughout the Watershed.
 - **Promote cbcw and (new TOMWC) program boat launch information (signs, brochures) throughout watershed launch sites, as well as other invasive sources i.e.: canoes, kayaks, fishing gear.**
 - **Continue periodic aquatic plant surveys on lakes**
 - **Continue Purple Loosestrife monitoring in ditches and shorelines**

- 2.3 Protect wetlands from future development through low-impact development techniques
- Review DEQ Part 303 Wetland Permit Applications to evaluate proposed wetland impacts. Submit comments to DEQ regarding anticipated wetland impacts when appropriate.
- 2.4 Implement permanent land protection strategies (e.g. conservation easements, etc.) in priority
- Identify and fundraise priority resource areas on the Sturgeon River downstream of Wolverine.
 - **Continue Land Conservancy efforts (support LTC projects)**

Goal 3: Sustain tourism, recreational opportunities, and industry in a manner consistent with water quality protection

Objectives:

- 3.1 Expand low-impact recreational opportunities
- Water trails.....etc.
- 3.2 Collaborate with resource managers on recreational planning efforts
- **Continue working with DNR fisheries**
 - **Promote safe boating education sessions**
- 3.3 Minimize impacts from forestry by adhering to best management practices
- Conduct Better Back Roads workshops for logging contractors
 - Enroll private property owners in Forest Management programs, such as State of Michigan's Forest Stewardship Program or Natural Resource Conservation Service's Environmental Quality Incentives Program.
- 3.4 Minimize impacts from boating
- Promote clean boating practices **and state boating regulations** at marinas, **boat launches, fishing tournaments**, events and other public venues
 - **Promote/encourage quiet hour or noise ordinances and 'good neighbor'practices**

Goal 4: Protect regional and local hydrology

Objectives:

- 4.1 Limit impacts to wetlands and groundwater recharge areas
- Protect wetlands from future development through implementation of low-impact development (LID) techniques
 - Promote LID to architects, engineers, developers, builders, and associated professionals through workshops, trainings and publications.

- Review DEQ Part 303 Wetland Permit Applications to evaluate proposed wetland impacts. Submit comments to DEQ regarding anticipated wetland impacts when appropriate.

4.2 Manage stormwater throughout the Watershed

- Install stormwater best management practices, including rain gardens, oil/grit separators, and other structures in Alanson (East St.), Indian River (drainage basin to Sturgeon River), and Spring Lake (near M-119).
- ***Section 1.5 here (or the other way around?)***
- ***Research impact of roads at stream and lake water edge.***
- ***Provide educational materials concerning storm water runoff-driveways, lawns , etc***

4.3 Restore areas where local hydrology has been altered

- Improve priority road/stream crossings that have been identified as aquatic organism barriers at most flows
- Maintain roadside ditches
- ***Maple River dam removal-upstream migration mitigation of invasives?***
- ***Free span bridge over Carp Creek at Hogsback Road***

Goal 5: Protect the Burt Lake Watershed from future threats/emerging issues

Objectives:

5.1 Line 5 and other pipelines

- Conduct education and outreach to local government officials, lake associations, and other community groups and members about Line 5

5.2 Ensure climate-change vulnerable areas are healthy for future resiliency

- Identify climate-change vulnerable areas and strategies for resiliency