

Bin Site Transition

High Priority Bin Sites and Planning for Alternate Servicing

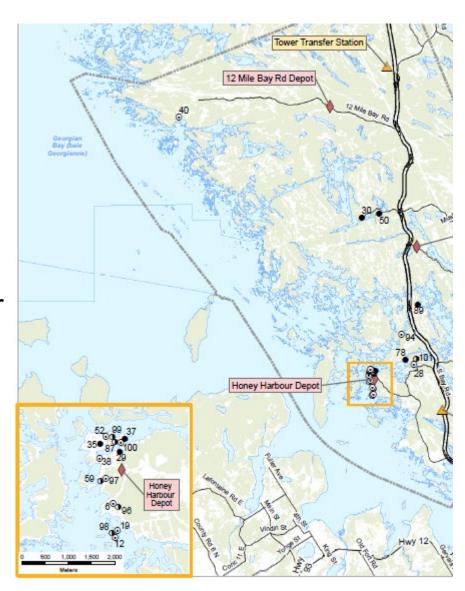
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District of Muskoka, Engineering and Public Works Committee | January 22, 2020

Background

GHD retained in fall 2019 for Risk Mitigation Assessment and Alternate Servicing Study:

- Field visits in fall 2019 to assess each bin site
- Identified priority sites with highest risk to environment and/or human health
- Documented results in Risk Mitigation Assessment
- Prepared Alternate Servicing Study Terms of Reference





Risks of Existing Bin Site Program

Bin sites present a higher risk to the environment and human health:

- Chemicals, metals, and microorganisms can leach out of waste, harming lakes, wildlife, vegetation, and people
- Hazardous waste can be corrosive, flammable or poisonous
- Waste can spread by wind, water and by animals
- Waste can attract animals and vermin, spread disease

The bin sites are unlicensed (i.e., no Environmental Compliance Approvals [ECAs]); therefore they do not comply with the Environmental Protection Act (EPA) and MECP have instructed the District to remove them.





Objectives and Methodology

Objective: Identify the bin sites that present the highest risk to the environment and human health and develop mitigation strategy

- 1. Evaluated each site based on its potential effect on the environment and human health
- Prioritized sites that should be addressed first
- 3. Developed **mitigation measures** for high priority sites. Where possible, bins will be moved within the site. In some cases, closing the site is the only option.
- **4. Consulted** with MECP on results and mitigation measures



Evaluation

- Every site was evaluated based on its potential risk to the environment and human health, including:
 - Proximity to lakes, creeks and wetlands
 - Drainage patterns whether runoff from site goes to lakes, creeks and wetlands
 - Poor waste management practices, such as disposal of hazardous material and recyclables or waste outside of bins
 - Evidence of animals
 - Proximity to wellhead or intake protection areas





Evaluation and Classification

- Evaluation used a holistic approach:
 - Field visits to all 88 sites completed by GHD, District staff, and MECP (select sites in Georgian Bay)
 - Consultation with District staff and MECP
 - Professional judgement
- Risk Evaluation Matrix outlined criteria and risk levels
- For each site, criteria assigned risk level (high, moderate, low).
- Each site then assigned overall priority level based on individual classifications.



Evaluation and Classification

Relative Priority	Proximity to Surface Water Body	Ground Surface	Adjacent Drainage Features	Topography	Waste Management Practices	Surrounding Property Use	Proximity to Well Head or Intake Protection Area
High (red shading)	Within 10 metres of water body or wetland	wetland or	Adjacent or within close proximity to drainage features, or clear drainage to nearby receptor	Close to and sloping towards water body, wetland, drainage features	 Visible and/or reported poor garbage management conditions Reported historic excess of waste disposal and unwanted dumping Visible and/or reported Subject Waste disposal Visible evidence of stains, releases, etc. 	 Community property use such as parks Adjacent to residential properties 	Directly on or within 10 metres to well head are or intake protection zones 1 nd 2
Medium (yellow shading)	Between 10 and 30 metres of water body or wetland	Grass or granular fill (non- native)	Within vicinity of drainage features but not adjacent	• Sloping towards water bodies,	Well maintained with occasional improper dumping and/or subject wastes	Within or adjacent to commercial property use such as grocery store or restaurant Within or adjacent to forested land	Between 10 and 20 metres of well head area or intake protection zones 1 and 2
Low (green shading)	Over 30 metres from water body or wetland	Asphalt pavement or concrete	No clear drainage features within the area	Relatively flat Sloping away from water body or wetland	Well maintained with no history of hazardous, subject wastes, and/or improper dumping Services a small and/or remote population	Within marina or municipal roadway	Not within the vicinity of well areas or intake protection zone 1 and 2

Mitigation Measures

- Short-term mitigation measures developed for high priority sites.
- Where possible, on-site mitigation recommended:
 - Relocate bins within existing site
 - Install a temporary covered structure over bins
 - Install berms around the Site
 - Restrict access to the Site through fencing and signage
- If on-site mitigation is not possible then bin site will be closed in 2020 and alternate servicing will be provided
- MECP in agreement with proposed mitigation



Results

Area Municipality	Low Priority	Moderate Priority	High Priority
Township of Georgian Bay	4	9	6
Township of Muskoka Lakes	6	9	6
Town of Huntsville	5	9	2
Town of Bracebridge	6	9	2
Town of Gravenhurst	2	5	9



High Priority Sites

	Potential to Mitigate On-Site – Short Term	Removal and Alternate Waste Collection	
Georgian Bay	Bayview Marine Resort Paragon Marina King Bay Marina Minors Bay Road Parking Lot	Brandy's Cove Yachting Centre Honey Harbour Town Centre	
Muskoka Lakes	SWS Marina Parkers Landing Nine Mile Lake Marina Walkers Point Marina	McDonald Road Ent. 4716 Muskoka Road 169 (Hamills Point Road)	
Huntsville	None	Rivercove Drive North Mary Lake Road	
Bracebridge	None	Caribou Road/Blenkins Way Leech/Pine Lake Road	
Gravenhurst	North Morrison Lake Road Campbells Landing Marina Villas Marina Dennes Marina Parking Lot (summer)	Franklin Park Dennes Marina Dock Rockhaven Resort Hewitt Landing Riley Lake Road	

Alternate Servicing Study

Alternate Servicing Study

- Will evaluate alternate waste collection servicing for all households/communities currently supported by bin sites
- While the Risk Mitigation Assessment focused on high priority sites, the Alternate Servicing Study will look at all bin sites
- Various alternatives will be transparently assessed using multifaceted criteria and supported by consultation with those impacted.

Terms of Reference (TOR)

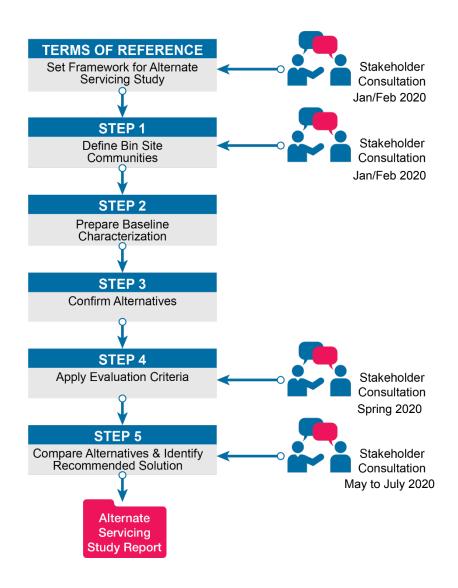
- Provides the framework for how Alternate Servicing Study will be carried out
- Outlines the proposed alternatives, evaluation criteria, and consultation process
- Prepared in parallel to the Risk Mitigation Assessment



Alternate Servicing Study

Study Process

Study will be undertaken using Environmental Assessment methodologies to ensure alternatives are assessed in a way that is transparent, traceable, and consultative.





Alternate Servicing Study

Waste Collection Alternatives



- Redirect users to existing transfer station/depot
- Establish new transfer station/depot at existing bin site
- 3. Establish new transfer station/depot at new site
- Expand curbside collection
- 5. Specialized collection (e.g. barge or dockside collection)
- 6. Mobile bin sites
- Waste collection alternatives will be assessed for each community. Only applicable alternatives will be included and may differ by community.
- Seeking feedback on alternatives and evaluation criteria from Area
 Municipalities, MECP, and stakeholders as part of the Terms of Reference.



Alternate Servicing Study and Risk Mitigation Assessment

Consultation and Next Steps

Winter 2020:

- Circulate draft TOR to Area Municipalities and stakeholders for review/input – seek feedback on waste collection alternatives and evaluation criteria
- Finalize TOR and circulate along with bin site information sheets seeking comment on the alternatives, meet with stakeholders to discuss





Alternate Servicing Study and Risk Mitigation Assessment

Consultation and Next Steps

Spring/Summer 2020:

- Present draft Alternate Servicing Study report for consideration
- Consultation sessions and meetings with cottage associations on proposed alternate waste collection solutions
- Pending results of Risk Mitigation Assessment and consultation with MECP, prepare for removal of high-risk bin sites in spring 2020
- Present Alternate Servicing Study to the EPW Committee and District Council for direction on recommended alternatives

Fall 2020

 Finalize Bin Site Transition Plan for submission to the MECP by November 30, 2020





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