



The Yellowknife Harbour Plan Background Report and Implementation Strategy provides a vision and framework for shaping the future of the Harbour and water's edge lands. The vision statement evolved through consultation with the community and reflects the broad spectrum of Harbour users. The recommendations are organized according to the six guiding frameworks introduced in this study's February 2011 Background Report. The Harbour Plan Background Report and Implementation Strategy concludes with recommendations for implementation and Harbour management.

Vision Statement

Yellowknife Harbour is the **lifeblood** of the city, its **life source**, **gateway** to the region beyond and year-round **playground**.

It is the **conduit** among communities of people and the **meeting point** among nations. It has defined the **culture** and **image** of this extraordinary place.

All stakeholders will **protect**, **leverage** and **manage** the assets of Yellowknife Harbour to **strengthen** its vital function to the **well-being** and **livability** of the region as an ecosystem, economic generator, destination, community amenity and cultural resource.

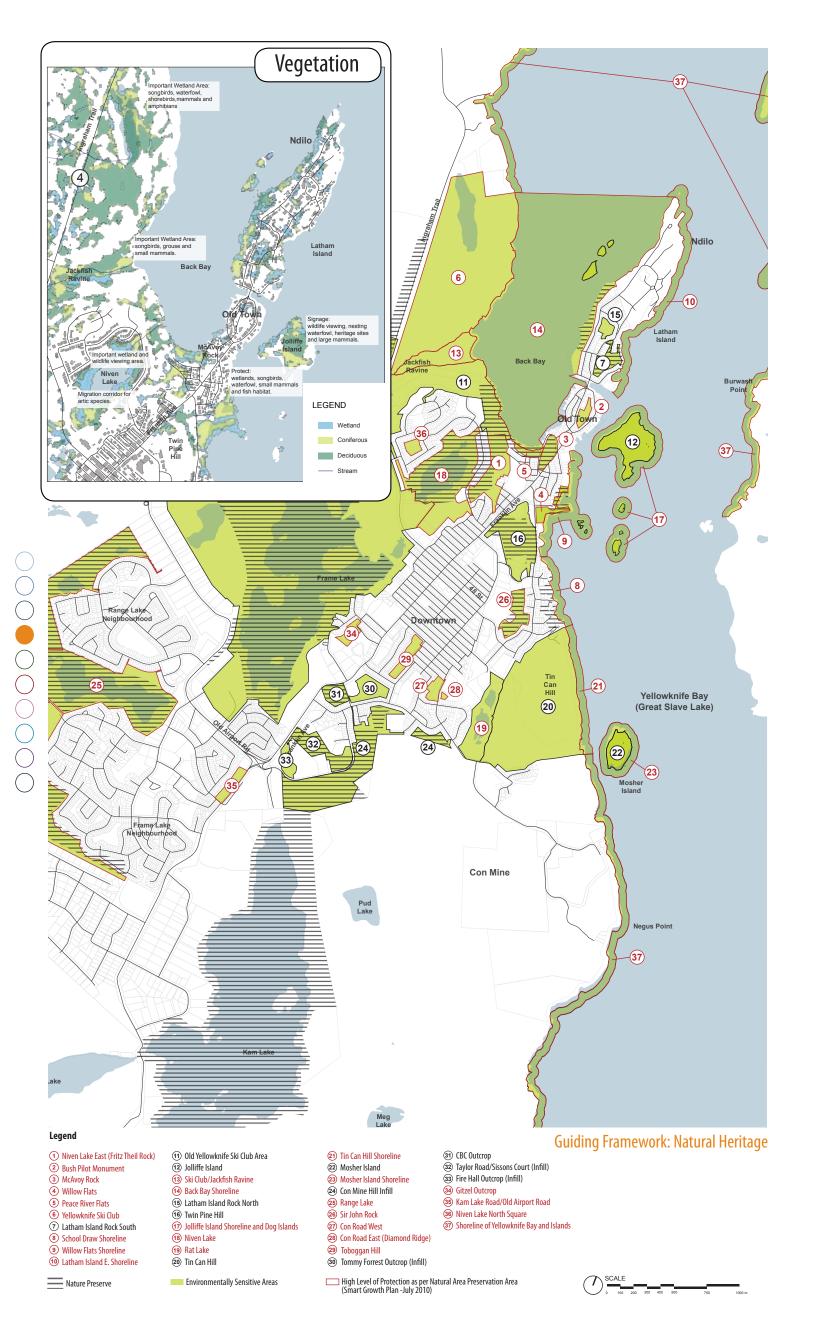
Yellowknife Harbour, through its enhanced **public access**, **exposure** and **civic purpose**, will become ever more cherished by all citizens. All Harbour users will be respectful of each other. All will share in its **stewardship** and ensure its continued **health** and **legacy** for future generations.

Guiding Frameworks



Implementation

Implementation & Harbour Management Strategies





Vision

Yellowknife Harbour will nurture and support a healthy and diverse ecosystem.



Guide development appropriately to avoid detrimentally affecting Environmentally Sensitive Areas



Aerial of Old Town



Ensure responsible stormwater management practices are implemented

Principles

- 1. Protect and enhance intact and linked shoreline and wetlands and near shore islands.
- 2. Preserve terrestrial and aquatic habitats.
- 3. Protect local water quality.
- 4. Promote an ecosystems-based approach to planning and design.

What We Heard

- A strong message from several groups, including the Yellowknives Dene, is that habitat quality has declined over the years as a result of urban growth and industry (mining) and that we should make every effort to protect and restore the natural environment.
- 2. Need to place similar water contamination restrictions on landowners as well as water users (boaters, house boaters etc.).
- Treat the 'whitespace' of ice in a similar fashion as the public greenspace on land
- 4. Maintain unspoiled wilderness character of Yellowknife.
- 5. Protection of water quality is of paramount importance.

Recommendations

- Direct high use activities and development to less sensitive areas or disturbed sites with restoration/ enhancement potential.
- Develop and implement policies, site control measures, monitoring and impact contingency measures to protect groundwater and surface water quality.
- 3. Integrate sustainable storm water management practices into existing and new development areas.
- 4. Require erosion/siltation control plans for new developments adjacent to shorelines, wetlands and watercourses.
- Develop and implement management plans for Environmentally Sensitive Areas to guide development and recreational activities and protect sensitive areas.
- 6. Promote through education and enforce regulations to mitigate potential water quality impacts generated by Harbour users.



Detailed Recommendations

The policy direction, strategy, and guidelines developed in the Natural Area Preservation Strategy (Dillon 2010) provides a framework for balancing environmental protection with sustainable urban growth in the City of Yellowknife. The document provides an outline of the natural area selection criteria, levels of environmental protection and development guidelines, policy goals and strategies, natural area site recommendations, implementation mechanisms, performance monitoring and future study requirements. The following recommendations compliment the Natural Area Preservation Strategy, and provide a sound basis for achieving environmentally sustainable growth.

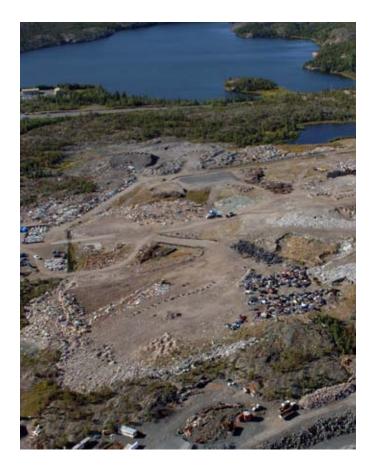
 Direct high use activities and development to less sensitive areas or disturbed sites with restoration/enhancement potential.

Future development and high use recreational activities should be directed to less sensitive areas or previously disturbed sites. The intent of this recommendation is to minimize negative impacts to intact, less disturbed environmental areas, such as ESA's, wetlands and sensitive shoreline areas, from development pressures and various recreational uses. Utilizing disturbed sites for future development or recreational based activities may yield opportunities for localized restoration and enhancement of the environment through site remediation and naturalization initiatives. The objective of this recommendation is to protect the natural environment of Yellowknife Harbour for the long-term and to promote environmentally sustainable growth and recreational based activities.



The Royal Botanical Gardens in the City of Hamilton has recently modified their trail system so that high use activities such as hiking, jogging, nature viewing, canoe launches, cross-country skiing, etc. are restricted from sensitive environmental areas and habitat of endangered wildlife species. High use recreational activities are directed to less sensitive areas such as plantations, regenerating fields and disturbed sites, such as a sand and gravel pit and closed road right-of-ways. Restoration of the disturbed sites with native plant communities provides habitat enhancement and educational opportunities for the public.

Development in most Southern Ontario municipalities is not permitted in sensitive environmental areas such as wetlands, shorelines, and ESA's. In many cases, buffers of 30 m (or greater) are required between the limit of a proposed development and an environmental feature.



Develop and implement policies, site control measures, monitoring and impact contingency measures to protect groundwater and surface water quality.

Protection of surface water and groundwater quality is of paramount importance to the survival of the Yellowknife Harbour ecosystem. Policies, site control measures and a performance monitoring program should be developed to ensure that future development occurs in a sustainable fashion. Measures also need to be taken to correct existing problems that affect surface water and groundwater quality. Developing a comprehensive understanding of the existing water quality in the Yellowknife Harbour watershed is central to developing appropriate protection and remediation measures, as well as monitoring and impact contingency.

In Southern Ontario, most municipalities have specific official plan policies which are intended to protect surface water and groundwater from existing and future land uses. Conservation Authorities in Ontario also have very strict regulations and guidelines related to construction practices in proximity to wetlands, lakes and rivers. The combination of "outcome based" policies (i.e. protection of surface water and groundwater regime), site control measures, enforcement and monitoring (during/after construction) is designed to provide a high level of protection to the environment. This adaptive management plan approach, if properly implemented, can be a very effective tool in maintaining the ecosystem of the Yellowknife Harbour.



3. Integrate sustainable storm water management practices into existing and new development areas.

Protection of surface water quality and the aquatic ecosystem of Yellowknife Harbour require that proper stormwater management (SWM) practices be implemented for new development, and that wherever feasible, older developments be retrofitted with SWM measures to address water quality concerns. Low Impact Development (LID) standards for stormwater management should be explored as they provide opportunities for at-source, conveyance and end-of-pipe solutions for polishing/filtering and infiltration of urban runoff. Simple measures such as bio-swales and constructed wetlands can greatly improve surface water quality in Yellowknife Harbour by trapping/filtering pollutants in urban runoff.

New developments in the Toronto and Region Conservation Authority jurisdiction are required to implement LID SWM measures. The City of Kitchener recently implemented bio-swales in the downtown core to treat urban runoff.

4. Require erosion/siltation control plans for new developments adjacent to shorelines, wetlands and watercourses.

Run-off from new developments and construction sites can have a negative impact on surface water quality, fish habitat and wetlands. New development adjacent to shorelines, wetlands or watercourses should implement an erosion/siltation control plan that is designed to mitigate the impacts of runoff from a construction site through the use of various mitigation measures such as silt fencing, straw bale interceptors, rockcheck dams, and sediment control ponds. Use of fast growing trees and shrubs should be carefully considered due to their impact on the loss of view of the Harbour.

Case Study Example

The Greater Golden Horseshoe Area Conservation Authorities' *Erosion and Sediment Control Guidelines for Urban Construction* (2006) was developed to protect and preserve surface water quality and aquatic/terrestrial habitats. It includes best management practices from all of the various erosion and sediment control guidelines currently applied by municipal and provincial agencies within the Greater Golden Horseshoe Area. Many of the practices contained in this document, and referenced therein, can be applied to new developments within Yellowknife.

 Develop and implement management plans for Environmentally Sensitive Areas (ESAs) to guide development and recreational activities and protect sensitive areas.

Resource Management Plans are recommended for the ESA's to ensure that sensitive/significant areas are protected for future generations, while providing for sustainable recreational uses in appropriate areas. The basic elements/components of the management plan include:

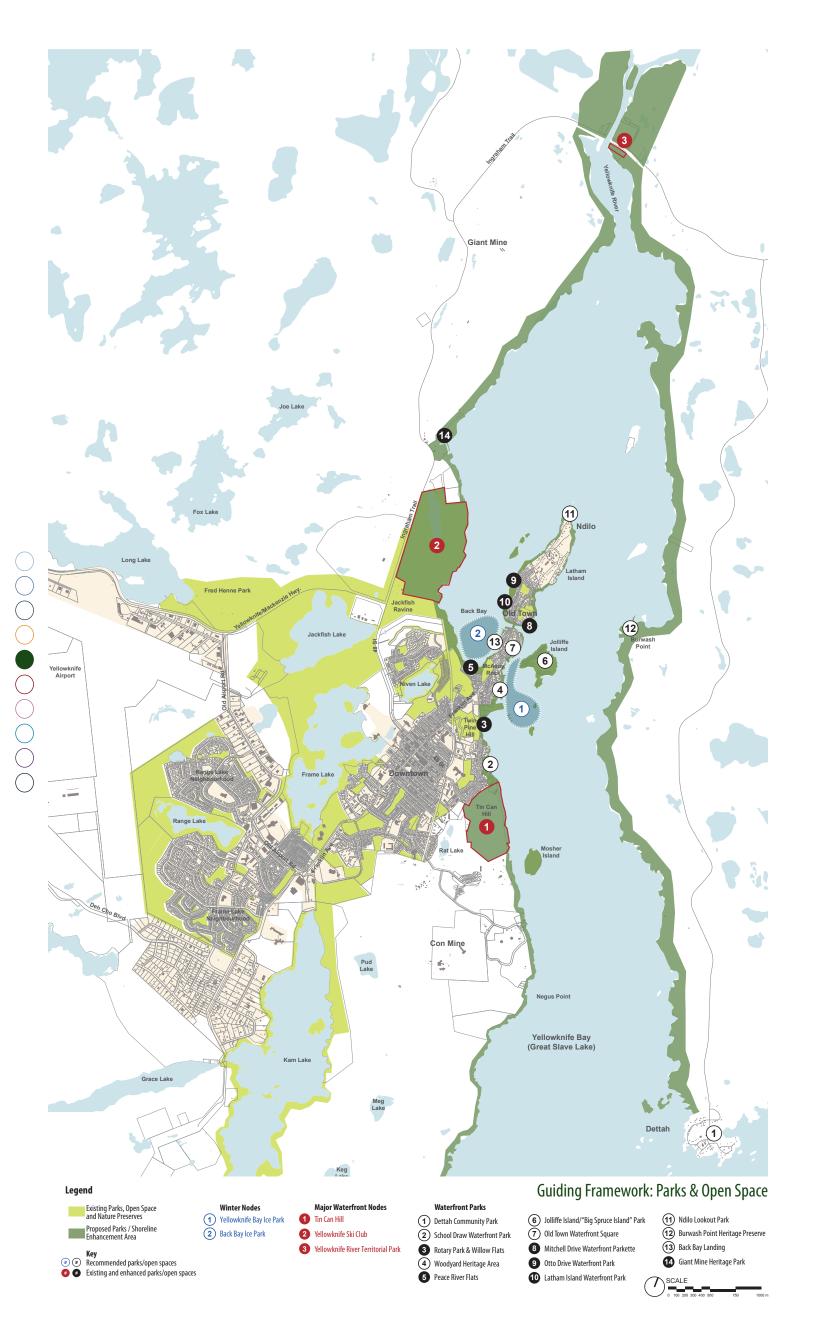
- Comprehensive bio-physical inventory by local experts to describe, map and evaluate ecosystem features/functions, sensitivities, disturbance regime, and restoration/enhancement opportunities;
- Identification of clear resource management objectives (e.g. habitats to protect/restore, biodiversity targets, improved linkages, trail re-routing, buffers to development);
- Develop suitable on the ground strategies to implement the management plan;
- Establishment of a monitoring program to measure the effectiveness of the management plan; and,
- Follow adaptive management protocol and make adjustments to the plan as required.
- 6. Promote through education and enforce regulations to mitigate potential water quality impacts generated by Harbour users.

"An informed public is an engaged public"...Environmental stewardship and public awareness is essential for protecting water quality in Yellowknife Harbour. Through interpretative signage, public outreach programs, school curriculum, yellow fish road program, Harbour Watch volunteers, and various other initiatives, greater public involvement can be achieved to assist in reaching the goal of protecting the Harbour. Appropriate policies/regulations, enforced by Municipal By-law officers, should be put in place to control the various Harbour users and ensure that water quality is protected.



87% of Yellowknife residents say protection of water quality and habitat is an important priority.

Ipsos Reid Survey, August 201



Parks & Open Space

Vision

Yellowknife Harbour will have beautiful waterfront parks and open spaces that are well connected, clearly public and accessible to all.

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Enforce direct connections and views to the waterfront, (Trondheim, Norway)



Promote animated and programmed public spaces that are rich in natural and cultural heritage. (Trondheim, Norway)



Combine and enhance both the day and night-time economy to augment natural surveillance. (Sundsvall, Sweden)



Create accessible and exciting spaces that provide for a diversity of active and passive use for all seasons. (Oulu Finland)



Promote public spaces that are rich in natural and cultural heritage. (Oulu Finland)



Develop squares and spaces along the waterfront to provide a variety of uses.



Accommodate a mix of uses and activities to activate the waterfront. (Granville Island, Vancouver, BC)

Principles

- 1. Design parks and open spaces to protect, enhance and celebrate the area's rich natural and cultural heritage.
- 2. Locate parks and open spaces to provide for a diversity of active and passive uses/functions in all seasons.
- 3. Locate parks and open spaces in a way to enable a connected system of green spaces.
- 4. Design parks and open spaces to create jewels that are the focal points of waterfront neighbourhoods and urban districts.
- 5. Design parks to be safe, accessible, visible and well defined.

What We Heard

- There should be public use on public land. Currently public lands are not being used for the public use and/or are not viewed as public.
- 2. Link and connect the parks, both to each other and to the water's edge.
- 3. Improve the existing parks.
- 4. Create an integrated system of parkland including Ndilo and the broader Akaitcho lands.
- 5. Need more public parks connected to the water's edge.
- 6. Need better access for all user groups (more definition of uses).
- 7. Need to manage and protect the frozen water as regulated 'white space'.
- 8. Must have free, unrestricted public access to the entire shoreline of Jolliffe Island.
- 9. Is there an opportunity to build a new public park on abandoned land adjacent to Niven Lake?
- 10. The public does have adequate access to the waterfront... it's not well promoted or maintained.

Recommendations

- Develop/recognize major green spaces as key destinations/nodes on the waterfront — Yellowknife River, Tin Can Hill and Yellowknife Ski Club.
- 2. Identify ice parks for programming of winter activity.
- 3. Enhance existing/develop new parks along the waterfront to ensure access to the water's edge for a variety of uses. Develop a square in Old Town as a central focus and gathering space.
- 4. Reinforce the shoreline enhancement zone.
- 5. Restrict leases for private use of public waterfront land.

92% of Yellowknife residents said that public lands along the waterfront should be publicly accessible.



Clearly public water's edge park with high quality amenities/features



Public property off of Lessard Dr.

Latham Island Waterfront Park Concept



Giant Mine Heritage Park

1 Develop/recognize major green spaces as key destinations

1 Tin Can Hill

This is an important node on the waterfront, with numerous trails throughout. Tin Can Hill is identified in the 2011 General Plan as Natural Areas, Parks & Open Space. Considerations should include improved trail amenity features, visual and physical (all season) access to Yellowknife Bay, protection of water quality and ecological features identified in the Natural Area Preservation Strategy or other studies.

2 Yellowknife Ski Club

The Ski Club is a major recreational facility for the City and Territory for cross-country skiing, biathlon, cross-country running, and biking. The City should engage the Ski Club's board to assess (on an ongoing basis) how the City can retain and enhance the volunteers' ability to provide multi-seasonal outdoor recreation. The importance of the area in a 'mine-to-mine' trail and its cultural and historic importance needs consideration.

3 Yellowknife River Territorial Park

This is an important day use area for local residents and tourists, operated by the Department of Industry, Tourism and Investment. The City of Yellowknife should maintain contact with the Department regarding any changes to the park, so that public access to the bay and river can be maintained.

2 Identify Ice Parks

1 Yellowknife Bay

Prepare a plan to manage, protect and enhance the winter activities that focus now on the Snow King's Castle. The ice park should define a non-motorized zone for activities such as skating, kite flying, and shinny.

2 Back Bay

Prepare a plan to manage, protect and enhance appeal for non-motorized winter activities in a clearly defined area that will not conflict with snowmobiles, cars, etc.

3 Enhance existing/develop new waterfront parks/open space

Enhance Existing

3 Rotary Park

Enhance maintenance of the park. Discussions with the GNWT are required regarding clean-up along the Dettah Ice Road. A boardwalk through the wetland would establish the start of the new "dock walk" along the water's edge of the Bay.

5 Peace River Flats

Enhance maintenance and clean-up. Improve trail links to/from the area while ensuring the wetlands continue to maintain ecological and community functions. Ideal location for canoe and storage lockers for access to the Bay (see Harbour Uses).

8 Mitchell Drive Waterfront Park

Has picnic tables, garbage containers, with a great view of the Harbour. Enhance maintenance and expand parking.

9 Otto Drive Waterfront Park

Add sign to identify public park, public access, public use. Remove shack. Improve signage and enhance maintenance.

10 Latham Island Waterfront Park

Tremendous opportunity to proved public use of city-owned property off of Lessard Dr. behind Morrison Dr. residences. Ideal location for float plane and boat docking. Remove shacks. Protect important ecological function of the area. Apply Crime Prevention Through Environmental Design (CPTED) principles to address concerns of public use by adjacent homeowners (see Recommendation 6).

14 Giant Mine Heritage Park

The NWT Mining Heritage Society has prepared a master plan for an interpretive centre and park on site of the current outdoor display. The outdoor display is one of the initial phases of the park. Mining equipment is displayed on a track that frames the parking lot. A log cabin was moved to the site and houses a static display. The master plan has a number of components including an interpretive centre using the old Recreation Hall and renovation of the shaft head frame, hoist room, power house for indoor and outdoor displays. Walking trails are to be expanded and underground tours from the open pit to one of the Shafts are proposed. The Heritage Society also has plans to save some of the buildings in the town site as other attractions in the park.

The soil and water contamination of on-site arsenic dust, hydrocarbons and other industrial waste of the Giant Mine site are currently being assessed and managed by the federal government and GNWT. The Giant Mine Lease Area Land/Water Use Plan prepared in June 2006 acknowledged the importance of the integration of the heritage, including attractions, trails, interpretation and education into a long-term development plan for the area. The Study recommended public access and passive recreation along the shoreline



with consideration of a marina, pending the results of an analysis of feasibility. The protection of the area's significant ecological and geological diversity was identified as an important consideration in determining the location, character and form of development. In terms of commercial and residential development, it was recommended that this area only be considered after 2019, unless the City is unable to develop enough of Tin Can Hill and Yellowknife Bay South. The 30-year lease, which expires in 2030, would have to be addressed in considering development options for this area.

The issue of contamination and remediation of the Giant Mine site introduces a level of uncertainty for the ultimate use of this area and future plans will depend on the outcome of the current environmental studies.

New Waterfront Parks

As waterfront land becomes available for sale, the City should give priority to the consideration for acquisition.

1 Dettah Community Park

Add play facilities, benches, landscape treatment near Chief Drygeese Government building.

2 School Draw Waterfront Park

The ecological attributes of this area should be enhanced and maintained, as this area merits a high level of protection. Improving water quality from storm water drainage needs to be considered. Public access should be provided with clear signage.

4 Woodyard Heritage Area

The Woodyard is part of the unique character of Old Town, and that characteristic is to be respected. At the same time, improved public access to the waterfront is needed, and this is a key location for access. A shared public walkway through the area and access for non-motorized watercraft (e.g., canoes, kayaks) will be added without taking away from the area's character or the ecological functions of the wetlands. Ideal location for canoe and storage racks.

6 Jolliffe Island/'Big Spruce Island'

The island has a long history with the Yellowknives, and starting to use the local Dene name for the island would be an asset. Accommodate unfettered public access. Enhance maintenance on the Island. Manage the "creep" of sheds and "back of house" facilities associated with float homes that line the west and southwest edge of the Island. See Section 7 for other recommendations for a Heritage Park. Jolliffe Island is subject to the Akaitcho Land Claim. Any plans for its future will involve negotiation and coordination with the Yellowknives Dene.

(7) Old Town Waterfront Square

A public gathering space, with prominent views to the Bay and including commercial space, is suggested. This was recommended in the Urban Design Initiative (June 2010). The square should be designed in a way that responds to the unique and eclectic characteristics of Old Town. This could be a prominent access point and activity node in a waterfront walk. A comprehensive parking strategy for Old Town is needed to precede or accompany the development of such an anchor attraction area.

(11) Ndilo Lookout Park

The Yellowknives Dene First Nation controls the land in Ndilo, including this proposed lookout park. YDFN are interested in enhancing public access to the water's edge, while ensuring that the occupancy of the shoreline is authorized and that the natural features are preserved. The City should work with YKDN to sign, promote, and maintain this lookout.

(12) Burwash Point Heritage Preserve

This designation is an acknowledgement of this general area's special importance to the Yellowknives. Any further designation or planning on this area would need to be led by the YKDFN, and would wait on the outcomes of their current land use planning process.

(13) Back Bay Landing

Develop city-owned land with canoe/kayak storage and small craft launch. Provide area for drop-off and pick-up. Provide water's edge seating.

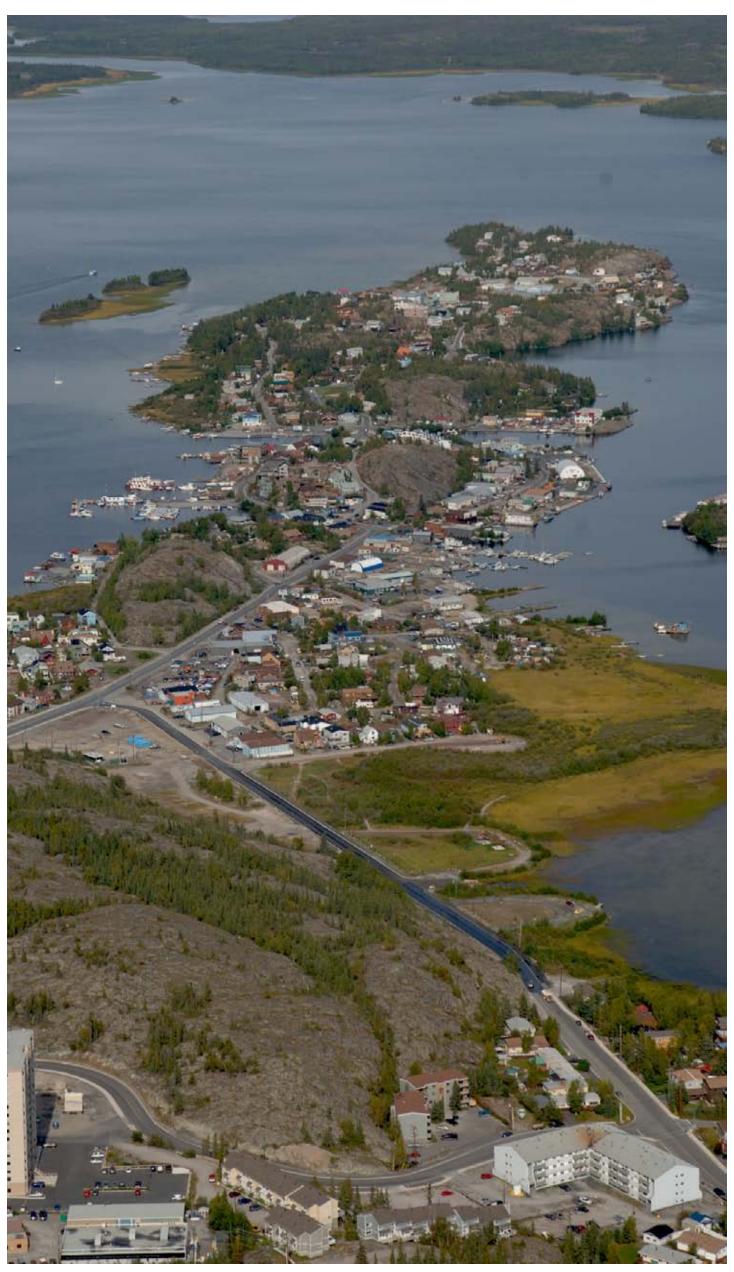


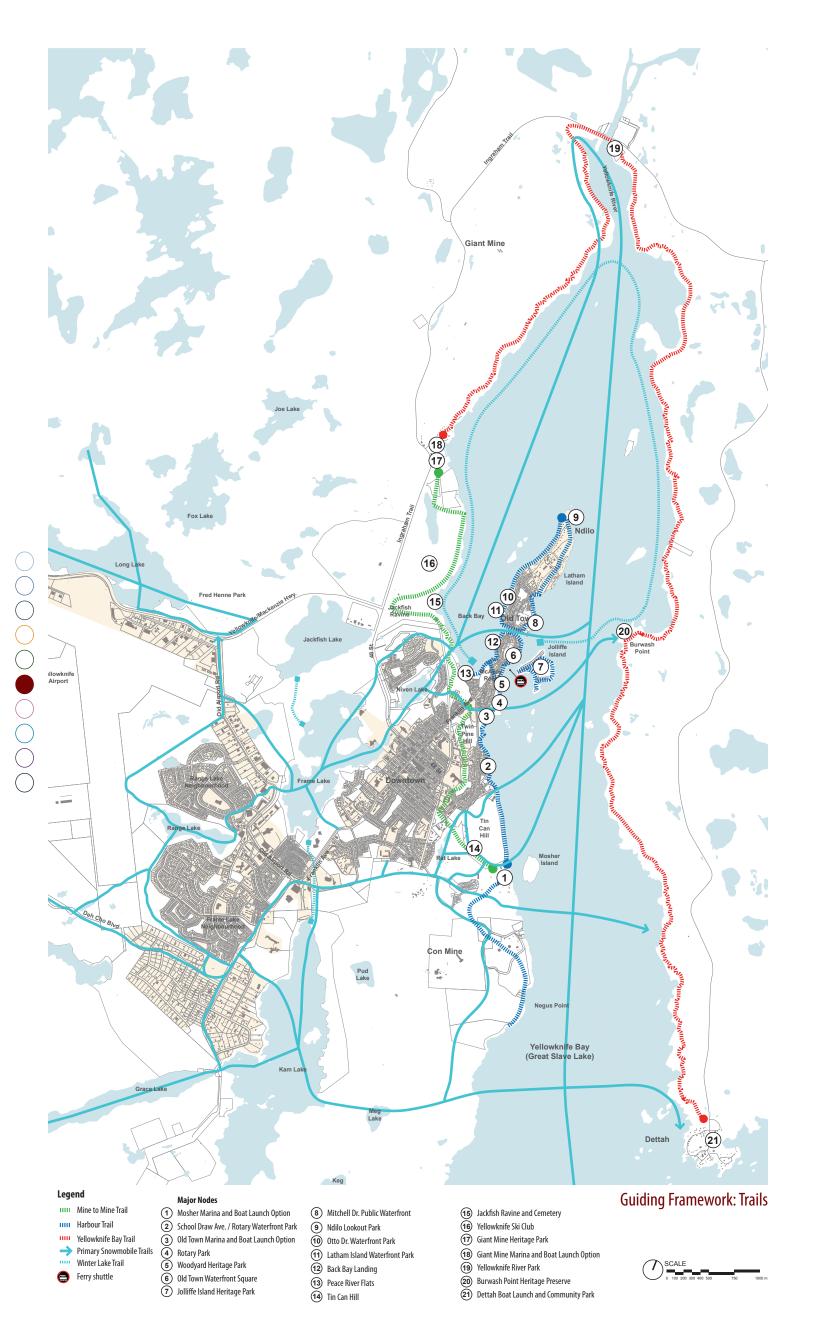
4 Reinforce shoreline enhancement zone

The recently completed Natural Area Preservation Strategy identified the shoreline of Yellowknife Bay and Islands as warranting a high level of protection. That Strategy recommended that development should be restricted and carefully controlled. Clearly, the shoreline is the focus of recommendations in each Framework of this Background Report and Implementation Strategy. Detailed environmental analysis of site conditions will be required to develop concepts that are truly exemplary developments of trails, signage, docks, residential or commercial developments, parks, etc.

5 Restrict leases for private use on public waterfront land between Tin Can Hill and ski club

The City and other public agencies have a long history of providing the use of their lands for use by a few. There are lands that are leased, for example, to the ski club or cruising club, where many Yellowknife residents enjoy benefits of the development. A clear message in the study was that public land should have unrestricted public access – access by all. Public lands in the core area of the Harbour – between Tin Can Hill and the Ski Club – should be used for truly public use and access. This includes relocating uses that currently inhibit access to public land, including the Fish Plant, barges and private docks. See Section 9 for other recommendations regarding private use of public land.







Vision

Yellowknife Harbour provides a beautiful setting for well-connected accessible trail system that enables year-round use.

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Properly maintain trails and walks



Emphasize special places and nodes through trail highlights such as board-walks, gathering spaces, lookouts and interpretation



Create ice trails that are clearly de-



Develop a comprehensive trail wayfind ing/signage strategy



Ensure trails are accessible all year-



Develop key connecting trails



Ensure trails are properly maintained and accessible



Develop and enhance awareness of major parks along trails



Provide a hierarchy of trails for year-round use

Principles

- 1. Trails will provide public access to public space.
- 2. Trails will incorporate wayfinding (through direction signs, trail distance markers, trail names, maps of the trail system) to enhance awareness of the system of the component trails.
- 3. Trails will enable year-round use.
- 4. Some trails will be single use, others multipurpose.
- 5. Trails will be appealing for use by all ages.
- 6. Trails will be located to enhance awareness of the rich cultural and natural heritage of the Yellowknife Harbour.

What We Heard

- Establish connected routes (Mine to Mine, Willow Flats boardwalk) — pick the "low hanging fruit" first to ease the idea of trail connections into the public eye.
- 2. Walking along the shoreline is mostly not accessible during the summer. However during the winter the ice makes the shoreline completely accessible. Why is there so much opposition to access along the shoreline in the spring, summer and fall?
- 3. Maintain and improve the existing trails
- 4. Keep the trails safe during all times of the year.
- 5. Link and connect the parks, both to each other and to the water's edge.
- 6. Provide clear signage and wayfinding for all trails.
- 7. Provide clearly marked multi-use trails on the ice for pedestrians, skiers, snowmobilers, dog mushers etc.

Recommendations

- Develop three primary trails: Mine to Mine, Harbour Trail and Yellowknife Bay Trail.
- Develop key connecting trails to link the lakes the Harbour Trail and the Mine-to-Mine Trail.
- 3. Explore opportunities for a small-scale ferry/water taxi service between Old Town and to Jolliffe Island.
- 4. Develop a strategy to clearly mark and promote awareness of the Ice Roads/winter connections on Yellowknife Bay.
- 5. Develop a comprehensive trail wayfinding/signage strategy.
- 6. Establish an operating budget to ensure trails are well maintained.

82% of Yellowknife residents say "having public access to and along the Yellowknife Harbour is important to me personally".

Ipsos Reid Survey, August 2011

1. Primary Trails

The Guiding Framework for Trails identifies three primary trails: Mine to Mine, Harbour Trail and Yellowknife Bay Trail. The locations are conceptual in nature and meant to be consistent with the City's General Plan. The City's Integrated Parks, Trails and Open Space Development Study recommended the investigation of the feasibility of developing a Mine to Mine trail as an all season path between Negus Point and Giant Mine. Protection of areas of ecological significance is recognized as an important consideration in identifying a route. As described in that report, connections to neighbourhoods are important, as well as signage to identify the route and point of interest along the way. The Harbour Trail is a concept for a continuous all season trail that is on or near the water's edge from Tin Can Hill to Back Bay. It is understood that some of waterfront land is privately owned and access along the water's edge will not be possible. In these locations, the trail will follow the nearest road or route through public land. The Yellowknife Bay Trail is a larger regional scale all season trail, primarily for motorized vehicles. The location of the trails in the Harbour will be based on communication and cooperation with the Yellowknives Dene.

2. Key Connecting Links

The City's Integrated Parks, Trails and Open Space Development Study recommended many connections in the trail system including a connection between the Frame Lake trail system and the Ski Club and between Niven Lake and the Ski Club. The primary trails are not meant to be purely stand alone trails, connections between the trails are anticipated.

3. Ferry/water taxi from Old Town to Jolliffe Island

Many people suggested the idea of a small ferry or water taxi to provide access from Old Town to Jolliffe Island. This service would be considered in association with other ideas for the public use of Jolliffe Island. This would require communication and cooperation with the Yellowknives Dene.

4. Ice Roads

Many people attending the consultation events suggested the need for a strategy to clearly mark and promote awareness of the multitude of users on Ice Roads and other winter trails on the Bay – including snowmobile trails.

5. Wayfinding/signage strategy

A new information and signage strategy is required for trails. The current trails are not well signed with respect to names, locations and distances nor is there adequate signage with respect to special features.



Harbour Trail Dock Walk in Causeway Concept



Harbour Trail Dock Walk in Back Bay Concept



Harbour Trail Woodyard Dock Walk Concept