



Foreshore Integrated Management Planning on Fraser Lake

Nechako Watershed Roundtable
November 7, 2023

Land Acknowledgement

Living Lakes Canada prioritizes Reconciliation with Indigenous Peoples. We commit to respecting the rights of Indigenous Peoples by aligning our work with the goals of local Indigenous groups. We recognize the role and responsibility that Indigenous Peoples have to all land and the water that flows through it, and we honour that relationship by uplifting Indigenous voices in water stewardship.



Session Overview

- Living Lakes Canada
- Foreshore Integrated Management Planning (FIMP)
- Columbia Basin Findings
- Fraser Lake FIM 2012
- Fraser Lake FIMP 2023
- Next Steps



Leader in Water Stewardship

National Projects

- National CBWM Conference & Recommendations
- Member of Federal & BC Water Coalitions
- Foreshore Integrated Management Planning
- National Lake Blitz
- STREAM (Sequencing The Rivers for Environmental Assessment and Monitoring)
- CABIN (Canadian Aquatic Biomonitoring Network)
- iTrackDNA (Targeted Environmental DNA Research)
- Action for Healthy Watersheds

Regional Projects

- Columbia Basin Water Monitoring Framework
- Columbia Basin Water Hub
- Columbia Basin Groundwater Monitoring Program
- High Elevation Monitoring Program
- Eastern Slopes Aquatic Monitoring Collaborative



FORESHORE INTEGRATED MANAGEMENT PLANNING

Foreshore Integrated Management Planning (FIMP)

- A **cumulative impact assessment tool** establishing Foreshore Development Guidelines to **conserve ecosystems, support climate resiliency, and protect species of conservation concern** by providing BMPs to decision makers, stakeholders, right holders, and shoreline property owners



FIMP Methods Outline: Current Approach



Foreshore Inventory and Mapping (FIM)



Used to delineate, inventory, and map lake foreshore habitats.

Foreshore Habitat Sensitivity Index (FHSI)

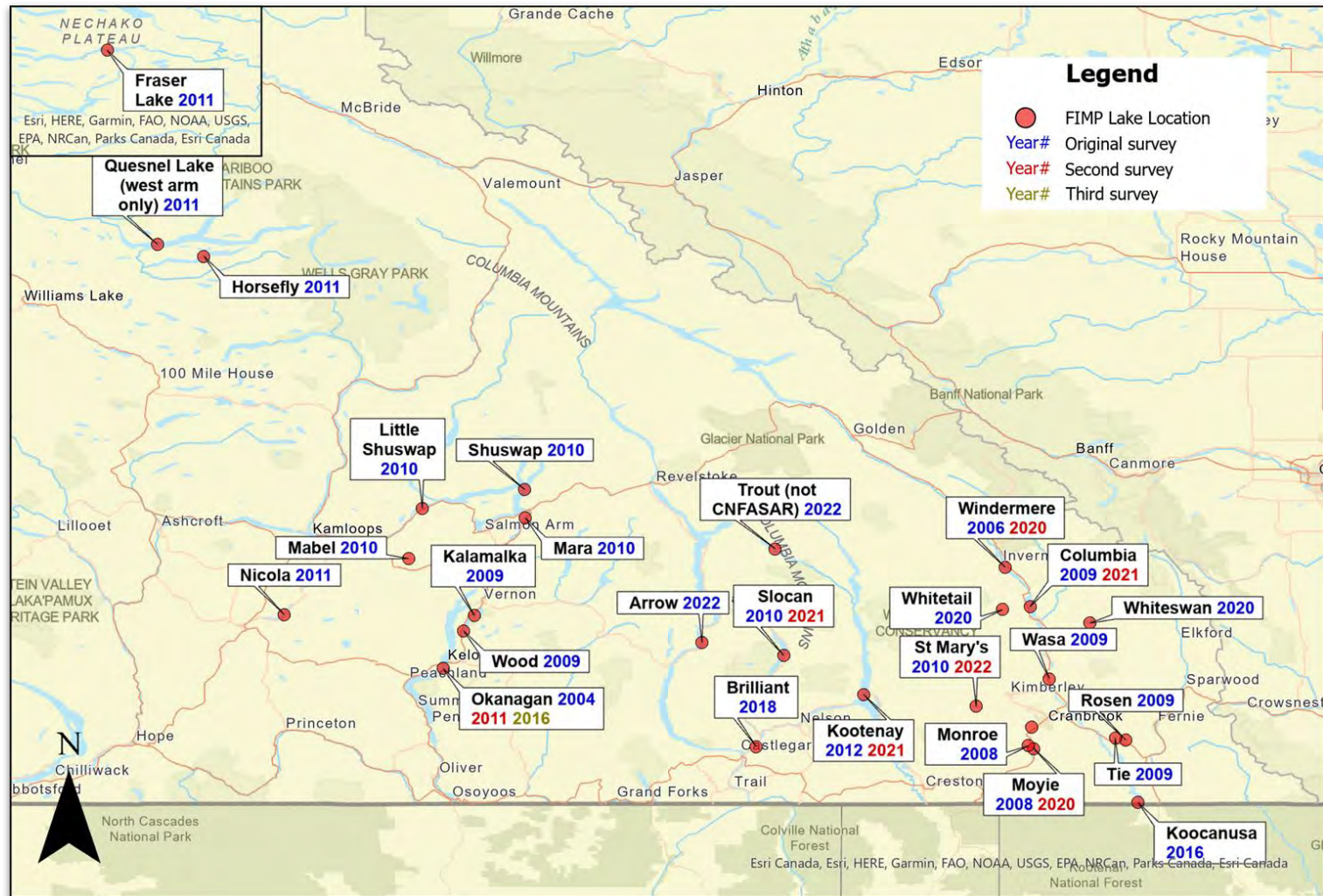


Used to describe the existing habitat value and sensitivity, based on five ecological ranks, to urban development activities.

Foreshore Development Guidelines (FDG)



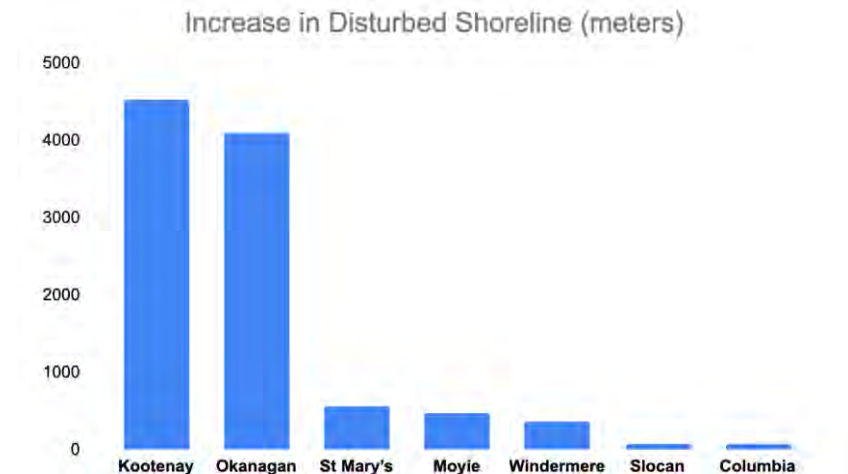
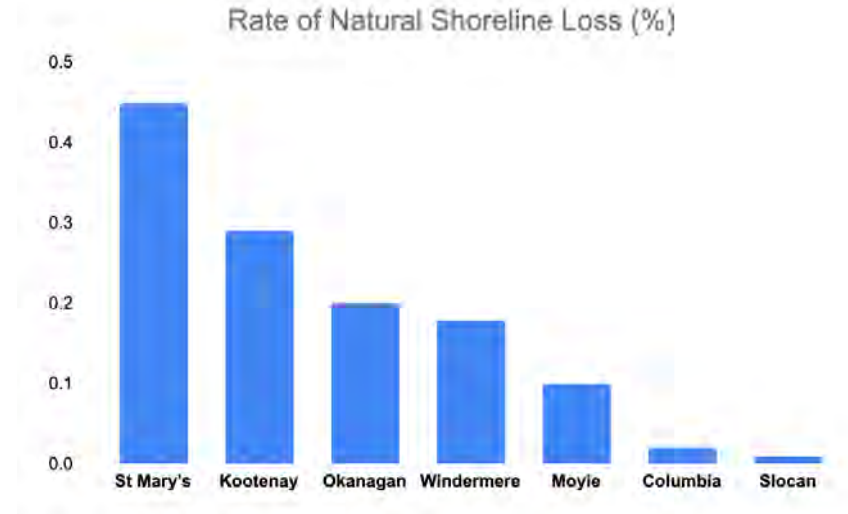
Summarize the analysis and provide recommendations surrounding development guidelines to protect high-value and sensitive habitats along the lake foreshore.



Columbia Basin FIMP Project

Canada Nature Fund for Aquatic Species at Risk 2019-2023

- Re-surveys were conducted 9-14 years after the initial surveys
- Compares trends in development pressure, habitat impacts, land-use changes, management strategies, across jurisdictions
- Trends note that lakes with the least pressure on natural foreshore have the most protected conservation areas (Columbia and Slocan Lakes) and the lowest amount of private land





None - no disturbances/impacts



Low - minimal disturbances/impacts



Medium - medium disturbances/impacts



High - extensive disturbances/impact

Foreshore Inventory Mapping on Fraser Lake 2012



- The total length of shoreline along Fraser Lake is 70.9 km.
 - Disturbed shoreline accounts for 19.5 km, while natural shoreline accounts for 51.4 km, or 72%
- Primary land use:
 - Rural properties (33%)
 - Natural Crown lands (23%)
- Most common shoreline modification: Docks (115)
- Shoreline descriptions:
 - No impact: 11 km (15%)
 - Low impact: 24.6 km (35%)
 - Moderate impact: 11.3 km (16%)
 - High impact: 24.1 km (34%)

Foreshore Integrated Management Planning on Fraser Lake 2023



- Funded by Living Lakes Canada, CN Rail, Cook-Rees Memorial Fund, NEWSS, and RDBN
 - Stellat'en First Nation
 - Nadleh Whut'en First Nation
 - Masse Environmental Consultants
- Field survey took place the week of August 7-11
- QA/QC Complete
- A provincially blue-listed wetland type (soft-stemmed bullrush marsh) identified on the north shore of the lake
- *Isoetes echinospora*, an aquatic quillwort was identified in the lake – first time this has been documented in the area

Preliminary Recommendations (subject to change)



- Update the language RDBN OCP for Area D around requirements for development in riparian areas
- Standardize Development Permit Area around the lake regardless of shoreline ranking
- Establish zones of sensitivity around culturally significant features
- Recommend non-motorized boat zones and/or restricted speed zones around sensitive areas
- Encourage communal/shared boat launches in densely developed areas
- Establish a conservation area around the mouth of Ormond Creek

Next Steps

- Collaborative report review process begins in January 2024
- Reports, maps, and drone footage to be published in Spring 2024
- Report Dissemination and community outreach will begin thereafter
 - Presentations
 - Workshops
 - Delegations
 - Community events



Contact

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Learn More

livinglakescanada.ca/project/foreshore-integrated-management-planning/

Questions?

