

Welcome!



Squamish Marine Forum

January 24 2018 | 6:30 PM-9:00 PM

Squamish Adventure Centre

38551 Loggers Lane

6:30-8:00 PM 'Salt Life' Panel Presentation

Hear a collection of locals share their values, perspectives, challenges and opportunities in our marine realm, as we come together to support and steward marine assets in Squamish.

8:00-9:00 PM Marine Expo + Activities

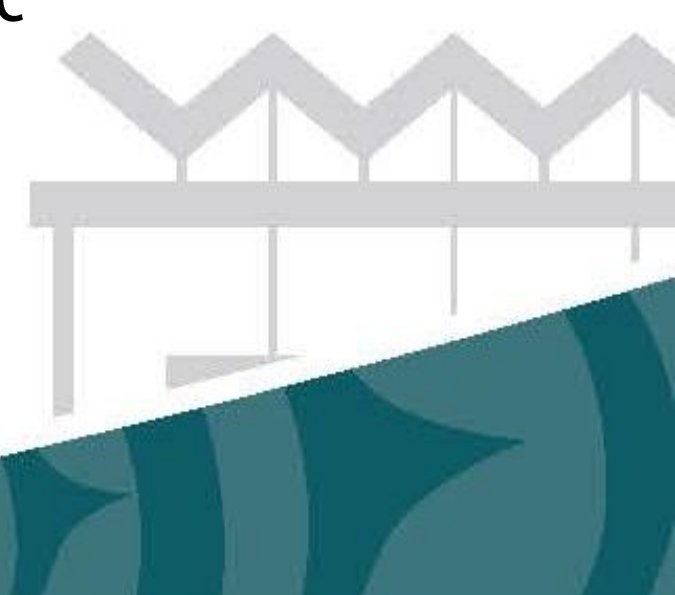
Learn about and contribute to the development of a **Marine Action Strategy (MASt)** that aims to mobilize shared leadership and identify priorities and actions in a variety of marine focus areas. Provide input on specific draft goals, objectives and actions to maximize and enhance waterfront + marine resources that provide ecological services and social, cultural, health and economic benefits to our coastal community.

[Participate in our Marine Survey @ www.squamish.ca/marinestrategy](http://www.squamish.ca/marinestrategy)

For more information - Sarah McJannet, Planner | District of Squamish Community Planning & Infrastructure
604-815-5096



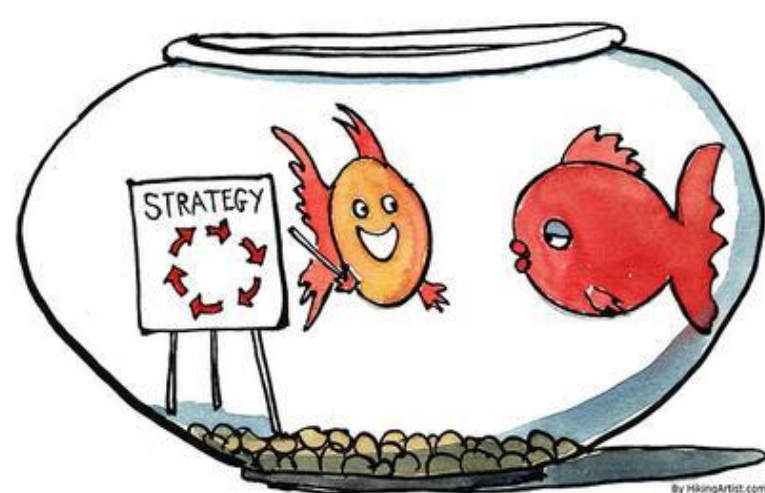
Marine Action Strategy




SQUAMISH

Marine Action Strategy

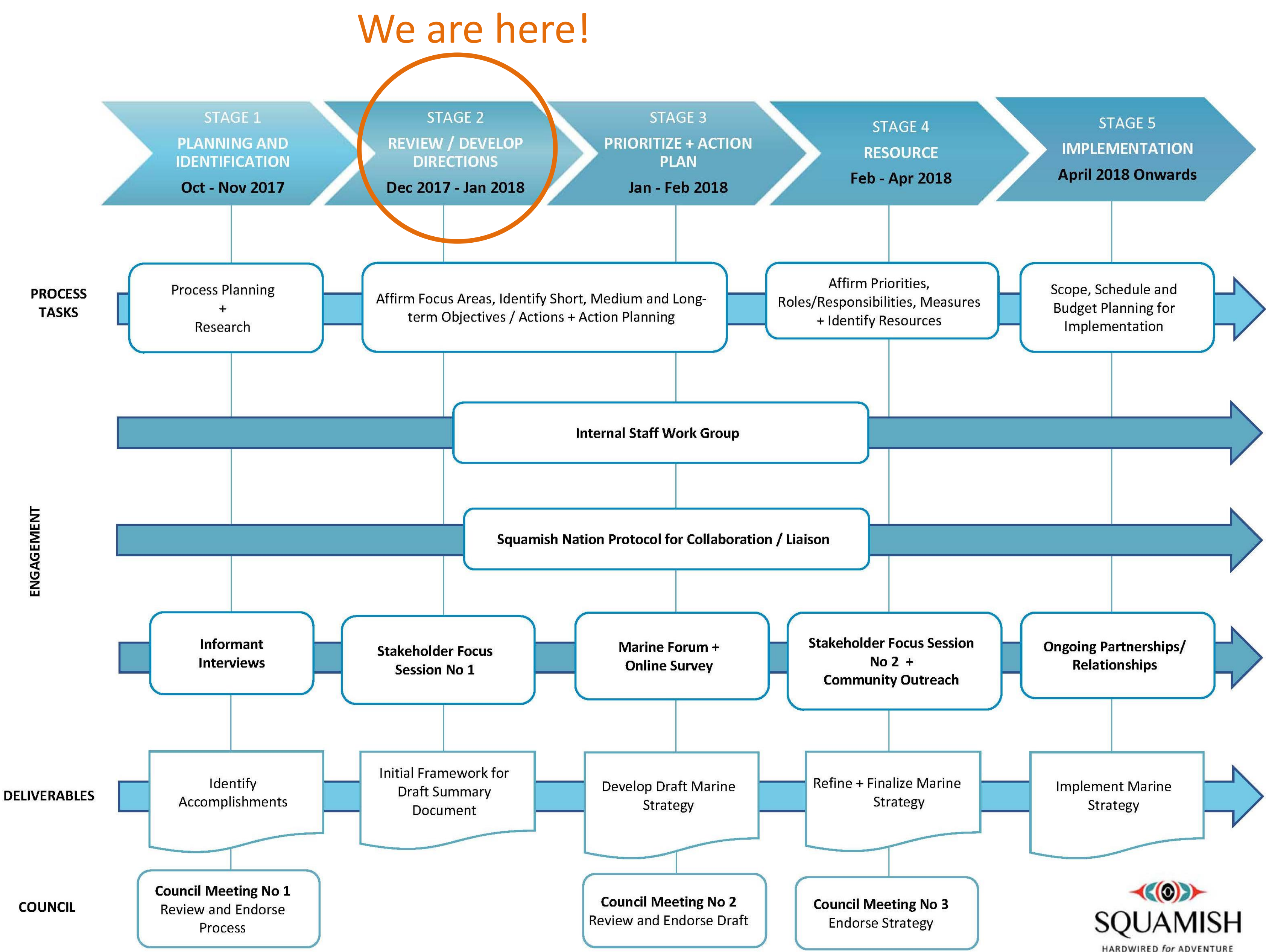
Objectives



What is it, exactly?

- Mobilize shared leadership in marine realm
- Identify marine focus areas and prioritize actions to protect + maximize waterfront resources/assets
- Inform and align decision making
- NOT another Plan!
- Strategic frame for local marine ACTIONS
- Aligns and coordinates marine priorities + activities by Squamish stakeholders and agencies
- Deliverable: Strategy Document + Implementation Plan (short, medium, long term actions)

Project Stages, Engagement + Deliverables

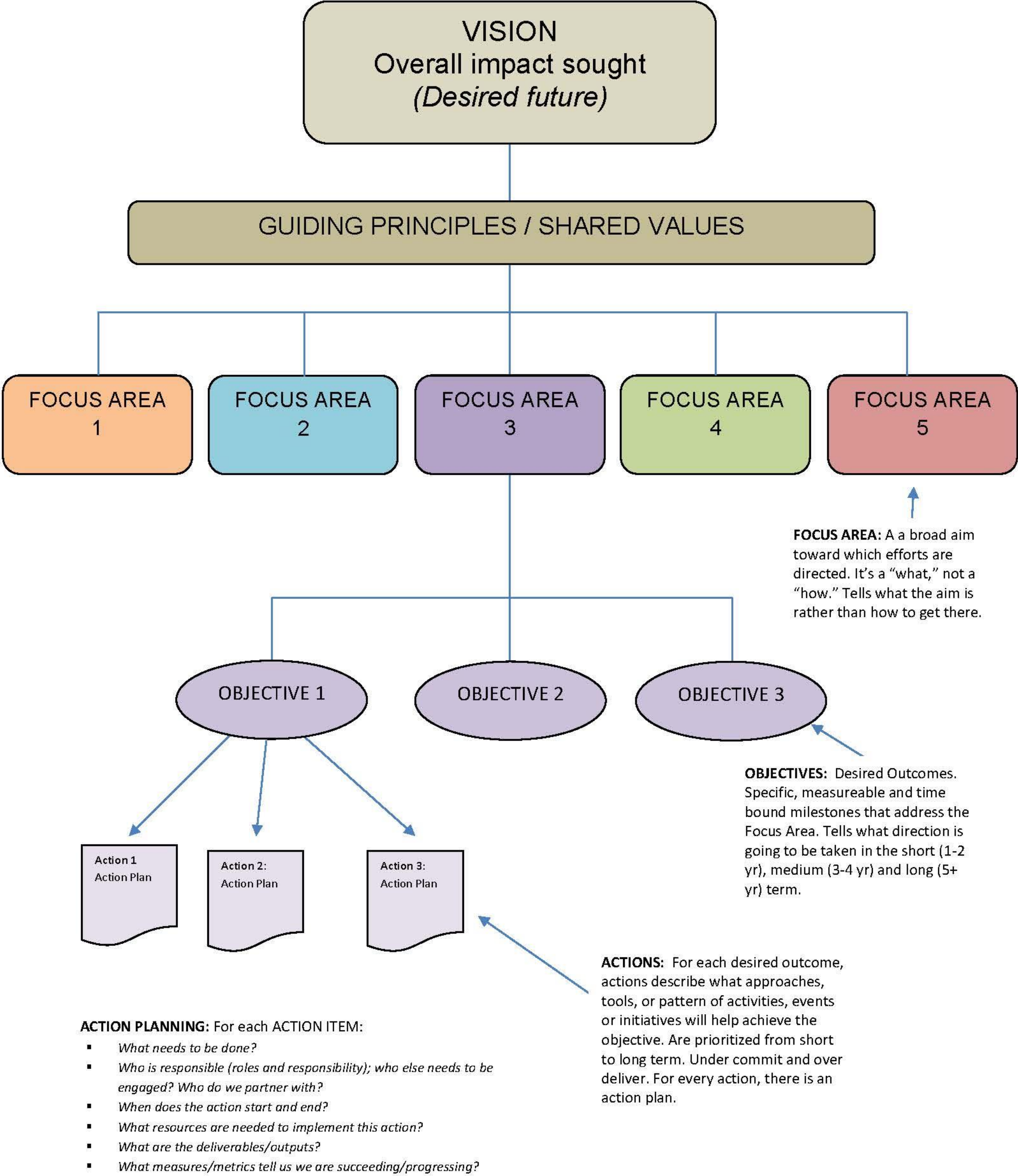


Marine Action Strategy

Draft Organizing Framework



MARINE ACTION STRATEGY :: DRAFT FRAMEWORK

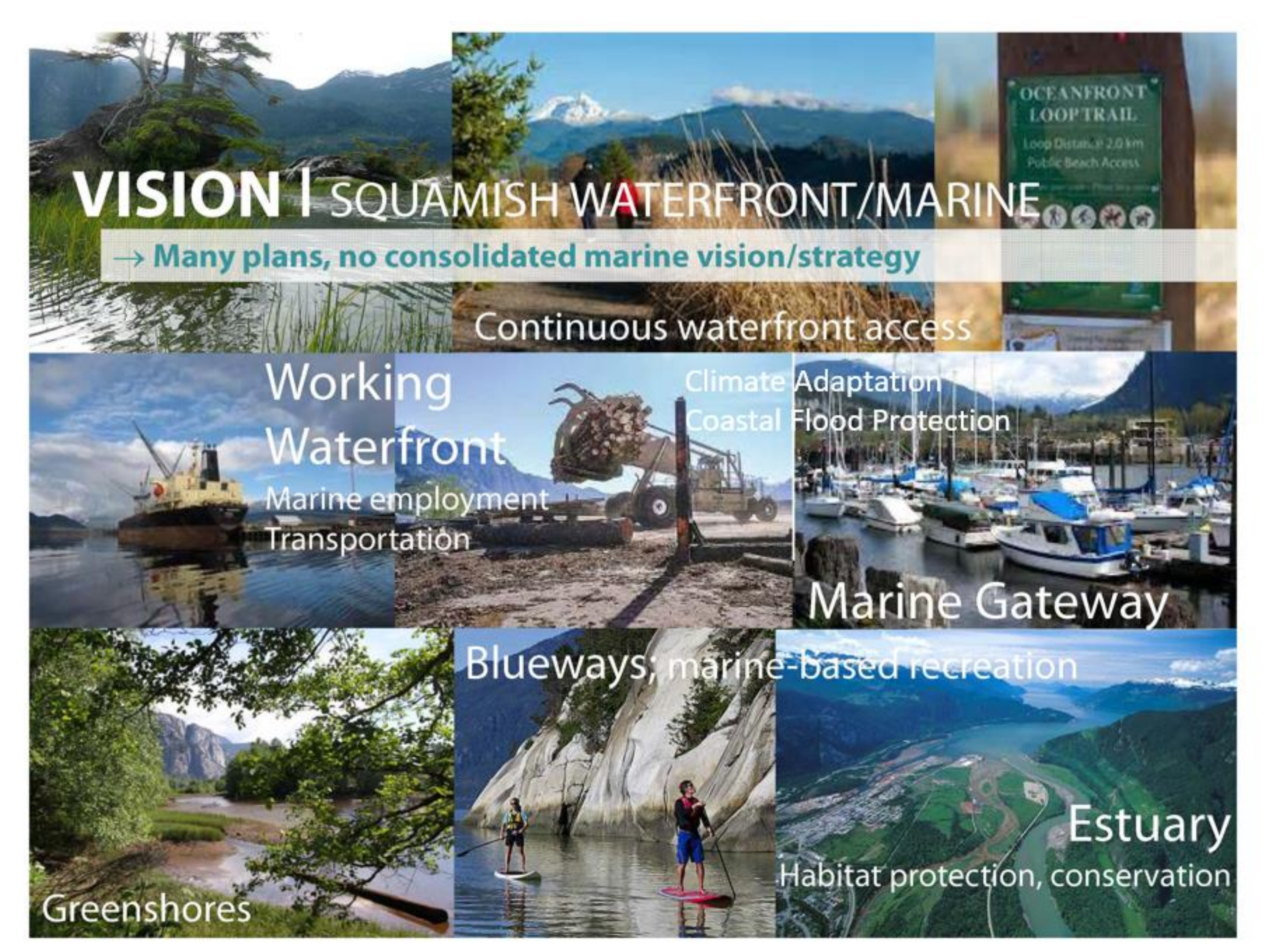


Marine Action Strategy

Affirming our Vision

What guiding principles + values are important?

What do you envision for our marine realm?



*Add your ideas
and words!*



Marine
Action
Strategy
Area/
Scope

Mark up
key areas
for our
collective
focus



Marine Action Strategy

Shared Lands + Waters

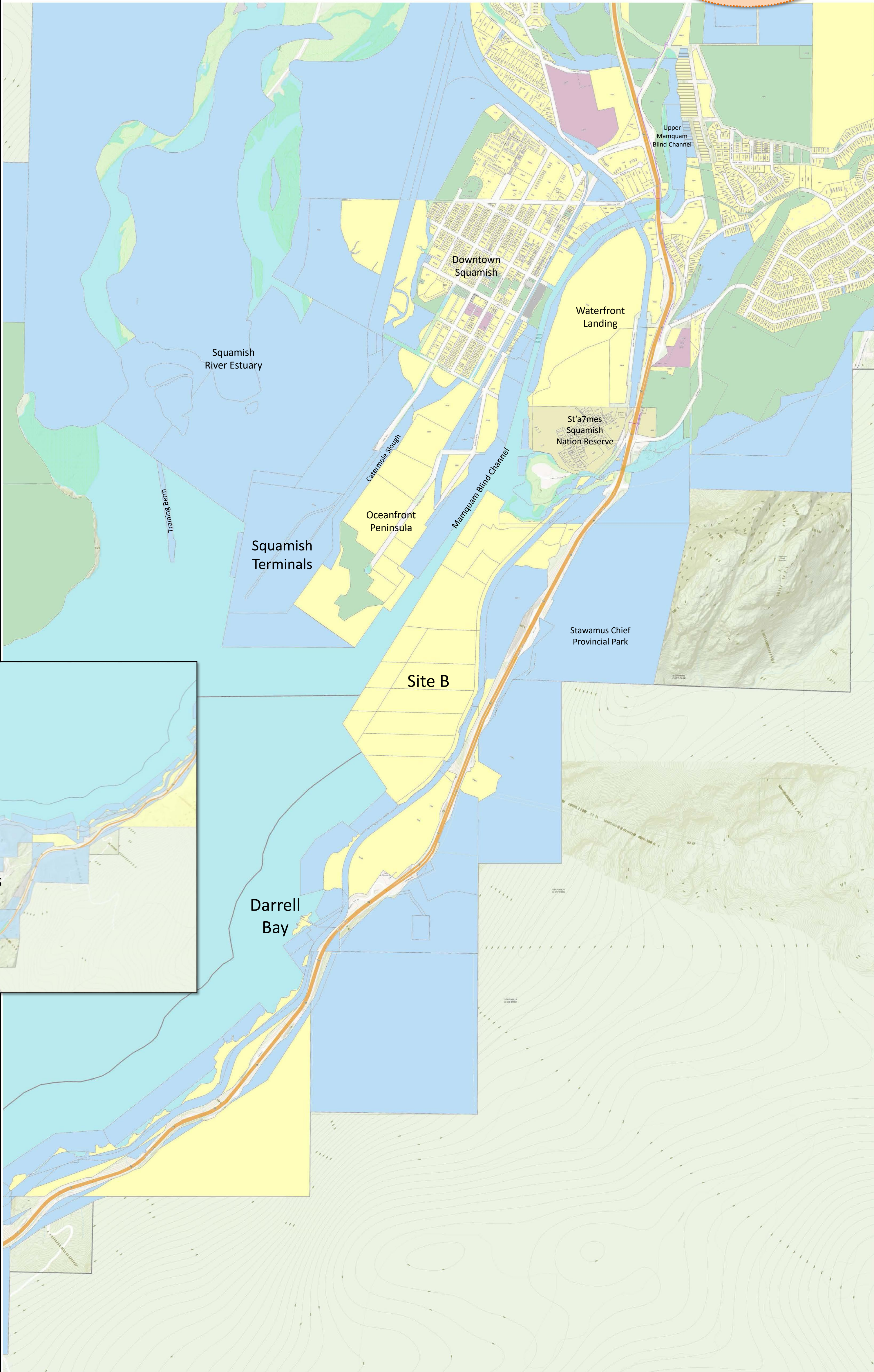
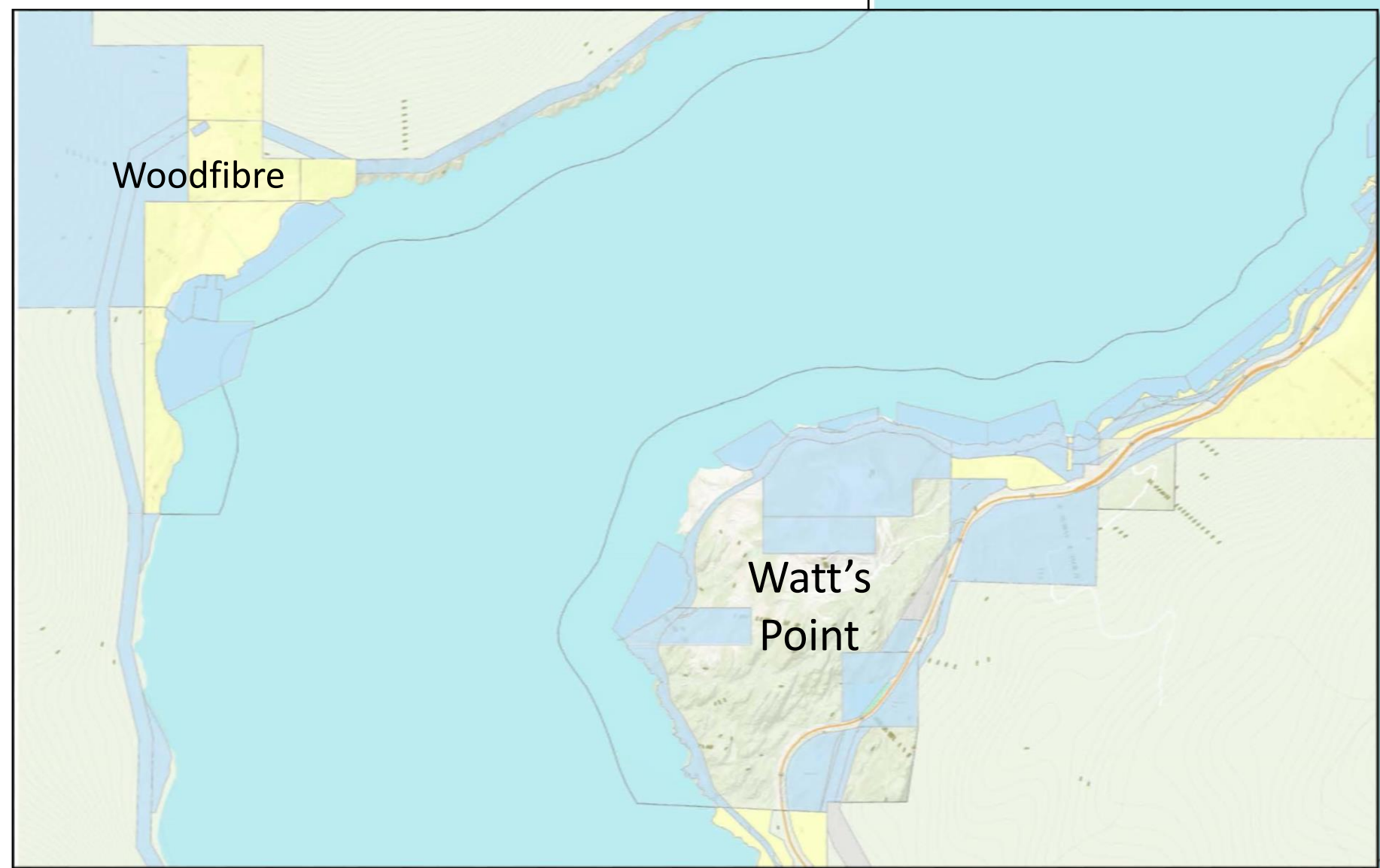
Skwxwú7mesh
This is the traditional unceded territory of the
Skwxwuu7mesh Uxwumixw
(Squamish Nation)

a sample of
who is sharing
+ managing
Squamish
lands and
waters

Legend

- Properties
- Provincial Park
- District Park
- Ownership Type
 - Private
 - Municipal
 - Crown
 - Squamish Nation Reserve
 - School District

Inset Map



Marine Action Strategy

Marine Planning at Large

In developing a local marine action strategy, there are a variety of local, regional, provincial and national marine initiatives underway that influence and link with our collective efforts. In addition, there are many community initiatives, programs, partnerships and projects (not represented here) that also inform the strategy.

a sample of
local, regional
provincial +
national marine
initiatives
underway

**District of
Squamish
Marine
Action
Strategy**

Draws on other plans and strategies, including District of Squamish Integrated Flood Hazard Management Plan/Coastal Flood Protection Strategy; Squamish Estuary Management Plan; Official Community Plan and many more...

**Howe Sound
UNESCO
Biosphere
Reserve
Proposal**
Future of Howe
Sound Society

**Howe Sound
Community
Forum**

**Ocean
Watch Howe
Sound Task
Force**
Coastal Ocean
Research Institute

To identify and implement local actions in the [Ocean Watch Action Plan](#) within the mandate and reach of member communities. Highlight potential actions that include policy integration and collaboration between Local Governments and First Nations.

**Squamish
Nation
Marine
Planning**

**BC
Cumulative
Effects
Framework**
Ministries of
Environment and
Forests, Lands and
Natural Resource
Operations

Intended to guide cumulative effects considerations through existing natural resource sector legislation, policies, programs and initiatives. Value assessment protocols are being developed for **aquatic ecosystems**, forest biodiversity, grizzly bear, moose and old growth forest.

Interim
Assessment
Protocol for
Aquatic
Ecosystems in
BC

**National
Oceans
Protection
Plan**
Transport Canada, DFO,
Environment & Climate
Change Canada

Scope includes navigation, regional response planning, environmental monitoring, habitat restoration funding, abandoned vessels, partnerships

**National
Strategy on
Abandoned
and Wrecked
Vessels**

*Are there other
marine-focused
initiatives to add?*

Aquatic
Invasives
Mgmt
Plans?

Recreational
Water
Quality
Mgmt

Contaminated
Sites Planning



Marine Action Strategy



Marine SWOT Review (Phases 1+2)



Focus Area 1



Governance + Shared Leadership

Mobilize shared leadership to enhance coordination and good governance of the marine environment.

- Includes considerations about:

 - Sharing ownership and responsibility in the marine realm
 - Working within multiple jurisdictions and across sectors – many roles, responsibilities and authorities
 - Collaboration with Squamish First Nation; future joint planning and marine management opportunities
 - Evolution of estuary management (moving forward with next phase of Squamish Estuary Management and associated management bodies/partners)
- Enforcement and compliance efforts for navigation, and environmental protection of waterways, fisheries etc, including derelict vessels
 - Enhancing collaborations and partnerships to increase positive impacts
 - ...?

Draft Goals, Objectives + Emerging Actions

Goals	Objectives + Actions
1 Shared Governance	
1.1 Develop shared leadership model for marine planning and management, working closely with other levels of government.	<ul style="list-style-type: none">▪ Establish intergovernmental framework for improving coordination of activities.<ul style="list-style-type: none">▪ Key actions include clarifying roles and responsibilities of the different levels of government; considering development of an intergovernmental working group discussion of funding opportunities.▪ Jointly explore partnership opportunities and increase collaboration with Squamish Nation on local level management of estuary and local waters.<ul style="list-style-type: none">▪ Improve management of marine activities with expanded jurisdiction.▪ Establish water use regulations for publicly controlled water lots (e.g., Water Use Bylaw for District public right of ways to regulate boat moorage).
2 Shared Leadership	
2.1 Enable a forum for key governments and stakeholders and to engage in coastal planning and development review, and to coordinate diverse interests and needs.	<ul style="list-style-type: none">▪ Explore development of local coordinating body and process with multiple levels of government and cross-sector participation<ul style="list-style-type: none">▪ Consider mandate: to review, monitor, and advise governments (DoS, SFN, others) on projects, initiatives, and plans influencing the Squamish coastal environment (uplands, foreshore, ocean).▪ Examples of coordinating body initiatives include: land use planning, dredging, dredge spoil disposition, industrial uses, coastal emergency preparedness, stewardship, recreation, etc.▪ Seek partnership and funding opportunities with all governments to identify and collaboratively fund community projects.▪ Continue to engage in and support regional marine planning initiatives such as Howe Sound Community Forum, Howe Sound OceanWatch Task Force with Coastal Ocean Research Institute (CORI).
3 Management of Marine Uses + Activities	
3.1 Monitor, manage and enforce day to day marine activities .	<ul style="list-style-type: none">• Develop stronger marine regulation, enforcement capacity and knowledge.• Investigate potential for expanded marine Harbour Authority with appropriate marine management and enforcement capacity, supported by policy and bylaws.
3.2 Collaborate with Transport Canada and the Province to support enforcement and compliance efforts	<ul style="list-style-type: none">• Delineate MBC navigable channel and establish long-term maintenance program.• Identify resources and local staging areas for derelict boats/storage/recycling etc.



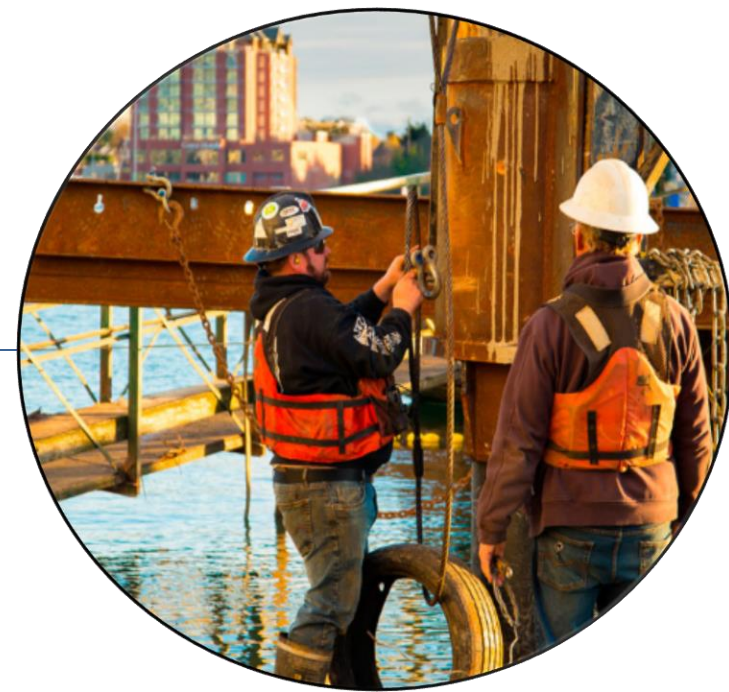
Focus Area 1 Feedback

Governance + Shared Leadership

Please provide comments on draft goals, objectives and actions. On track? What are we missing? Who needs to be involved? Highlight your priorities!



Focus Area 2



Marine Economy

Support a thriving marine economy and working waterfront in harmony with community social, cultural, environmental and economic aspirations.

Includes considerations about:

- Continued downtown revitalization and mixed-use waterfront redevelopment
 - Marine industry and employment lands and necessary access to the water, intermodal connections
 - Marine transportation corridors - access/ logistics/ maintenance (e.g., dredging)
- Marine infrastructure (vessel moorage, boat launches and lifts, pump outs, fuel docks, repair)
 - Commercial and institutional features of the waterfront
 - Resiliency (built and natural) to address coastal flooding
 - ...?

Draft Goals, Objectives + Emerging Actions

Goals	Objectives + Actions
1 Marine Access and User Needs	
1.1. Support the success of marine-based business, recreation, tourism, employment, and residential uses.	<ul style="list-style-type: none">Identify land and water needs for all marine users in collaboration with marine users (e.g. log sorting/booming, boat moorage, marine facilities and ancillary uses, storage, parking, waste management facilities etc).
1.2 Enable safe and effective uses of coastal waters and plan for and manage interface issues to avoid user conflicts.	<ul style="list-style-type: none">Identify, map and enhance access points and key linkages to uplands and water uses (e.g. Develop best practices for all marine users; e.g. log sorts/ booming, marinas/ yacht clubs).Secure and coordinate public access / rights of ways with current and future land owners.Develop appropriate policy and zoning (e.g., logging, sailing, windsports, terminals, residential development/ houseboats).Following OCP Adoption, initiate marine zoning review to clean up and align existing zoning regulations with future intended water uses (Marine conservation, mixed-use marine zones etc)Develop land/water use maintenance program to improve access.Develop MBC dredging program and long-term funding strategy to maintain safe navigability.Mitigate long term noise and dust issues arising from industry/ development.
2 Squamish Marine Industry	
2.1 Support growth in the Squamish marine industry.	<ul style="list-style-type: none">Inventory and confirm critical industrial access routes between highway, uplands and water lots.Inventory and assess marine transportation routes; and consider their formalization through marine transportation plans.
2.2 Protect marine and upland transportation corridors as a valued shared asset for ongoing industrial activities.	
3 New Economies + Marine-based Employment	
Support diverse employment opportunities including marine recreation/tourism jobs and marine-related trades.	<ul style="list-style-type: none">Explore innovative, new-to-Squamish marine economic uses.Consider public-private partnerships that create innovative new marine uses; e.g., ferry network.Explore with Squamish Nation marine employment and development opportunities.
4 Infrastructure and Amenities	
Plan for and develop appropriate marine infrastructure and facilities for current needs, and future growth.	<ul style="list-style-type: none">Build shared understanding of wants/needs of all water-dependent users for infrastructure, amenities, services, and facilities.Identify secure locations for current and future marine infrastructure, facilities and amenities needs through plans and policies (e.g., pump outs, fuel docks).Identify needed tourism and local transit improvements (e.g., transit connections, parking, local ferry networkDevelop appropriate approach for cost-recovery.Develop local funding model for needed community based waterfront social, economic and environmental amenities/facilities that will address existing and future needs.

Focus Area 2 Feedback

Marine Economy

Please provide comments on draft goals, objectives and actions. On track? What are we missing? Who needs to be involved? Highlight your priorities!



Focus Area 3



Coastal Ecosystems

Support stewardship and the protection of the marine environment and our local coastal ecosystems.

- Includes considerations about:
- Taking action to conserve coastal ecosystems
 - Protecting marine wildlife and habitat
 - Preventing ecosystem damage
 - Remediation of contaminated sites
 - Coastal flood protection

- Green (natural) infrastructure + ecosystem services
- Realignment of the Spit training berm
- Monitoring and enhancing water quality
- ...?

Draft Goals, Objectives + Emerging Actions

Goals	Objectives + Actions
1 Leadership, Engagement and Partnerships	
Demonstrate leadership and increase engagement and partnerships in protecting coastal ecosystems.	<ul style="list-style-type: none">• Expand District involvement and work with all levels of government in marine conservation, along with business, industry and community groups.• Carry forward the remaining functioning elements from the 1999 Squamish Estuary Management Plan and Estuary Management Committee and devise a plan to move forward with next phase of estuary management.• Support federal government Ocean Protection Plan and other initiatives while connecting with grassroots interests, knowledge, and action.
2 Education and Awareness	
2.1 Promote awareness, education, and stewardship practices for healthy marine ecosystems.	<ul style="list-style-type: none">• Support and promote stewardship education and action, such as :<ul style="list-style-type: none">• Estuary education and awareness and appreciation of the Squamish Wildlife Management Area.• Potential for The Land Trust proposal for an Interpretive Centre.• Incorporating local, historical and traditional ecological knowledge in habitat protection and restoration.• Developing communications for boaters and other marine users about environmental stewardship, and respect for marine life. Include guidelines for safe fueling and sewage management.
2.2 Build broad understanding of valuable ecosystem services for the benefit of people and the environment.	
3 Conservation and Preservation	
Support preservation, conservation and protection of the natural marine environment.	<ul style="list-style-type: none">• Continue to improve/add to environmentally sensitive areas mapping for marine.• Develop marine habitat protection goals and objectives for the Squamish foreshore beyond the Squamish River Estuary.• Designate new protected areas (beyond the Squamish River Estuary) for marine habitat and species.• Consider marine use and conservation areas/zoning to help plan for and manage: development, and increasing use of the Squamish coastline by tourists, businesses, visitors, recreationists, and pets. Zoning will help to clarify and increase economic opportunities, and also ensure continued preservation of the environment.
4 Habitat Remediation / Restoration	
Support habitat enhancement and remediation of land use /water use projects.	<ul style="list-style-type: none">• Identify compensation for coastal/foreshore development projects, such as: forage fish habitat projects.• Support continued cleanup of contaminated sites. Pursue opportunities for brownfield sector funding for contaminated site remediation or risk management.• Work with local partners to advance Squamish River training berm restoration project (s) to achieve identified goals.• Establish a community habitat conservation fund to enable larger environmental conservation projects to be achieved.



Focus Area 3 con't

Coastal Ecosystems

Support stewardship and the protection of the marine environment and our local coastal ecosystems.

Draft Goals, Objectives + Emerging Actions

Goals	Objectives + Actions
5 Build Resiliency	
5.1 Increase environmental and community resiliency to impacts from sea level rise and coastal flood hazards	<ul style="list-style-type: none">• Implement new OCP Land Use Policy and Development Permit Area (Draft OCP DPA#2) that establishes requirements and constraints for site development and redevelopment proposals based on IFHMP.• To address vulnerable areas to impacts from climate hazards, per the IFHMP (Priority 2) undertake technical review including but not limited to collection of wind and wave data in Howe Sound, coastal subsidence / liquefaction assessment, special study areas for sea dike and tsunami hazard assessment.• Undertake additional special studies for the lower Squamish Estuary (Study Area #1, including the future role of Bridge Pond in stormwater management), the north end of the Oceanfront Peninsula (Study Area #2, including tie-in with future “high ground”), Highway 99 at Mamquam Blind Channel (Study Area #3), and from Loggers Lane at Highway 99 to Upper Mamquam Blind Channel (Study Area #4). Delete if this is just repeating the IFHMP• Improve and manage coastal marine ecosystem functioning:<ul style="list-style-type: none">• Identify and protect areas that act as natural storm / flood protection buffers. E.g, green/blue infrastructure are a natural service addressing climate impacts.• Utilize natural /appropriate engineered coastal flood protection mechanisms.
5.2 Increase emergency preparedness	<ul style="list-style-type: none">• Update the District’s emergency response plans to ensure that equipment and personnel are available to effect temporary closures in the event of a severe coastal flood event prior to completion of an interim sea dike perimeter.• Coordinate preparedness and improve response capacity for marine accidents and spills.
5.3 Develop partnerships and funding strategy	<ul style="list-style-type: none">• Continue to work with and enhance efforts with the District’s flood protection partners (land owners of coastal sites, Squamish Nation, regulators (IOD, Transport Canada, DFO).• Devise a funding strategy to provide a stable source of dedicated funding for dike upgrades and flood protection .
6. Water Quality	
6.1 Monitor and enhance water quality.	<ul style="list-style-type: none">• Consider selective dredging of upper MBC to improve aquatic habitat and water quality.• Support and expand the Mamquam reunion project to improve habitat, flood conveyance and water quality.
6.2 Develop and implement a water quality monitoring program.	<ul style="list-style-type: none">• Collaborate with Health Authority and waterfront partners to develop program and implement water quality testing.• Work with participating marine businesses, Squamish Harbour Authority, and marinas to promote and achieve ‘Green Marine’ designation/ environmental program compliance.
7. Enforcement	
Support enforcement efforts to eliminate illegal marine activities for the protection of the marine environment.	<ul style="list-style-type: none">• Address sewage compliance from liveaboards, dumping from boats, and fuel leaks. Explore development of a marine health bylaw that addresses waste and water use.• Collaborate with the federal government (Transport Canada, Coast Guard) to address derelict boats.



Focus Area 3 Feedback

Coastal Ecosystems

Please provide comments on draft goals, objectives and actions. On track? What are we missing? Who needs to be involved? Highlight your priorities!



Focus Area 4



Marine Gateway

Enhance the community’s connection to the water through an improved, safe and accessible gateway to our local marine environment for the social, cultural and recreational enjoyment of residents and visitors alike.

Includes considerations about:

- Enlivening the waterfront
 - Social, cultural + recreational uses of marine areas
 - Honoring and celebrating maritime history/culture
 - Coordinated use of the surrounding waters and upland water uses (commerce/industry/recreational/interpretive and/or restoration)
 - Marine / waterfront amenities and infrastructure
- Improving resident / visitor access to marine environment for recreation and enjoyment
 - Linkages to continuous greenways and blueways systems
 - Implementing coastal flood protection measures for protection of people, property and livelihoods
 - Improving water quality for health + recreation
 - ...?

Draft Goals, Objectives + Emerging Actions

Goals	Objectives + Actions
1 Gateway Access	
Secure and maintain access to the marine environment for business, recreation and enjoyment.	<ul style="list-style-type: none">• Identify key upland access points to support water-dependent uses and facilities. Work with land owners and marine users to secure access and facilitate their coordinated design and construction.
2 Marine Gateway - Facilities and Infrastructure	
2.1 Facilitate sensitive (re)development and/or enhancement of marine/waterfront amenities, facilities, and infrastructure.	<ul style="list-style-type: none">• Coordinate the design and implementation of the Downtown and Oceanfront greenways and blueways systems along the waterfront (including both east and west sides MBC) and align with District’s Active Transportation Plan.• Work with existing marine/marina facilities to assess long-term facility and servicing needs for coordinated development planning.• Identify and work with stakeholders to implement interim public boat launch solution(s) until a future permanent facility/sites are secured.• Develop boardwalks, trails, and related infrastructure that will protect the natural environment while allowing sustainable use.• Develop public amenities along trail network, e.g., covered areas and public washrooms at key locations.
2.2 Design waterfront and estuary trails and routes to ensure safe, accessible opportunities for all ages and abilities	
3 Marine/Ecotourism	
Support continued growth in sustainable and ecologically friendly tourism.	<ul style="list-style-type: none">• Work with tourism sector to enhance marine-based tourism opportunities and implement best practices in sustainable ecotourism.
4 Marine Tradition, History and Culture	
Increase awareness of and celebrate Squamish marine history, culture, and traditions	<ul style="list-style-type: none">• Identify historic infrastructure to maintain, such as docks, logging, shipping, old ship for locals/tourism viewing/appreciation.• Showcase the marine economy past and present; and First Nations traditions, culture.• Develop marine, wind, water visual public art amenities.• Develop interpretive signage program for key locations, incorporating local history, culture, First Nations traditions, etc.
5 Marine Education, Communications and Outreach	
Increase public appreciation and awareness of Squamish as a coastal community and marine assets.	<ul style="list-style-type: none">• Build on District <i>Hardwired for Adventure</i> branding for the marine environment.• Increase awareness of Squamish marine SWOT: Develop coordinated marine-based outreach/communications



Focus Area 4 Feedback

Marine Gateway

Please provide comments on draft goals, objectives and actions. On track? What are we missing? Who needs to be involved? Highlight your priorities!

