

SHÍSHÁLH-B.C. LAND USE PLAN PHASE 2 QUESTIONNAIRE

INTRODUCTION

shíshálh Nation and the Province of British Columbia are in the process of developing a joint shíshálh -B.C. Land Use Plan for the swiya (world, birthplace, lands, "territory"), on the Sunshine Coast.

In 2020-2021, the shishalh -B.C. Land Use Planning Table (LUPT) hosted engagement activities to identify interests, concerns and opportunities related to the land use planning process. The results from this first phase of engagement are found in this <u>Phase 1</u> <u>Engagement Summary Report</u>.

Since then, the LUPT has developed a series of <u>current condition assessments</u> relating to: wildlife, watershed integrity, coastal foreshore, old forests, climate change, cumulative impacts and socio-economic baseline.

The current condition and trend assessments provide us with a shared understanding of where things are right now to support us in making decisions about the swiya's future.

The results of the current condition assessments have informed some preliminary considerations for planning. These represent some initial ideas on the direction the Land Use Plan could take.

The purpose of this questionnaire is to gather feedback on our current condition assessment results and understand priorities relating to the preliminary considerations for planning.

All questions are optional, please feel free to skip over questions that are less important to you and share your thoughts on topics that are of most interest to you. Thank you for taking the time to share your thoughts.



RELATIONSHIP TO SWIYA

The word swiya describes the lands that shishalh Nation has occupied and utilized since time immemorial.

The swiya extends from xwésám (Roberts Creek) in the southeast to the height of land located north of <u>x</u>énichen (head of Queen's Reach) in the north, <u>k</u>wé<u>k</u>wenis (Lang Bay) to the west and spíl<u>k</u>sen (Texada Island) to the south.

- 1. What is your relationship to the swiya? (select all that apply)
 - a. Full-time resident
 - b. Part-time resident
 - c. Work full-time in the swiya
 - d. Work part-time in the swiya
 - e. Business owner
 - f. Tenure holder
 - g. Regular visitor (more than twice a year)
 - h. Occasional visitor (less than twice a year)
 - i. Indigenous person with ancestral ties to _____
 - j. Other:_____
 - k. None of the above

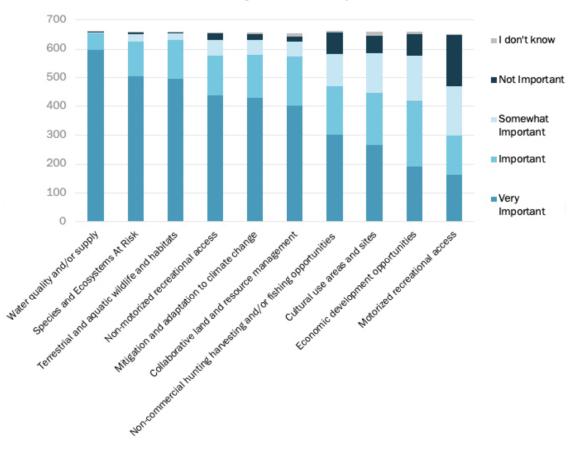




CHECKING IN ON LAND USE PLANNING VALUES

In Phase 1 engagement, we asked the public and stakeholders to provide B.C. and shishalh with feedback on the proposed values and interests we were proposing to look at during the land use planning process.

The following diagram reflects the results that the planning team heard.



How important are the following items to you when considering land and resource management in the swiya?

The table shows that the majority of people felt that water quality and/or supply was very important, and the fewest people felt that motorized recreational access was important.

You can access the full results of Phase 1 engagement here: <u>Phase 1 Engagement Summary</u> <u>Report</u>.



2. Do the results from Phase 1 align with the importance you place on these values?

🗌 Yes

🗌 No

3. Optional: If no, tell us how important the following items are to you when considering land and resource management in the swiya? For each choice, indicate level of importance on scale below

	Not	Somewhat	Important	Very	l don't
	Important	Important		Important	know
Water quality and/or supply					
Species and Ecosystems at Risk					
Terrestrial and aquatic wildlife					
and habitats					
Non-motorized recreational					
access					
Mitigation and adaptation to					
climate change					
Collaborative land and resource					
management					
Non-commercial hunting,					
harvesting and/or fishing					
opportunities					
Cultural use areas and sites					
Economic development					
opportunities					
Motorized recreational access					

4. What other words describe priorities you believe should be reflected in the Land Use Plan?



INTRODUCTION TO CURRENT CONDITION ASSESSMENTS

To set the context for this work, the shishalh Nation-B.C. Land Use Planning Table are sharing information about:

- Rights Title and Reconciliation
- shíshálh culture and heritage

They have also developed a series of current condition assessments on the following topics:

- Wildlife
 - o schetxwen (Black Bear)
 - o mayukw (Grizzly Bear)
 - o hupit (Black-tailed Deer)
 - o k'eyich (Roosevelt Elk)
 - o spipiyus (Marbled Murrelet)
 - o kakakewanxw (Northern Goshawk)
- Watershed Integrity
- Coastal Foreshore
- Old Forests
- Climate Change
- Cumulative Impacts
- Socio Economic Baseline

The following set of questions provides a summary of key findings from each current condition assessment and invites you to share your priorities relating to preliminary considerations for planning.

You can access this information and current condition assessments here.

Find more information about what a current condition assessment is and how they are conducted here please see the "What is a CCA?" document in the <u>document library</u>.





WILDLIFE: SCHETXWEN (BLACK BEAR) AND MAYUKW (GRIZZLY BEAR)

Both schetxwen (Black Bear) and mayukw (Grizzly Bear) hold immense importance in the swiya due to their ecological role and cultural significance. They both play a role in dispersing seeds and cycling nutrients and their presence is vital to the health of habitats.

Key findings from the current condition assessment on schetxwen (Black Bear) and mayukw (Grizzly Bear) include:

- The swiya currently provides abundant and well distributed suitable habitat to sustain schetxwen (Black Bear) populations. Intense forest harvesting can reduce quality denning opportunities
- The northern part of the swiya is inaccessible by road resulting in lower recreation use and limited infrastructure development which is favourable for mayukw (Grizzly Bear)

Find more information about schetxwen (Black Bear) and mayukw (Grizzly Bear) current condition assessment <u>here</u>.



5. The following statements feature preliminary considerations for planning relating to schetxwen (Black Bear) and mayukw (Grizzly Bear).

For each choice, indicate how each of the following statements align with your priorities.

	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
The Land Use Plan should support needs of					
schetxwen (Black Bear) populations by					
ensuring habitat connectivity and forest					
retention					
The Land Use Plan management					
recommendations should consider where					
human conflicts with schetxwen (Black Bear)					
occur					
The Land Use Plan should establish mayukw					
(Grizzly Bear) population recovery areas					
mayukw (Grizzly Bear) population recovery					
areas should minimize industrial and					
recreational disruptions to active mayukw					
areas					
The Land Use Plan should prioritize					
preservation and rehabilitation of important					
schelchalilhten (Salmon) species and their					
habitats					

6. What other considerations or questions relating to schetxwen (Black Bear) and mayukw (Grizzly Bear) would you like to share?



WILDLIFE: HUPIT (BLACK-TAILED DEER) AND K'EYICH (ROOSEVELT ELK)

hupit (Black-tailed Deer) and k'eyich (Roosevelt Elk) play a crucial role in their ecosystems and hold significant cultural, economic, social, and environmental importance. For the shishalh community, hupit are a deeply valued resource, providing food, clothing, tools, and for ceremonial use.

Key findings from the current condition assessment on hupit (Black-Tailed Deer) and k'eyich (Roosevelt Elk) include:

- Suitable winter habitat is the primary limiting factor for hupit (Black-Tailed Deer) survival and is not as prevalent as suitable spring habitat
- The relocation of k'eyich (Roosevelt Elk) from Vancouver Island to the swiya has been successful since it started in 1987. k'eyich populations within the swiya are stable to increasing.

Find more information about hupit (Black-Tailed Deer) and k'eyich (Roosevelt Elk) current condition assessment <u>here</u>.



7. The following statements feature preliminary considerations for planning relating to hupit (Black-Tailed Deer) and k'eyich (Roosevelt Elk).

For each choice, indicate how each of the following statements align with your priorities.

	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
The Land Use Plan should protect					
suitable winter habitat for hupit (Black-					
Tailed Deer)					
The Land Use Plan should protect					
suitable winter habitat for k'eyich					
(Roosevelt Elk) which includes mature/old					
forest stands and riparian areas in valley					
bottoms					
Management practices should consider					
how they will affect opportunities for					
hunting and cultural use					
Management practices should minimize					
k'eyich (Roosevelt Elk)-human					
interactions (for example managing					
populations near highways)					
Management practices should consider					
k'eyich (Roosevelt Elk) browsing pressures					
on tree plantations and regenerating					
forests					

8. What other considerations or questions relating to hupit (Black-Tailed Deer) and k'eyich (Roosevelt Elk) would you like to share?



WILDLIFE: SPIPIYUS (MARBLED MURRELET) AND KAKAKEWANXW (NORTHERN GOSHAWK)

spipiyus (Marbled Murrelet) rely heavily on old forests, making them important indicators of the health of old forest ecosystems. The presence of kakakewanxw (Northern Goshawk) suggests that forest conditions support a diverse habitat and a rich food web, providing ample prey for these powerful birds of prey. Birds of prey like kakakewanxw are seen as story tellers, providing lessons and guidance to the shíshálh people.

Key findings from the current condition assessment on spipiyus (Marbled Murrelet) and kakakewanxw (Northern Goshawk) include:

- 50% of the suitable nesting habitat for spipiyus (Marbled Murrelet) are within protected areas
- To meet the targets for protected suitable habitat areas set out in the <u>BC</u> <u>Implementation Plan for Recovery of Marbled Murrelet</u>, additional protection of suitable habitat is needed

Find more information about spipiyus (Marbled Murrelet) and kakakewanxw (Northern Goshawk) current condition assessment <u>here</u>.



9. The following statements feature preliminary considerations for planning relating to spipiyus (Marbled Murrelet) and kakakewanxw (Northern Goshawk).

For each choice, indicate how each of the following statements align with your priorities.

	Strongly	Somewhat	Neutral	Somewhat	Strongly
	agree	agree		disagree	disagree
The Land Use Plan should improve					
spipiyus (Marbled Murrelet) nesting habitat					
availability by limiting forest fragmentation					
and conserving suitable old-forests					
The Land Use Plan should find					
opportunities to identify, track and					
increase the number of kakakewanxw					
(Northern Goshawk) nest sites					

10. What other considerations or questions relating to spipiyus (Marbled Murrelet) and kakakewanxw (Northern Goshawk) would you like to share?



WATERSHED INTEGRITY

42 unique watersheds in the shishalh swiya sustain sensitive and rich ecosystems and provide vital water to over 30,000 people in the region. Whether supporting shishalh Nation ways of life or key salmon spawning areas, these watersheds are the heartbeat of the swiya.

Key findings from the current condition assessment on watershed integrity include:

- Risks to aquatic habitat vary across the swiya. Areas with the highest risk of high flow events are areas with higher road density and disturbance from development
- Riparian disturbance is widespread; however, conservation efforts led by shishalh Nation have successfully reduced human impacts near riparian areas

Find more information about watershed integrity at the current condition assessment here.



11. The following statements feature preliminary considerations for planning relating to watershed integrity

For each choice, indicate how each of the following statements align with your priorities.

	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
The Land Use Plan should prioritize	ugree	ugree		alsagree	disagree
management of areas with high					
concentrations of small streams, lakes, or					
wetlands (aquatic habitats)					
The Land Use Plan should prioritize					
management based on the watersheds					
that are most sensitive to impacts					
The Land Use Plan should prioritize					
watershed management based on					
ecological value (human water supply,					
schelchalilhten (Salmon) spawning areas)					
The Land Use Plan should manage					
upstream headwaters (e.g. increase					
riparian protection, road rehabilitation) to					
mitigate downstream impacts					
Watershed management should adapt to					
changing climatic and environmental					
conditions					

12. What other considerations or questions relating to watershed integrity would you like to share?



COASTAL FORESHORE

The foreshore is central to the shishálh way of life. It is connected to the time of creation, tied to the stories of the shishálh people, and is part of shishálh identity. The abundance of biodiversity and stunning landscapes of the foreshore supports local fisheries, recreational activities, and tourism, which are key to the region's economy while coastal properties are highly sought after for their natural beauty.

Key findings from the current condition assessment on coastal foreshore include:

- Eelgrass beds serve as essential habitats for juvenile fish. The most prominent beds were observed in kalpilin (Pender Harbour), alhtulich (Porpoise Bay) and North sxwelap (Thormanby Island)
- Kelp beds, clam beds and sponge reefs contribute significantly to marine biodiversity and were found in all areas surveyed
- 10 key salmon spawning areas crucial for salmon conservation have been identified
- Sea level rise over the next 75 years may have significant impacts on the Coastal Foreshore

Find more information about the coastal foreshore at the current condition assessment <u>here</u>.



13. The following statements feature preliminary considerations for planning relating to the coastal foreshore conditions.

For each choice, indicate how each of the following statements align with your priorities.

	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
The Land Use Plan should prioritize					
management of areas with overlapping					
coastal foreshore values (e.g., backshore					
habitats, eelgrass bed, kelp beds, clam beds,					
key spawning areas, sponge reefs)					
The Land Use Plan should prioritize foreshore					
restoration in areas with high significance (for					
example clam beaches with high restoration					
potential)					
The Land Use Plan should include measures					
to mitigate human impacts on the coastal					
foreshore					
The Land Use Plan should include sea level					
rise adaptation and mitigation opportunities					
in areas where there are the highest impacts					
to property, homes, businesses and road					
infrastructure					

14. What other considerations or questions relating to coastal foreshores would you like to share?



OLD FORESTS

Old forests (forests over 200 years old) provide immense cultural, ecological, economic, and social value. The shíshálh Nation way of life is tightly linked to the forests that continue to provide food, medicines, spiritual and ceremonial sites, cedar wood and bark, all of which contribute to shíshálh identity, language, and culture. Old forests support a wide range of ecosystem functions and values including biodiversity, ecosystem resilience, water storage, cultural use, commercial timber, carbon storage and recreation. There is a growing awareness of the impacts of harvesting, development and climate change that increase the risk of losing forest biodiversity and the need to balance a mix of economic and human uses.

Key findings from the current condition assessment on old forests include:

- There is good forest connectivity throughout the swiya across all elevations for Coastal Douglas Fir, Coastal Western Hemlock and Mountain Hemlock
- When looking only at Old Forests (200+ years) at lower elevations connectivity is highly fragmented
- There are significant gaps in forest connectivity for Old Forests on the western side of the swiya (near Lois Lake and the Sechelt Peninsula)
- Watersheds with the highest risk to biodiversity include kalpilin (Haslam Creek), kelkalaxay (Osgood Creek), stikiwshen tselalh (Lois Lake), and tikin (Freil).

Find more information about old forests at the current condition assessment here.



15. The following statements feature preliminary considerations for planning relating to old forests.

For each choice, indicate how each of the following statements align with your priorities.

	Strongly	Somewhat	Neutral	Somewhat	Strongly
	agree	agree		disagree	disagree
The Land Use Plan should identify and					
rank the most significant threats to					
various species and ecosystems to					
inform Old Forest protection measures					
The Land Use Plan should identify					
forested areas with Old Forest					
recruitment potential (forests that if					
protected over time would contribute					
to sustaining biodiversity)					
The Land Use Plan should include					
protection measures for rare Old					
Forest areas (Old Forest Sitka Spruce					
and Maple Forest)					

16. What other considerations or questions relating to old forests would you like to share? If you disagreed with any of the previous statements, please elaborate on why.



CLIMATE CHANGE

The effects of climate change are already being felt in the swiya's waters, where warming temperatures and ocean acidification are stressing marine species, including shellfish and schelchalilhten (Salmon). Adapting to these changes is crucial to preserving the ecosystems, water quality, cultural heritage, health, and well-being of all people in the swiya.

Key findings from the current condition assessment on climate change identify that

- The locations of forest ecosystems are expected to shift upwards in elevation and northward (Coastal Western Hemlock and Mountain Hemlock) and some may disappear entirely (Coastal Douglas Fir)
- Forest ecosystems like the Coastal Redwood Forest and Coastal Mixed Evergreen may migrate into the swiya from the south
- Low-lying coast areas in the south, which overlap population centers, are at the highest risk to sea level rise impacts

Find more information about climate change at the current condition assessment <u>here</u>.



17. The following statements feature preliminary considerations for planning relating to climate change.

For each choice, indicate how each of the following statements align with your priorities.

	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
Long-term monitoring of key					
environmental indicators to support					
adapting to climate change is important					
The Land Use Plan should prioritize					
Climate Refugia Areas and their					
connectivity when planning for wildlife					
habitat					
The Land Use Plan should incorporate					
protective measures for wetland and					
stream networks					
The Land Use Plan should prioritize					
sustaining Western Red Cedar in suitable					
habitat and accessible forest stands					
The Land Use Plan should consider the					
impacts of sea level rise in areas where sea					
level rise will impact cultural, ecological					
and socioeconomic values					

18. What other considerations or questions relating to climate change would you like to share?



CUMULATIVE IMPACTS

Cumulative impacts in the natural resource sector are critically important to understand because they represent the combined impacts of multiple activities—such as logging, mining, fishing, and development—on the environment over time. In the swiya, these activities can place tremendous pressure on ecosystems that local communities, including the shishálh Nation, depend on for their livelihoods, culture, and well-being.

Key findings from the current condition assessment on cumulative impacts include:

- Every watershed within the swiya has been affected by human activities to some extent
- Impacts include forest harvesting, coastal foreshore use, mining, recreation use, energy infrastructure and contamination/waste sites
- The highest impacts are in the southern portion of the swiya
- Less accessible northern regions of the swiya exhibit moderate to high impacts

Find more information about cumulative impacts at the current condition assessment here.



19. The following statements feature preliminary considerations for planning relating to cumulative impacts.

For each choice, indicate how each of the following statements align with your priorities.

	Strongly	Somewhat	Neutral	Somewhat	Strongly
	agree	agree		disagree	disagree
Prioritize mitigation of negative					
environmental impacts in areas with high					
or very high cumulative impacts ratings					
Guidelines for new or existing activities in					
the swiya should establish environmentally					
sustainable limits					
The Land Use Plan should support a					
guardianship program that reduces					
unauthorized use of natural resources					
The Land Use Plan should support public					
education that promotes respectful					
stewardship of land					

20. What other considerations or questions relating to cumulative impacts would you like to share?



SOCIO ECONOMIC BASELINE

Through the land use planning process, shishalh and B.C. are aiming to balance cultural and environmental values with development in ways that enhance the resilience and sustainability of local economies, ensuring that resource use is strategically planned to address the needs of the region and the evolving challenges of climate change and environmental degradation.

A socio-economic baseline provides information about the current conditions before a land use plan is finalized and implemented. Prior to finalization of the Land Use Plan, a second socio-economic study will determine potential impacts of the Land Use Plan to socioeconomic conditions.

Find more information about the socio-economic baseline at the current condition assessment <u>here</u>.



21. The following statements feature preliminary considerations for planning relating to socio economic development.

For each choice, indicate how each of the following statements align with your priorities.

	Strongly agree	Somewhat agree	Neutral	Somewhat disagree	Strongly disagree
The Land Use Plan should consider long-term				J	
sustainable timber supply while maintaining					
ecosystem integrity					
The Land Use Plan should augment the forest-					
based economy through value-added					
secondary forest products (e.g. salal,					
mushrooms)					
The Land Use Plan should consider the social					
and economic impacts of land-use and					
conservation designations on resource-based					
industries (i.e. mining and clean energy)					
The Land Use Plan should consider the social					
and economic impacts of land-use and					
conservation designations on recreation and					
tourism					

22. What other considerations or questions relating to socio economic development would you like to share?



DEMOGRAPHICS

These optional demographic questions help us understand who we have reached in this engagement and will help us target future engagement.

23. Optional: What community are you a part of? (select all that apply)

- Port Mellon
- □ Gambier Island
- □ Hopkins Landing
- □ Gibsons
- □ Roberts Creek
- □ Sechelt
- □ Halfmoon Bay
- Madeira Park
- □ Garden Bay
- □ Pender Harbour
- □ Irvines Landing
- □ Earls Cove

- □ Egmont
- Powell River
- Wilson Creek
- shíshálh Nation
- Tla'amin Nation
- Skwxwu7mesh/Squamish
 Nation
- Other community on the Sunshine Coast (Please specify):
- Other community off the Sunshine Coast

24. Optional: Which of the following categories best describe the industry you primarily work in?

- □ Recreation and Tourism
- □ Hospitality
- □ Agriculture
- □ Fishing and/or Hunting
- □ Forestry
- □ Mining/mineral exploration
- □ Manufacturing
- □ Environmental Services
- □ Retail, wholesale Trade
- Information and/or Technology
- □ Education
- Health and/or Social Services
- □ Finance and/or insurance
- □ Art and/or entertainment

- □ Public service
- Administration and/or business support
- Real estate and development
- Transportation and/or warehousing
- □ Utilities
- □ Legal services
- □ Student
- □ Retired
- □ Homemaker
- □ Environmental advocacy
- □ Small business
- □ Prefer not to say
- □ Other:_____



25. Any additional thoughts you would like to share with the Land Use Planning Table?

CLOSING

Thank you for sharing your thoughts. Your input will contribute to the Land Use Planning Table's understanding of interests on key management issues. This knowledge will be applied when the Land Use Planning Table analyses the potential benefits of different management options and will inform management recommendations.

The results of this questionnaire will be summarized in a Phase 2 Engagement Summary and made available on our <u>project website</u>. At this website you can sign up to receive updates on this planning project including future opportunities to get involved.