



Source to Sea:

A Watershed Scale Mapping Project

Water Summit November 3, 2021

Background

- Source to Sea Project with the Municipal Natural Assets Initiative (MNAI) began in the fall of 2020
- These assets include the forests, wetlands and riparian areas.
- To understand, measure, value and, ultimately, manage the natural assets within the watershed

Goals of the Project

- To establish a baseline inventory of the natural assets that support drinking water services
- To provide a condition assessment of the identified areas
- To understand how to determine the level of service of the identified natural assets, and
- To make recommendations for best management practices of the natural assets identified.

Current Status of Project - Phase One

- Phase one of the Source to Sea Project is now complete
- Condition assessment of the assets within the aquifer recharge area, including the
 - the forests,
 - wetlands and
 - riparian areas.

Source to Sea Dashboard

Town of Gibsons Natural Assets Inventory - Summary

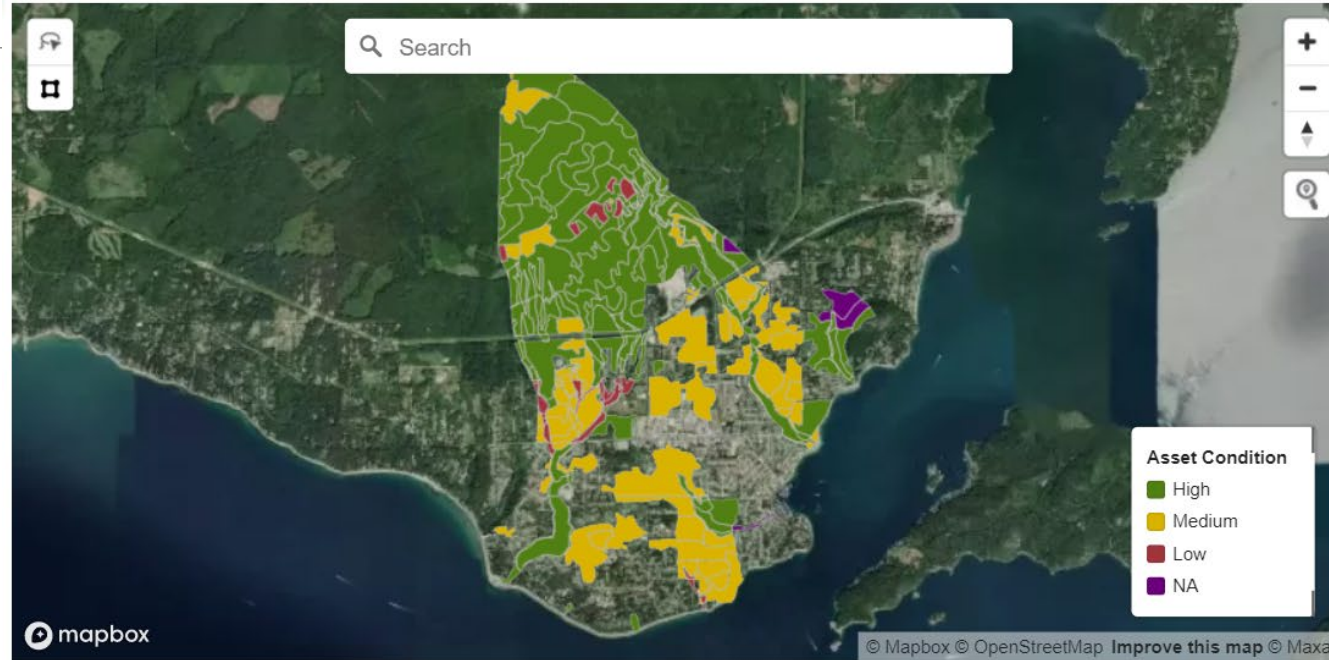
Summary

Forest

Riparian

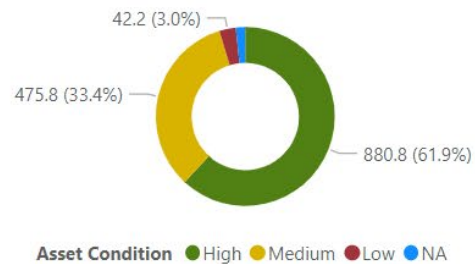
Wetland

Recreation

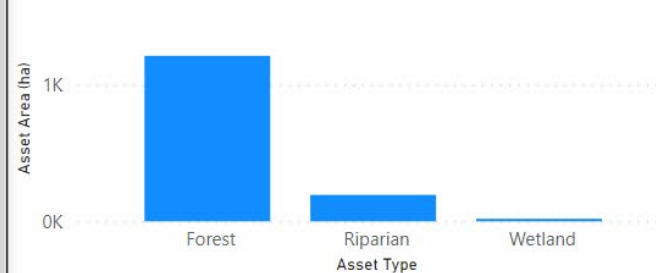


ASSET_ID	Asset Type	Asset Condition	Asset Area (ha)
1	Forest	High	12.74
2	Forest	High	11.47
3	Forest	High	34.71
4	Forest	High	0.05
5	Forest	High	18.09
6	Forest	High	4.79
7	Forest	High	18.59
8	Forest	Medium	16.73
9	Forest	High	24.94
10	Forest	High	21.17
11	Forest	High	0.52
12	Forest	Medium	8.59
13	Forest	High	8.68
14	Forest	High	1.91
15	Forest	High	3.65
16	Forest	High	3.42
17	Forest	High	12.09
18	Forest	Low	1.75
19	Forest	Medium	3.48
20	Forest	Medium	10.84
21	Forest	NA	2.90
22	Forest	High	30.61
23	Forest	Low	1.73
24	Forest	High	1.05
25	Forest	High	1.11
26	Forest	Low	4.93
27	Forest	High	4.80
28	Forest	Low	0.60
29	Forest	High	11.66
Total			1,423.36

Asset Area by Condition



Total Area by Asset Type



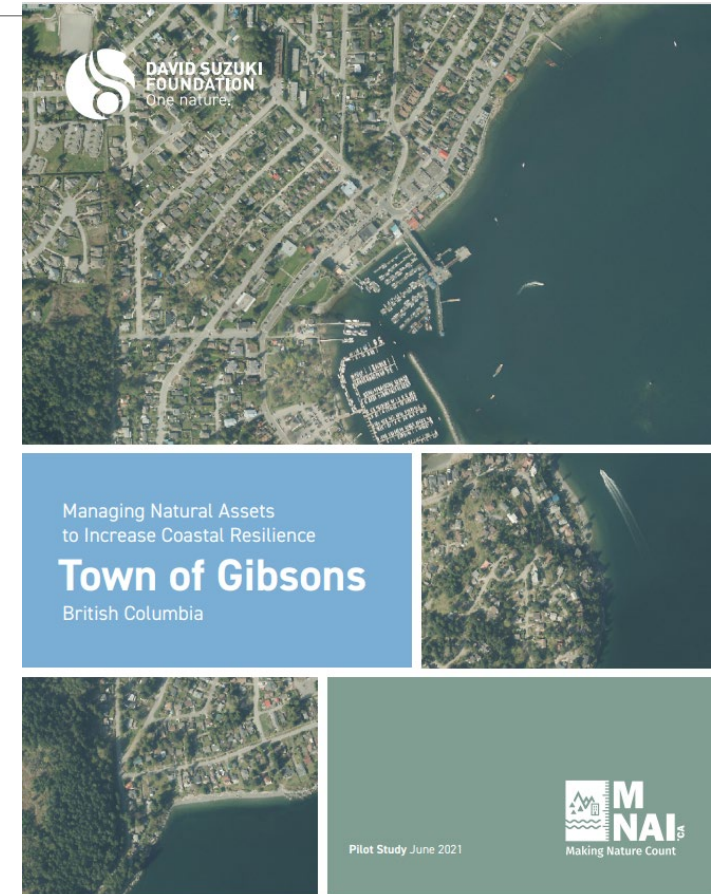
Current Status of Project - Phase Two

- Phase two includes a Risk identification of the assets
 - erosion,
 - development pressure,
 - invasive species,
 - drought,
 - deforestation, and
 - unauthorized dumping of green waste in sensitive areas.

Next, we will prioritize the scenarios to model

Cohesion with other Town Projects

- The update to the aquifer mapping study 2021
- Supporting recommendations of the 2018 ISMP:
 - Surface Water (Creek) Monitoring- hydrometric stations
 - Benthic sampling
 - Study the hydrology of Charman Lands
- Charman Creek Assessment
- Coastal Resilience Project



Collaborations and Partnerships

- Skwxwú7mesh Úxwumixw
- Sunshine Coast Streamkeepers
- Healthy Watersheds Initiative
- FLNRORD
- BCTS
- Sunshine Coast Regional District
- Átl'ka7tsem/Howe Sound Biosphere Region Initiative Society

Next Steps

- Identifying options to protect the Natural Assets, to develop management strategies and to identify any inputs or guidance to policy and financial planning.
- Asset Registry Dashboard, with condition assessments complete.
- Modelling of current conditions
- Economic valuation of watershed natural assets
- Framework to connect Coastal Resilience Project and Source to Sea methodologies
- Final report, technical document and road map