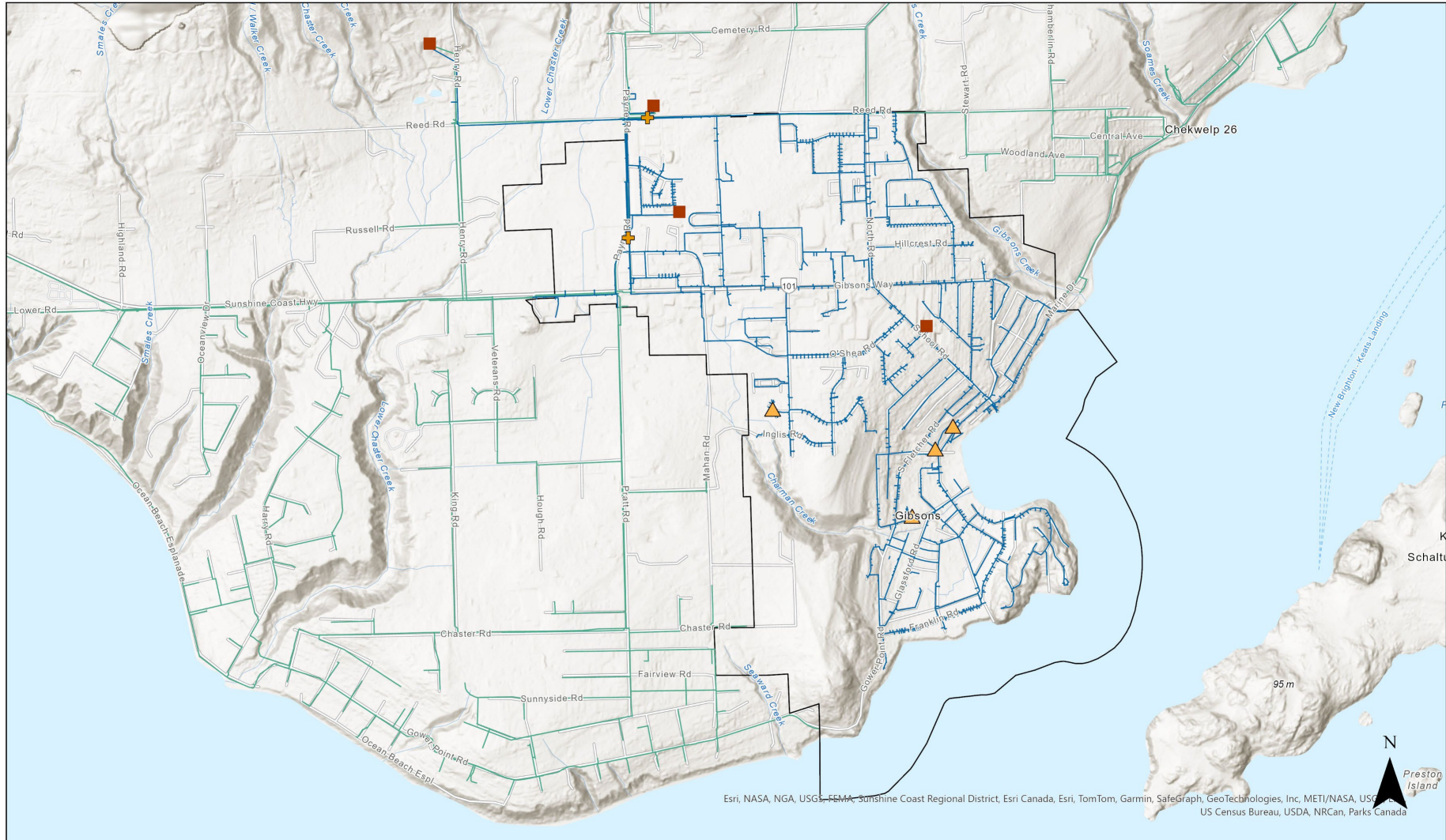




WATER INFRASTRUCTURE

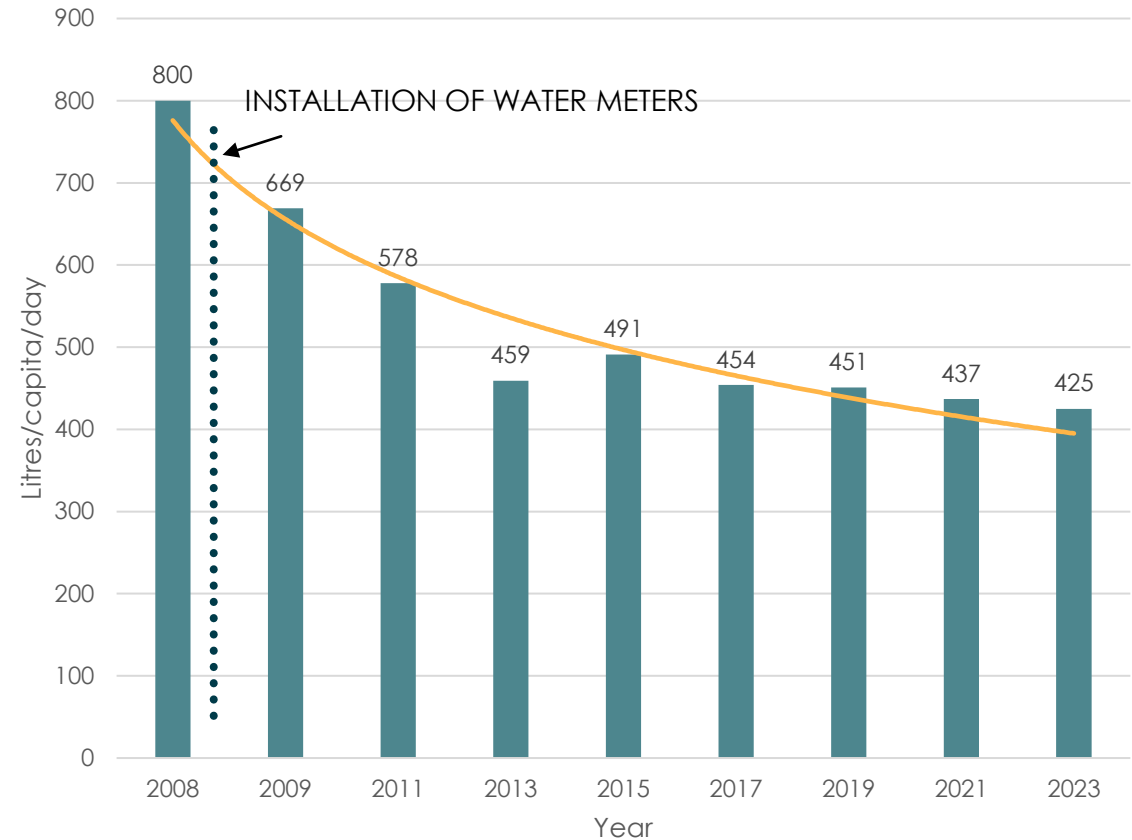




CONSERVATION THROUGH

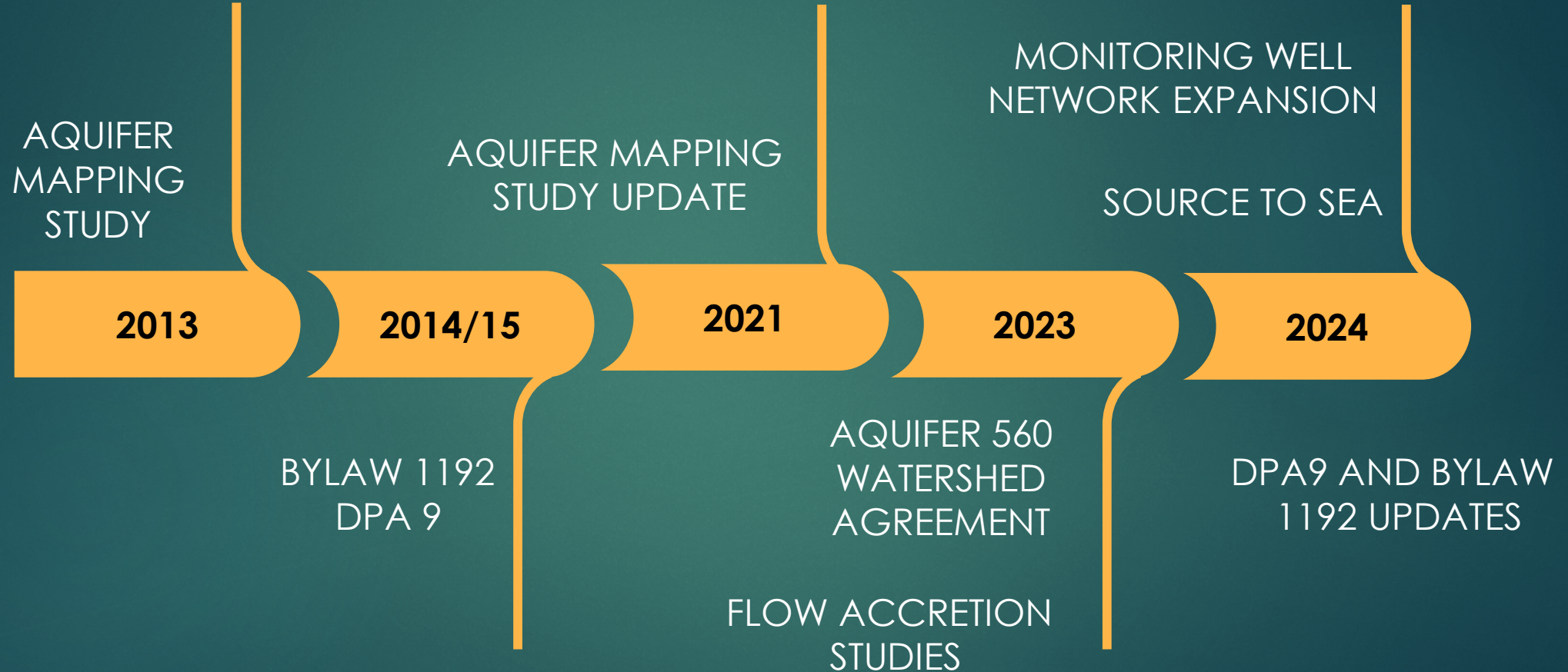
- ▶ EDUCATION
- ▶ VOLUMETRIC BILLING
- ▶ LEAK DETECTION

Average Annual Water Consumption
(Residential, Commercial & System Losses)



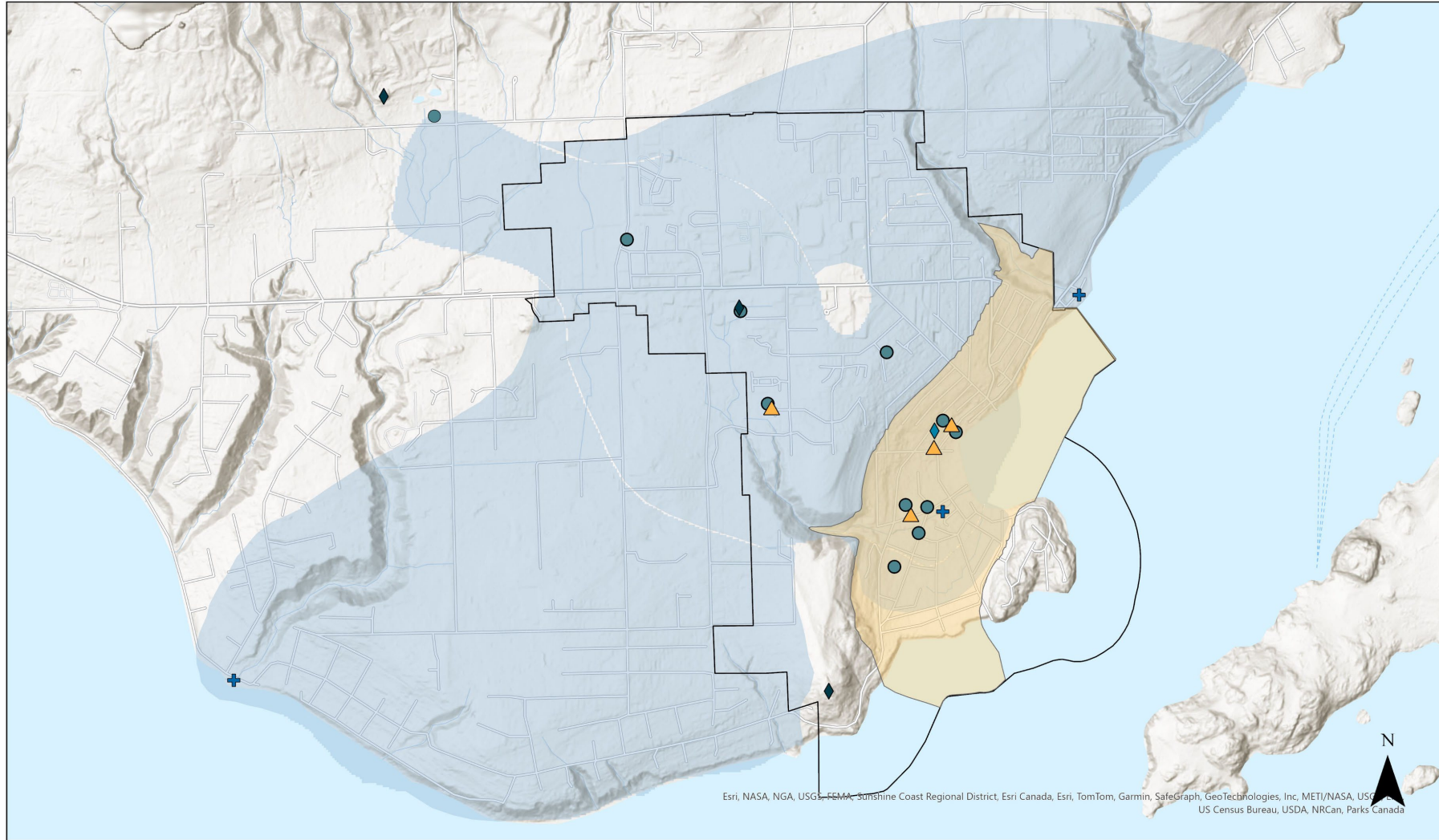


NATURAL ASSET APPROACH TO AQUIFER MANAGEMENT

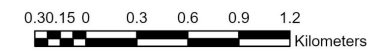




MONITORING NETWORK



- + Creek Monitoring Station
- ▲ Supply Well
- Town of Gibsons
- DPA9 subarea
- ◆ Weather Station
- Monitoring Well
- Aquifer 560





AQUIFER 560 WATERSHED AGREEMENT



- Increase levels of service
- Coordinate Water Supply Strategies
- Align Aquifer Protection Strategies, Development Permit Areas, and Emergency Response Plans
- Aquifer Monitoring and Modelling Programs
- Plan for Sustainable Operation of the two Water Systems



REGIONAL WATER STRATEGY - RECOMMENDED ACTIONS

CURRENT REGIONAL WATER SYSTEMS



GIBSONS WATER SYSTEM

- Population currently serviced: **4,758**
- Percentage of the region: **16%**
- Average daily water use: **425 U/c/d**

CHAPMAN SYSTEM

- Population currently serviced: **21,000**
- Percentage of the region: **70%**
- Average daily water use: **562 U/c/d**
- Dam storage: **1.76 million m3**
- Daily EFN: **17,280 m3**

Esri, NASA, NGA, USGS, Sunshine Coast Regional District, Esri Canada, Esri, Garmin, SafeGraph, METI/NASA, USA, USGS, EPA, USDA, NR, Parks Canada

Legend

- | | | | | | |
|---|--|--|--|---|---|
| ■ Edwards Lake | — Chapman Creek | ● Church Road Well | SCR D Electoral Areas | ● Town Well 1 | ● Town Well 4 |
| ■ Chapman Lake | Chapman WTP | ● Langdale Well | Aquifer 560 Recharge | ● Town Well 3 | ● Town Well 6 |
| — Gray Creek | ● Maryanne West Well | — SCR D Water Mains | — ToG Water Mains | ● Town Well 3 | Town of Gibsons |





REGIONAL WATER STRATEGY – RECOMMENDED ACTIONS

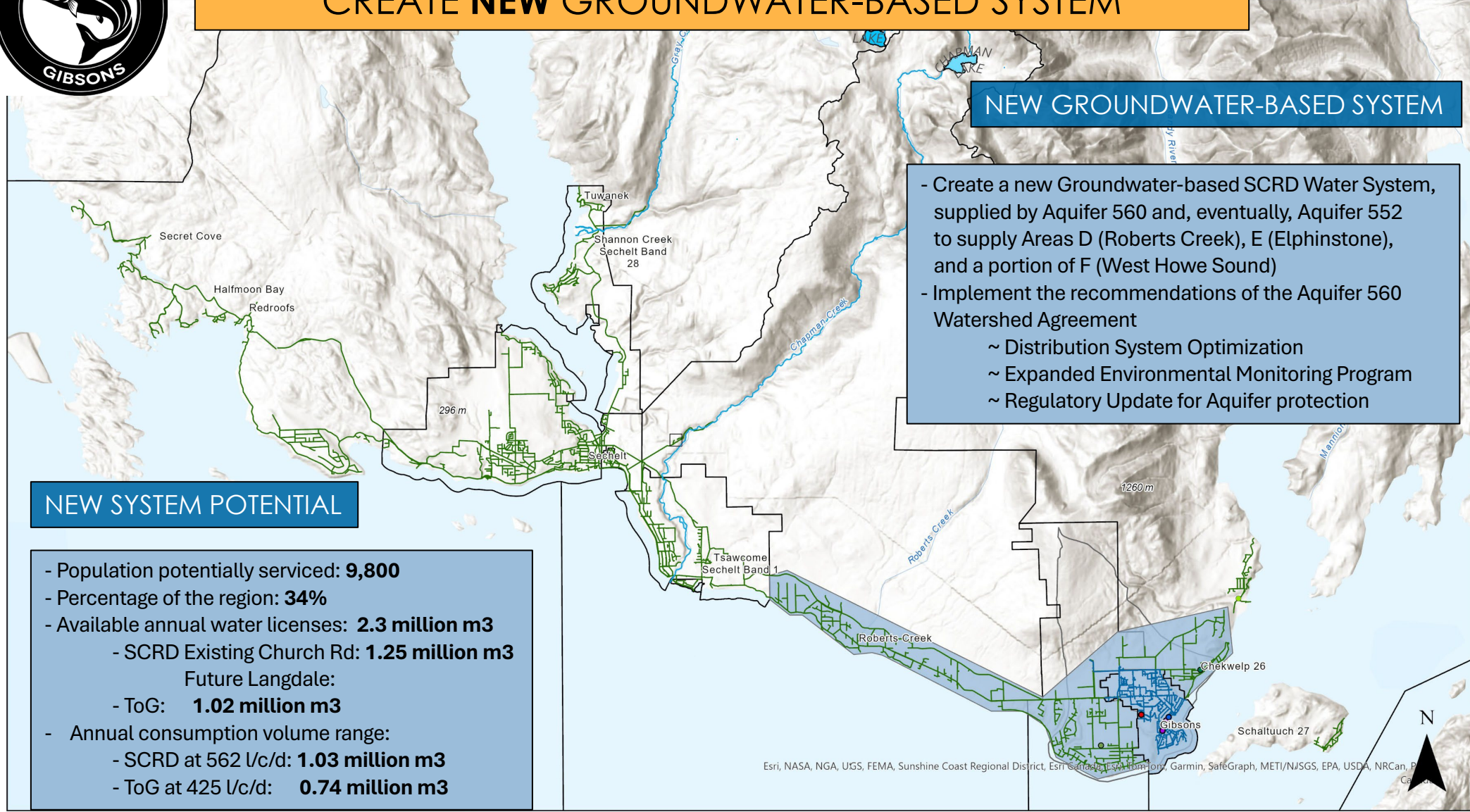
CREATE **NEW** GROUNDWATER-BASED SYSTEM

NEW GROUNDWATER-BASED SYSTEM

- Create a new Groundwater-based SCRD Water System, supplied by Aquifer 560 and, eventually, Aquifer 552 to supply Areas D (Roberts Creek), E (Elphinstone), and a portion of F (West Howe Sound)
- Implement the recommendations of the Aquifer 560 Watershed Agreement
 - ~ Distribution System Optimization
 - ~ Expanded Environmental Monitoring Program
 - ~ Regulatory Update for Aquifer protection

NEW SYSTEM POTENTIAL

- Population potentially serviced: **9,800**
- Percentage of the region: **34%**
- Available annual water licenses: **2.3 million m³**
 - SCRD Existing Church Rd: **1.25 million m³**
 - Future Langdale: **ToG: 1.02 million m³**
- Annual consumption volume range:
 - SCRD at 562 l/c/d: **1.03 million m³**
 - ToG at 425 l/c/d: **0.74 million m³**



Esri, NASA, NGA, UGS, FEMA, Sunshine Coast Regional District, Esri Canada, Garmin, SafeGraph, METI/NJSGS, EPA, USDA, NRCan, P...

Legend

- | | | | | | | |
|--------------|--------------------|------------------|-----------------------|----------------------|-------------|-----------------|
| Edwards Lake | Chapman Creek | Church Road Well | SCRD Electoral Areas | Aquifer 560 Recharge | Town Well 3 | Town Well 6 |
| Chapman Lake | Chapman WTP | Langdale Well | New SCRD Water System | ToG Water Mains | Town Well 3 | Town of Gibsons |
| Gray Creek | Marianne West Well | SCRD Water Mains | | Town Well 1 | Town Well 4 | |

