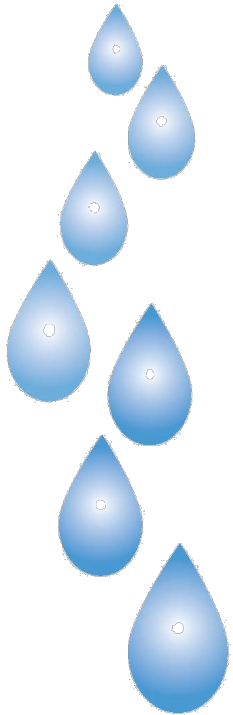




DRINKING WATER
WATERSHED
PROTECTION



Your Community's Water

Presentation by Julie Pisani

Regional District of Nanaimo

Drinking Water and Watershed Protection
Program Coordinator

Drinking Water and Watershed Protection



Science

Learn more about water in the region through scientific studies and data collection



Planning

Use this knowledge to inform land use decisions



Stewardship

Empower communities to protect our water & the environment

Why?



Our drinking water comes from lakes, rivers and underground sources - it is up to us to protect it.

The quality and amount of water in the ground and in our lakes & rivers is directly affected by what we do on the land.

Fish and other important aquatic species rely on clean and plentiful water for habitat.



District of Lantzville



A regional program to learn more about our watersheds and encourage water efficiency and watershed protection.



Water Sources: surface water



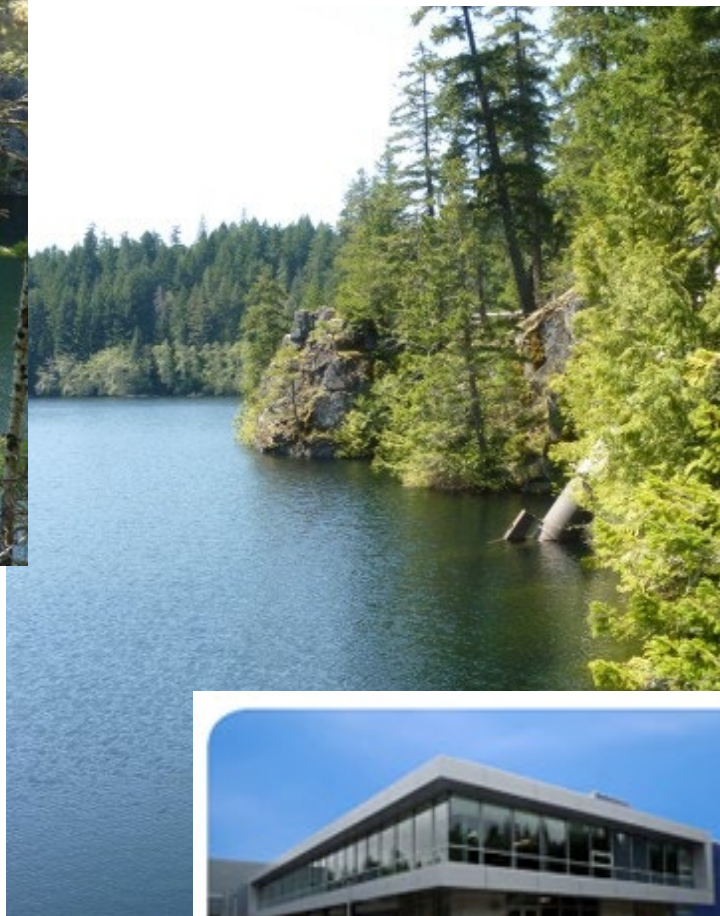
City of Nanaimo's
Jump Lake Reservoir
Stores 18 billion litres



Jump Creek



Water Supply: Surface Water



- South Fork of the Nanaimo River
- Dam & City of Nanaimo Water Intake



CoN Water Treatment Plant

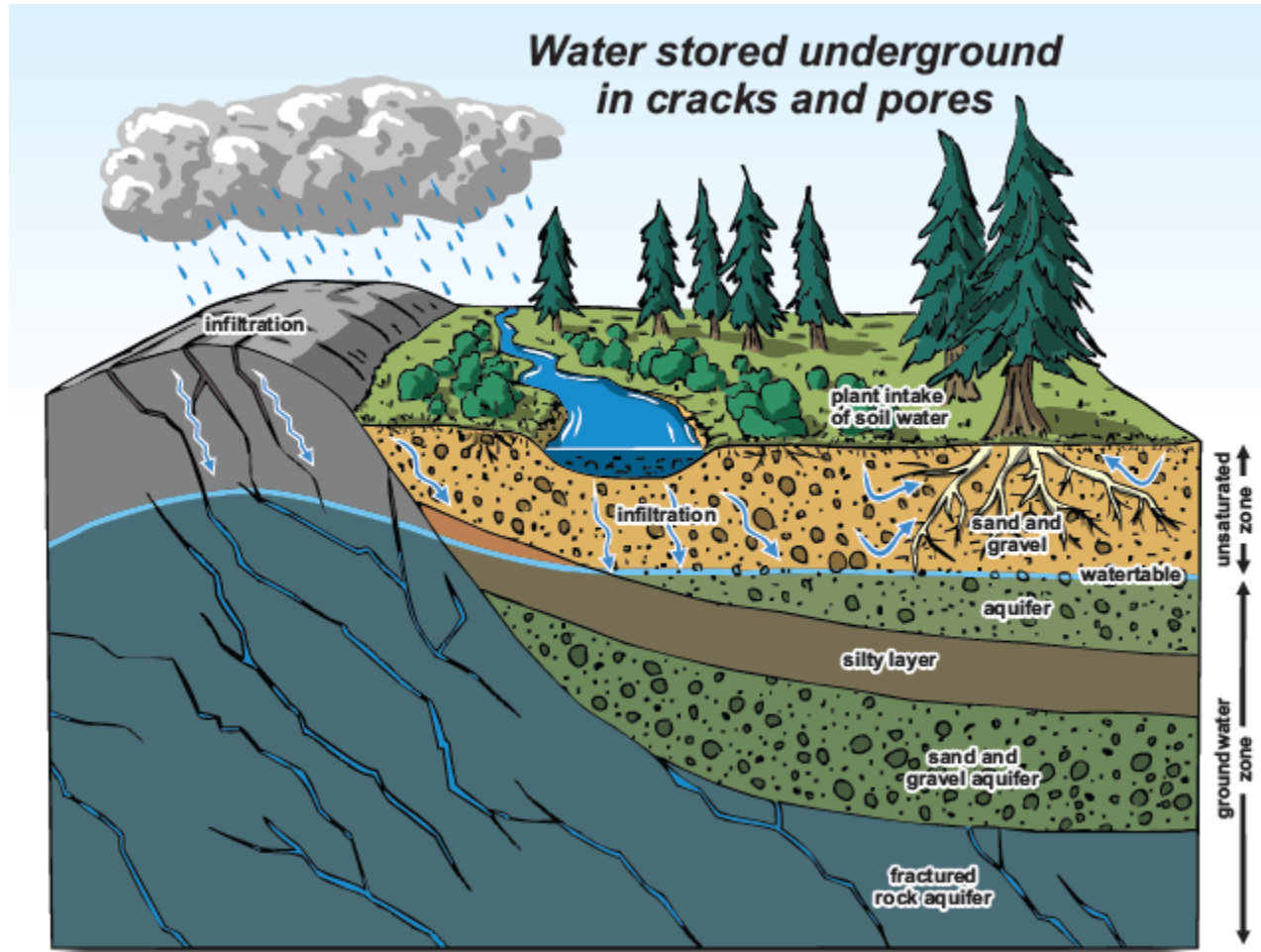


Water Sources: groundwater aquifers

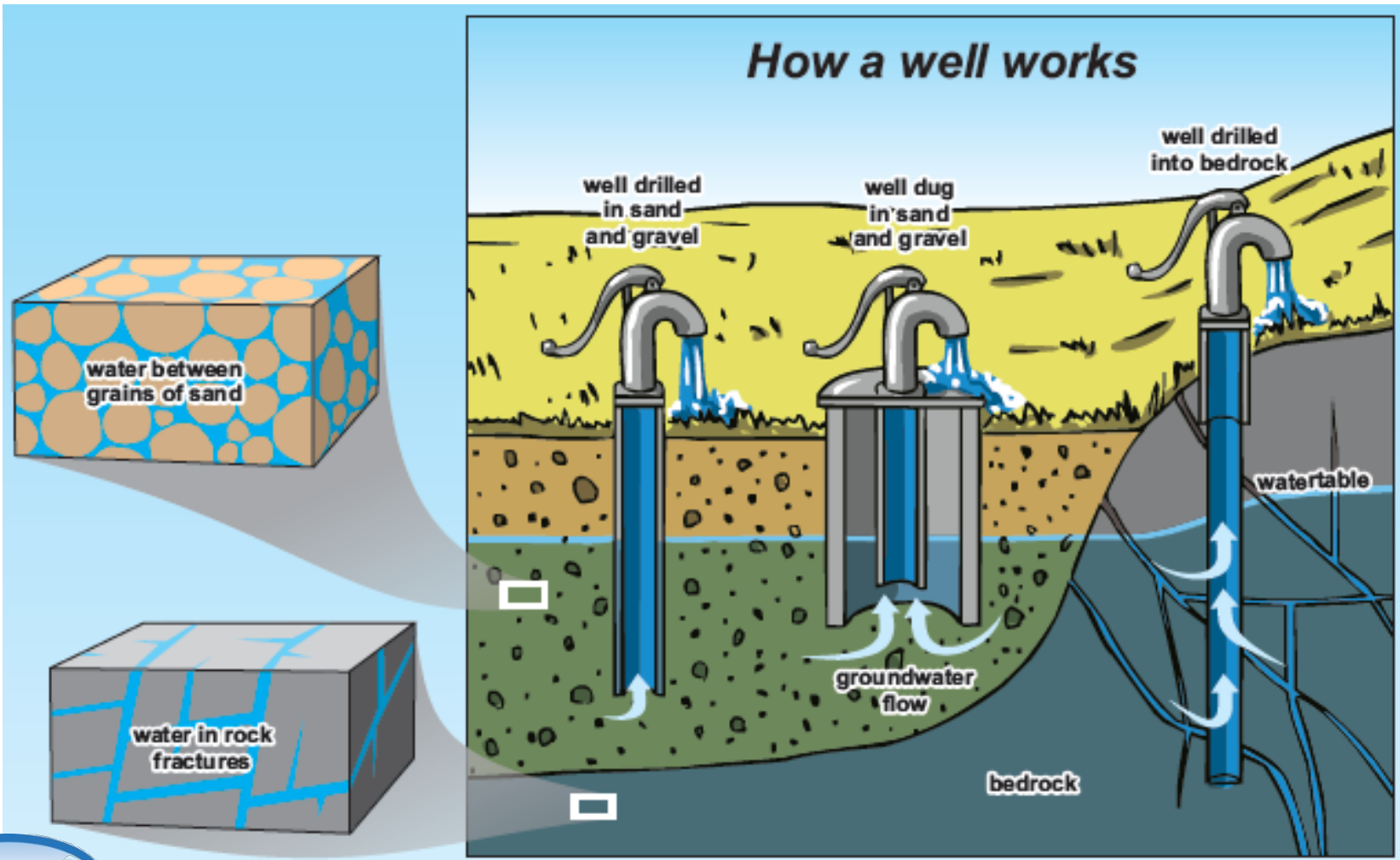
North
Cedar

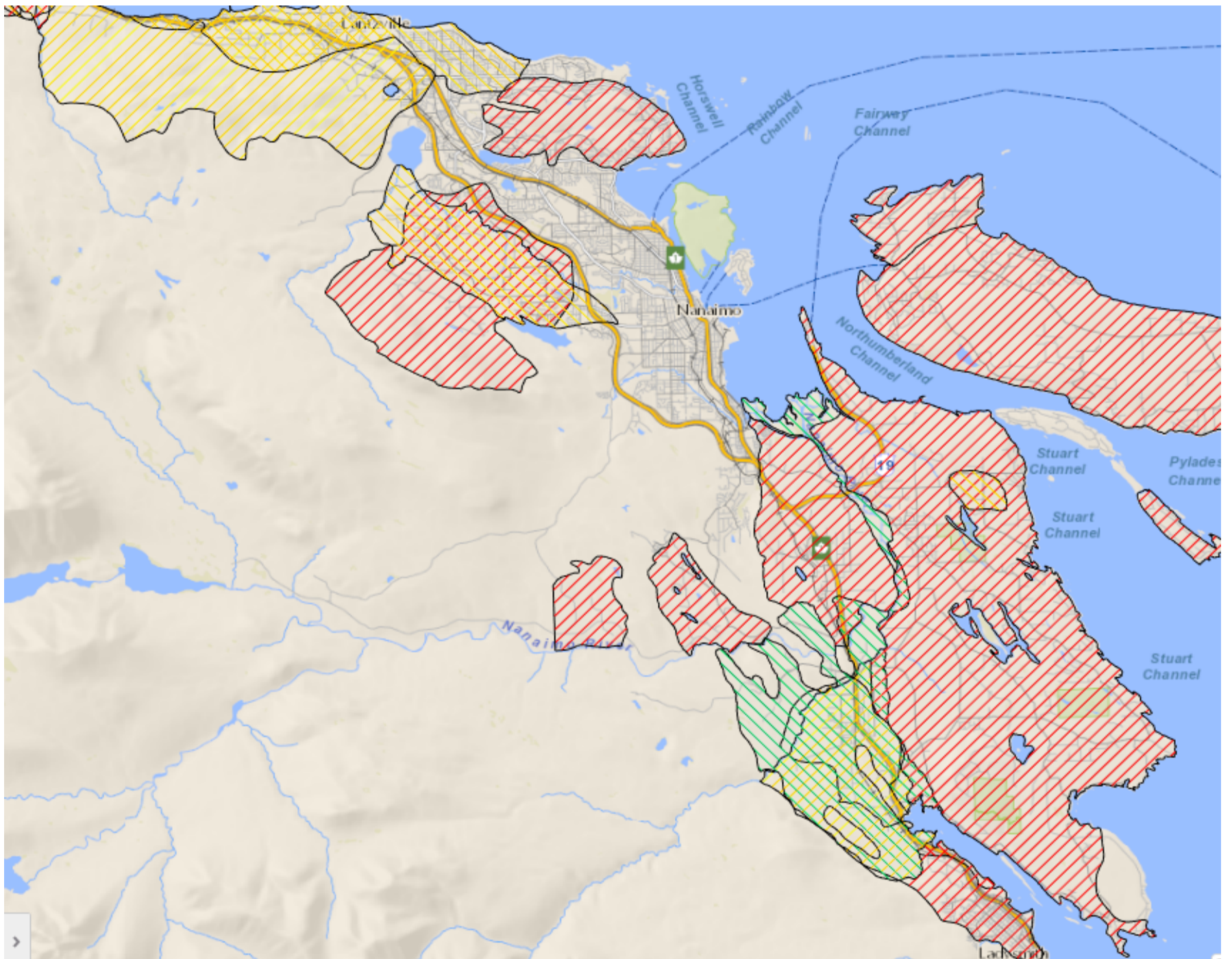
Lantzville

All Rural
Areas



Water Sources: groundwater wells





Ecosystem Needs



Spiritual, Cultural Values

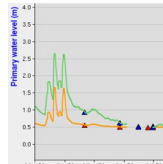
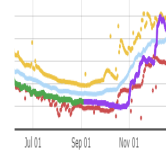


Understanding More About Our Water Helps Us Plan for the Future



Precipitation
& Snowpack

Groundwater
Levels



Stream Levels
& Flows

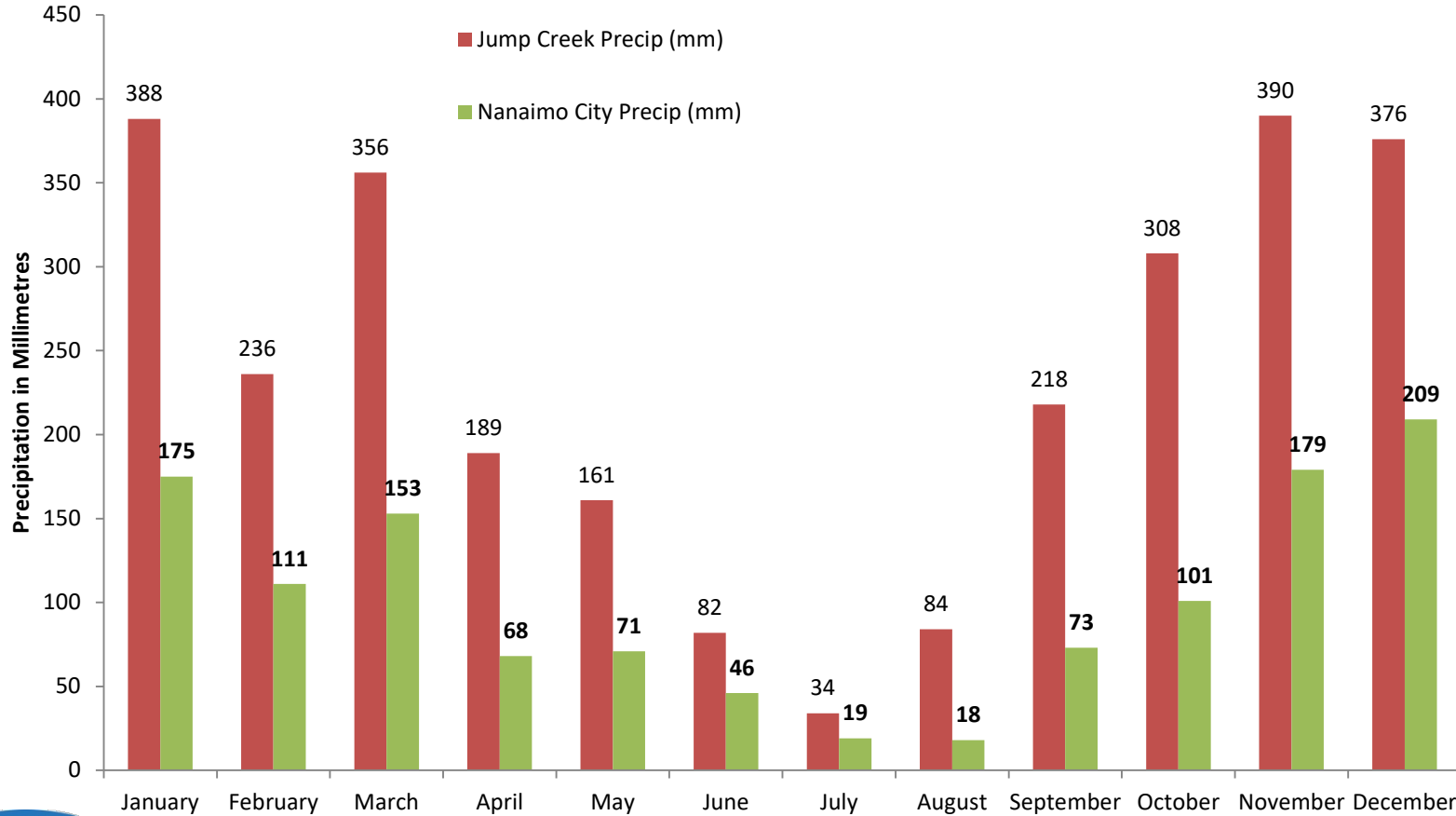
Demand



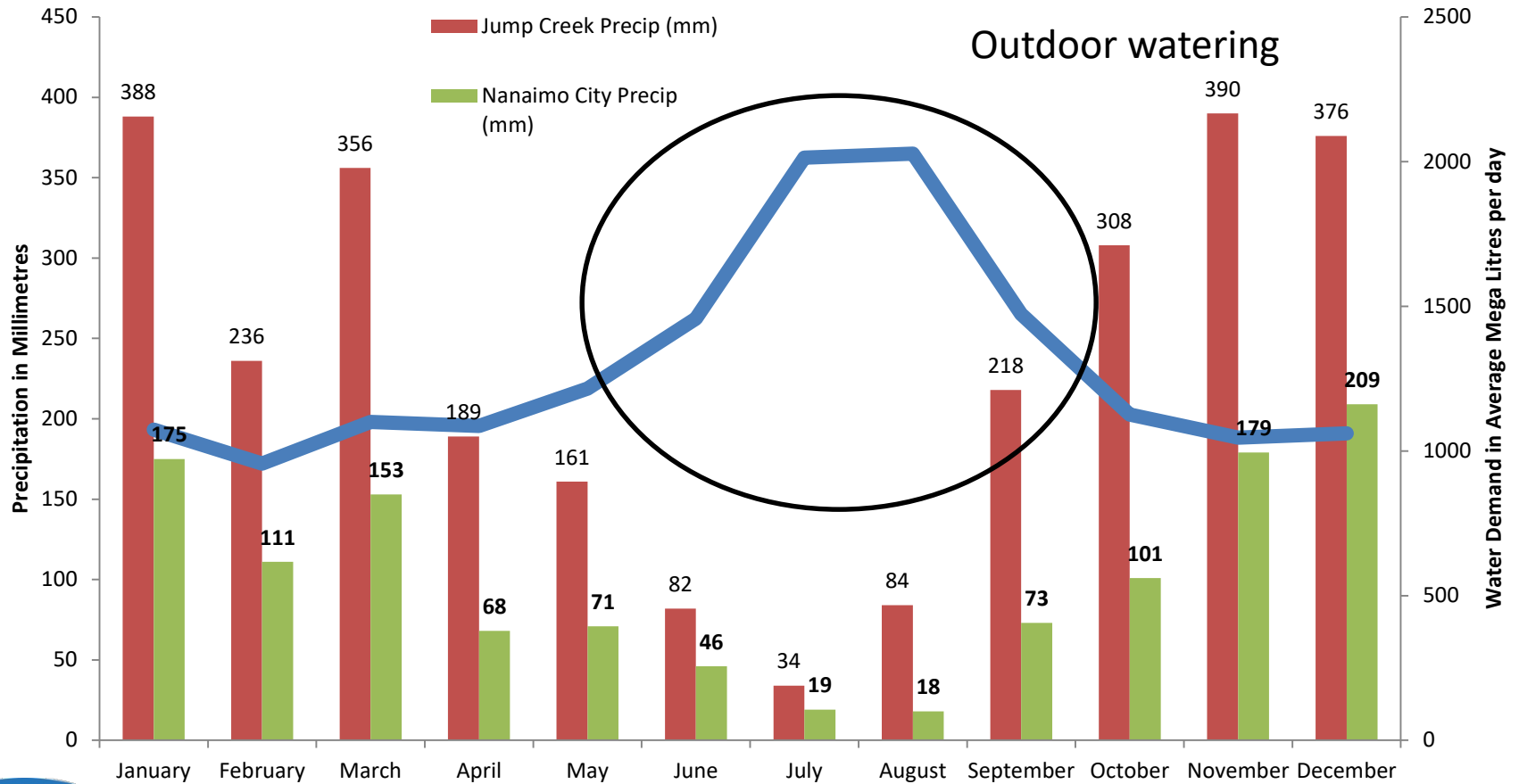
Water Quality



Nanaimo Rainfall



Nanaimo Rainfall + Demand

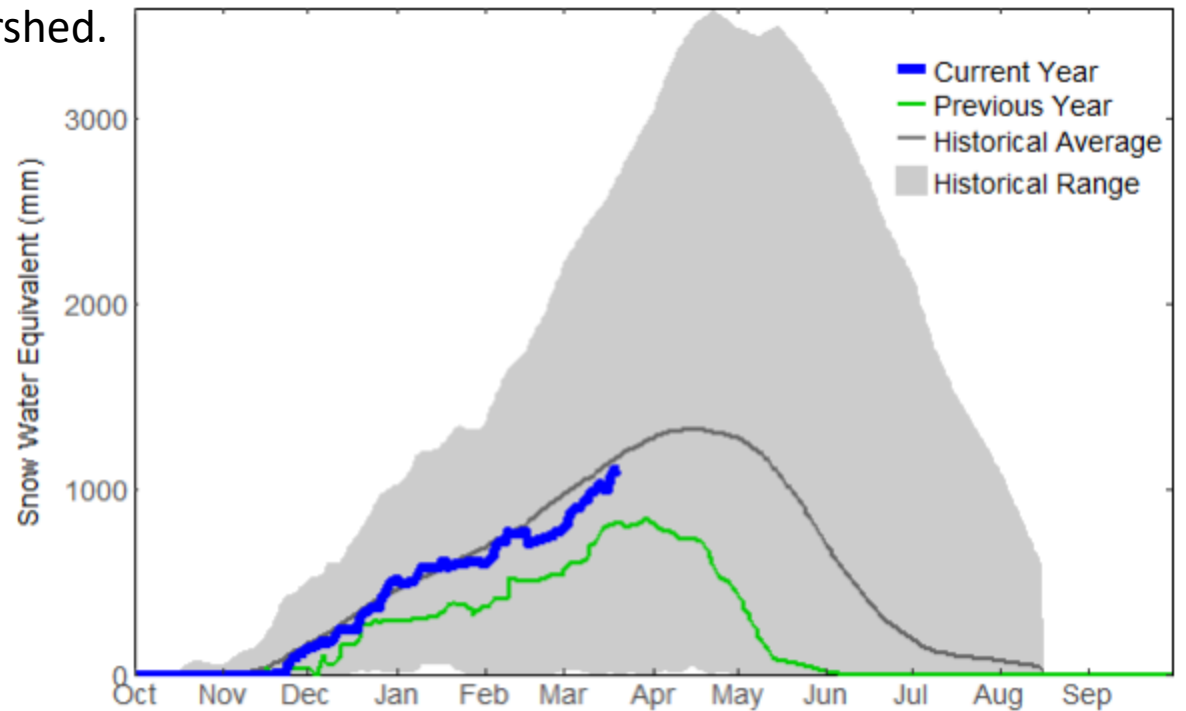


Snowpack

Ministry of
Forests, Lands and
Natural Resource Operations

RIVER FORECAST CENTRE

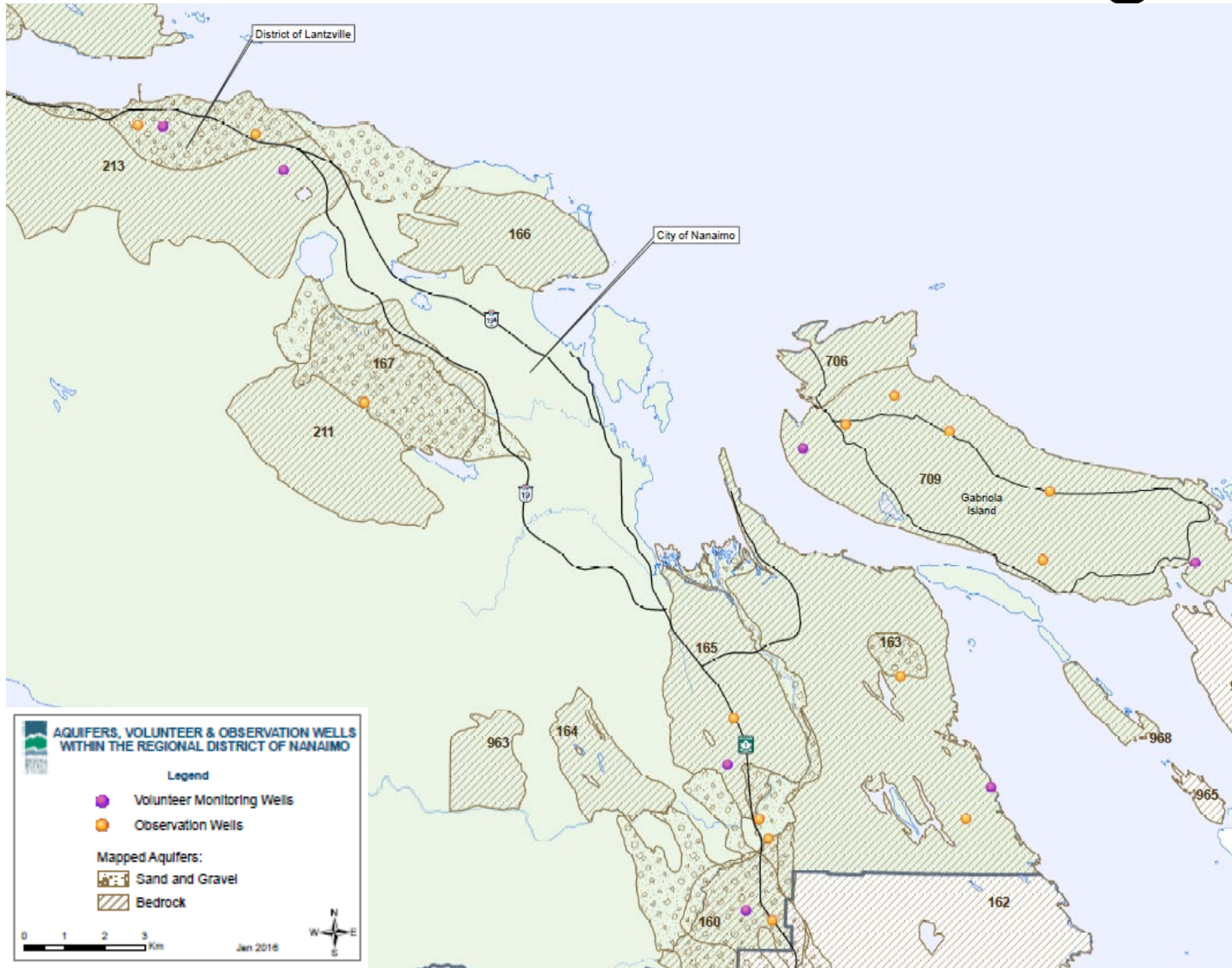
This is Jump Creek Snow Station in the upper Nanaimo River Watershed.



Updated 2017-03-20 16:29:30 PDT

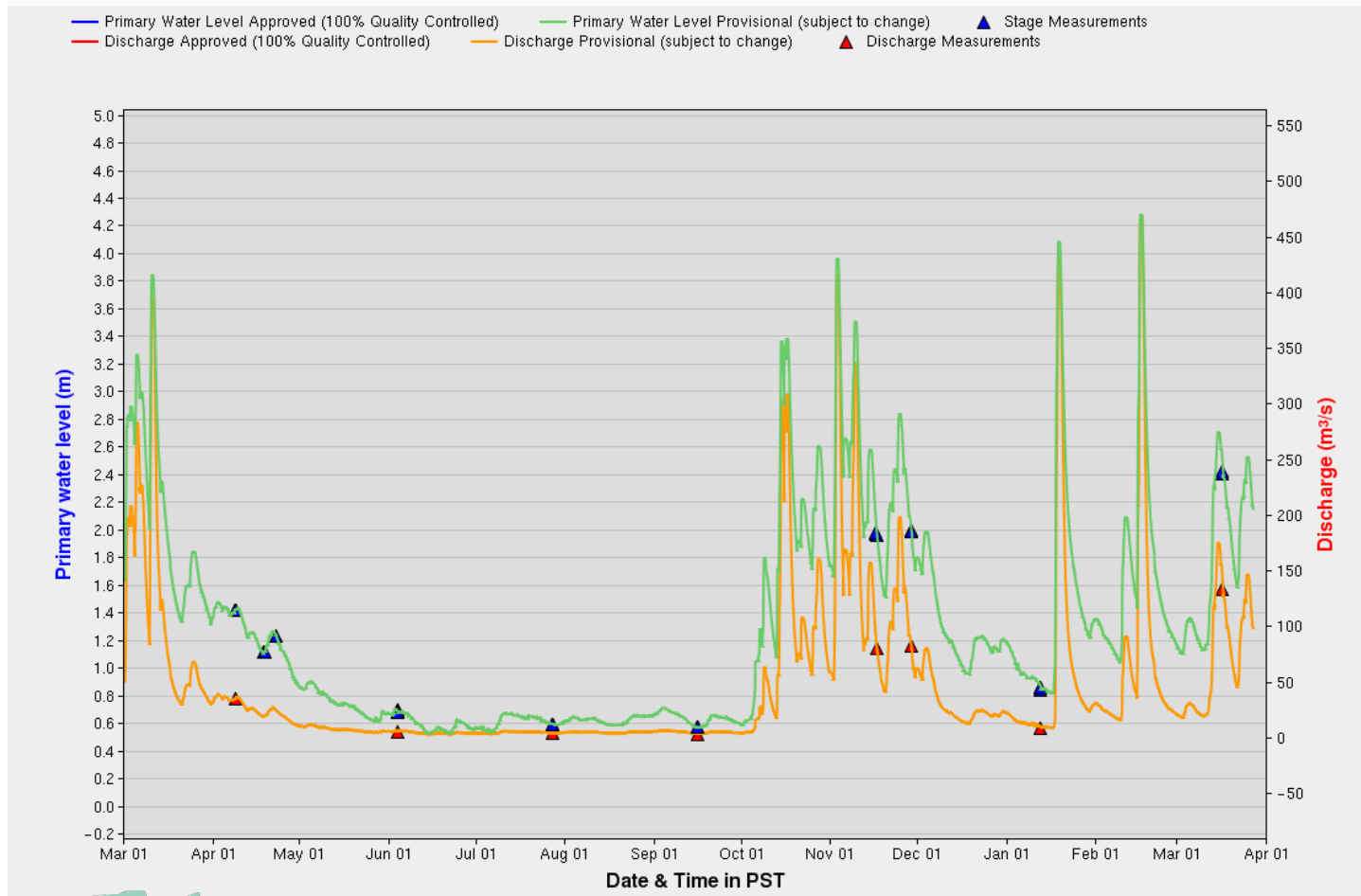


Groundwater Monitoring



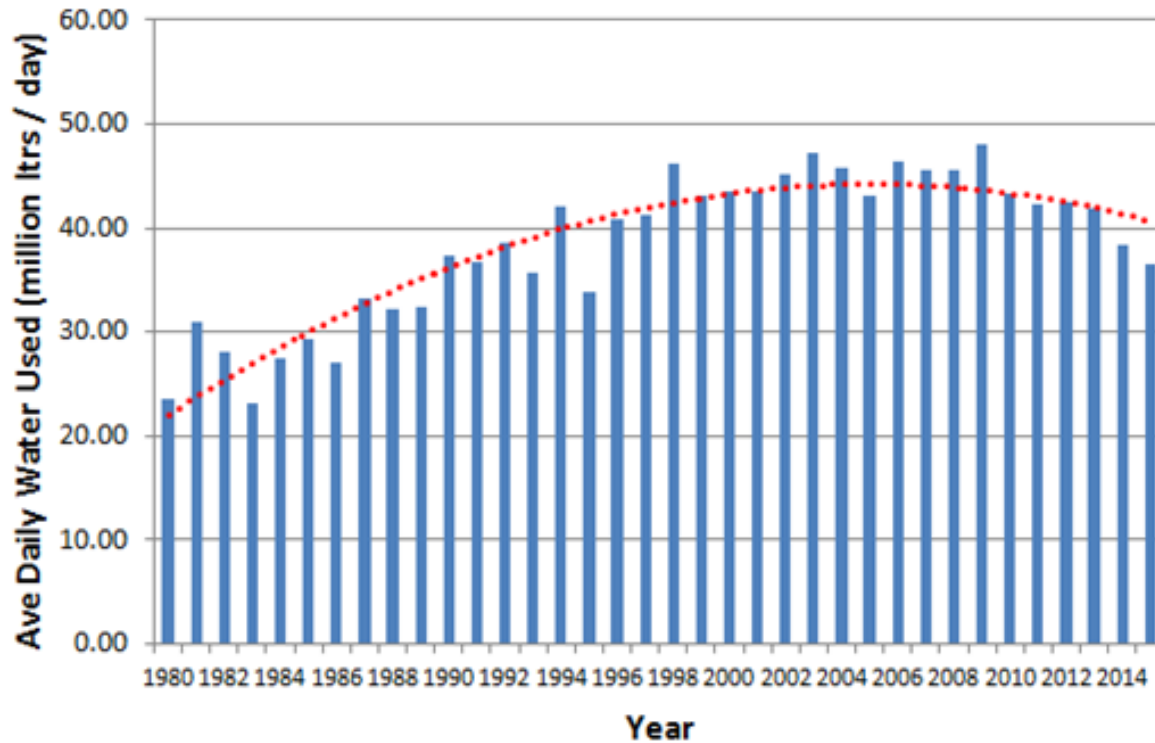
Stream Levels & Flows: Nanaimo River

March 2016 – March 2017



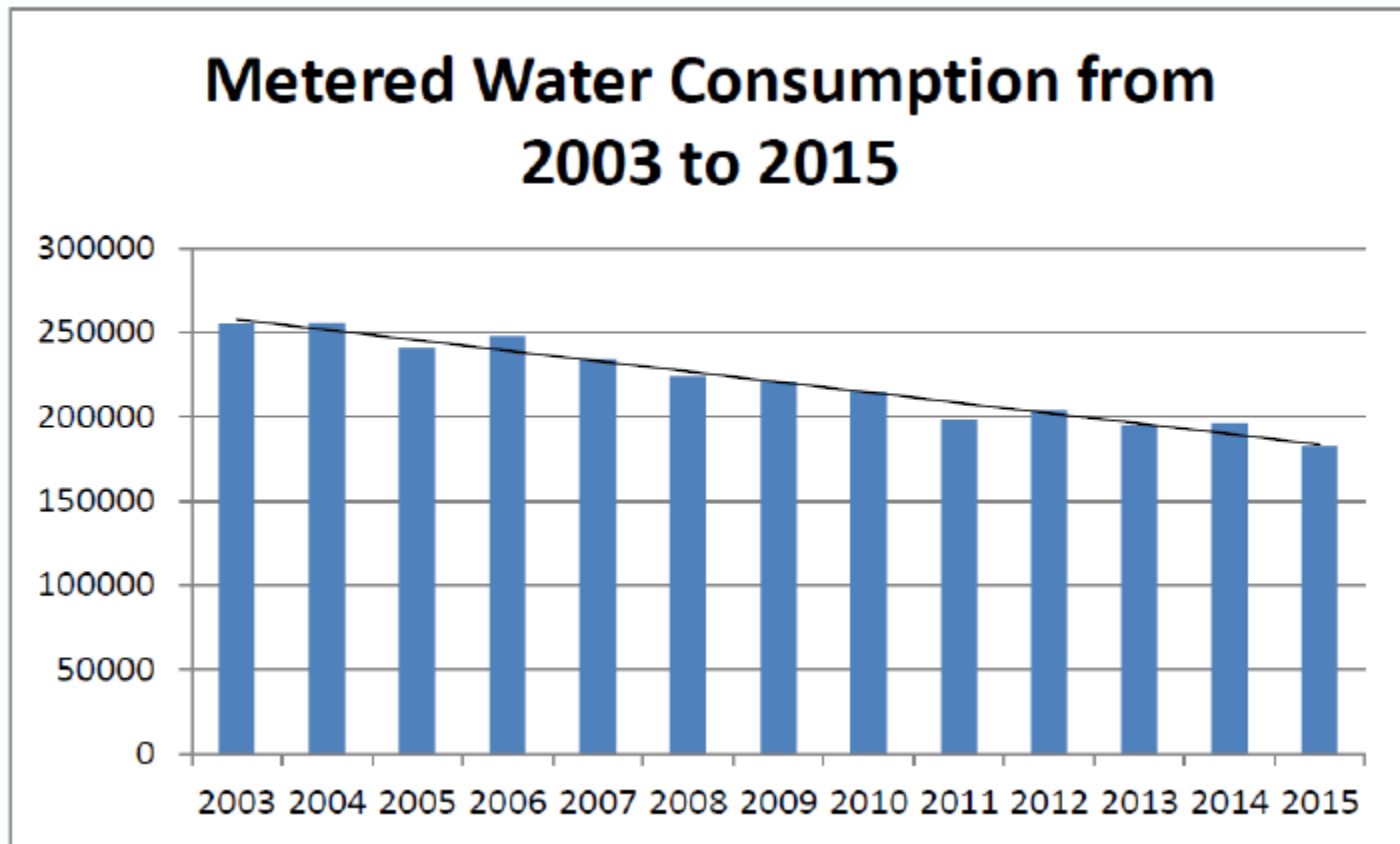
Water Demand Over Time

City of Nanaimo
Daily Water Used



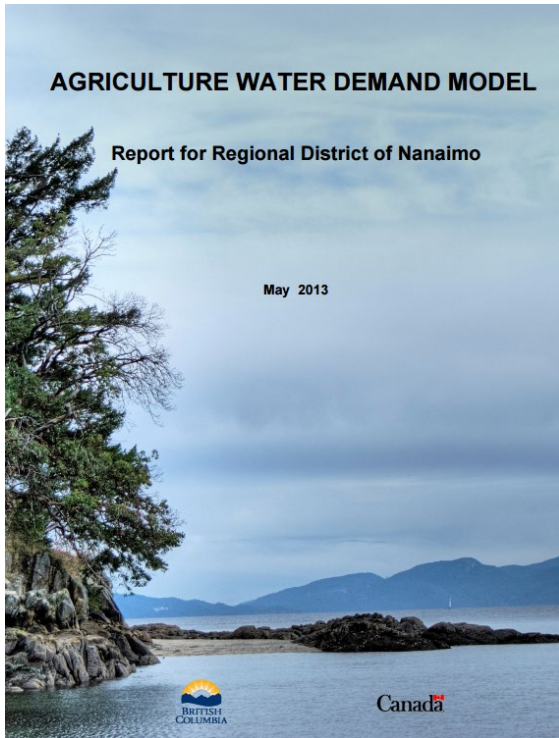
Water Demand Over Time

District of Lantzville



Water Demand

- Not just for our household use, but to grow our local food!



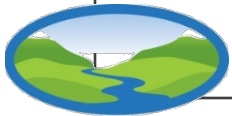

Water Quality Monitoring

water quality indicators

TURBIDITY
suspended particles in water; linked to higher levels of contaminants

DISSOLVED OXYGEN
oxygen dissolved in water supports aquatic life

TEMPERATURE
affects processes in water and in aquatic life



Watershed Stressors

Management Challenges

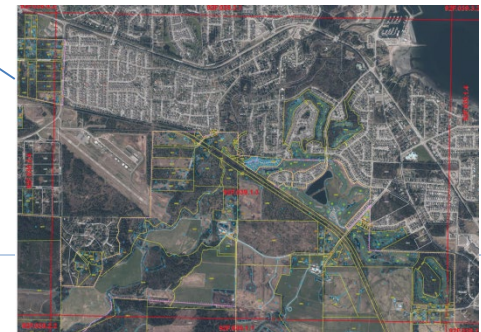
Environmental Stressors

Climate Change

Growing Population

Limited Resources

Land Use Change



Ongoing Efforts for Water Sustainability



Improve efficiency

Collaborative water planning

Learn more about the resource



Shared Responsibility



- Residents
- Government
- First Nations
- Industry
- Commercial
- Rural
- Urban



THE NEW NORMAL

What does a cultural shift to a water smart region look like?



Reconsider landscaping priorities.

- choose drought tolerant plants
- simply let the grass go golden in the summer



Value and steward the ecology of our creeks, rivers, lakes and wetlands.

- keep streambanks vegetated
- refrain from chemical use on our landscapes
- keep run-off on-site where possible



Innovate and take pride in water efficiency measures.

- rainwater collection cisterns
- greywater re-use technology
- soil moisture sensors and drip irrigation
- efficient appliances



Establish a deep rooted understanding about the connection between our land practices and the health of our water.

- neighbour to neighbour outreach
- dialogue in the public forum
- education for children and adults



Intrinsic Value of Water

- Abundant yet rare
- Irreplaceable
- Priceless yet valuable
- Offers an amazing opportunity for cooperation



CELEBRATE WATER!

THANK YOU!

Questions?

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www.dwwp.ca

www.teamwatersmart.ca