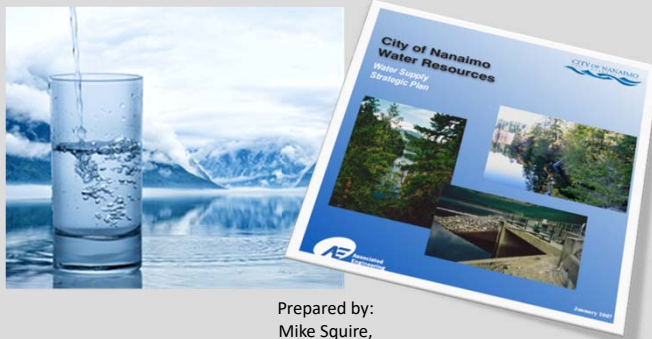


Water Supply Strategic Plan

As part of REIMAGINE NANAIMO, the City of Nanaimo is updating the Water Supply Strategic Plan to ensure we continue to have a supply of clean, safe, and affordable drinking water.



Prepared by:
Mike Squire,
Manager, Water Resources

Strategic Importance

Clean, safe, affordable drinking water is essential to sustain vibrant and healthy communities. Together, the Water Supply Strategic Plan and REIMAGINE NANAIMO will define how our communities grow and thrive.

We are updating the Water Supply Strategic Plan to ensure we continue to have a supply of clean, safe, and affordable drinking water

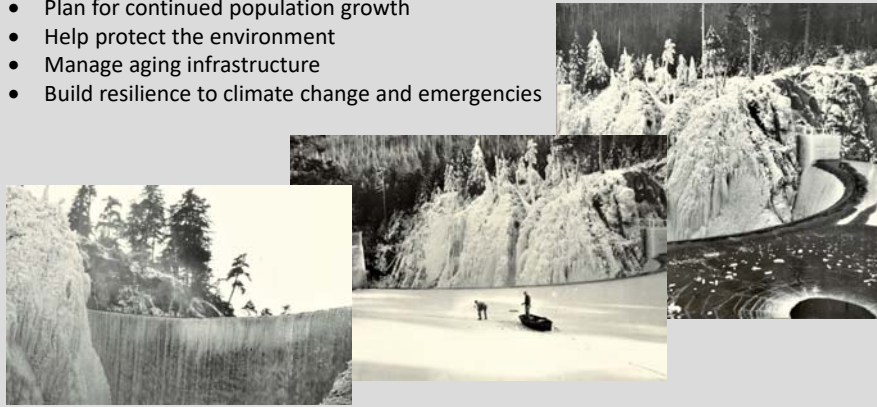
The current Water Supply Strategic Plan, which has been in place since 2007, is a strong plan that has guided the City to manage water responsibly. The 2007 plan now requires updating to respond to changing conditions and new information.



Strategic Importance

The City of Nanaimo Water Supply Strategic Plan sets the 50-year vision for the City's drinking water. The updated Strategic Plan will provide guidance the City will follow to:

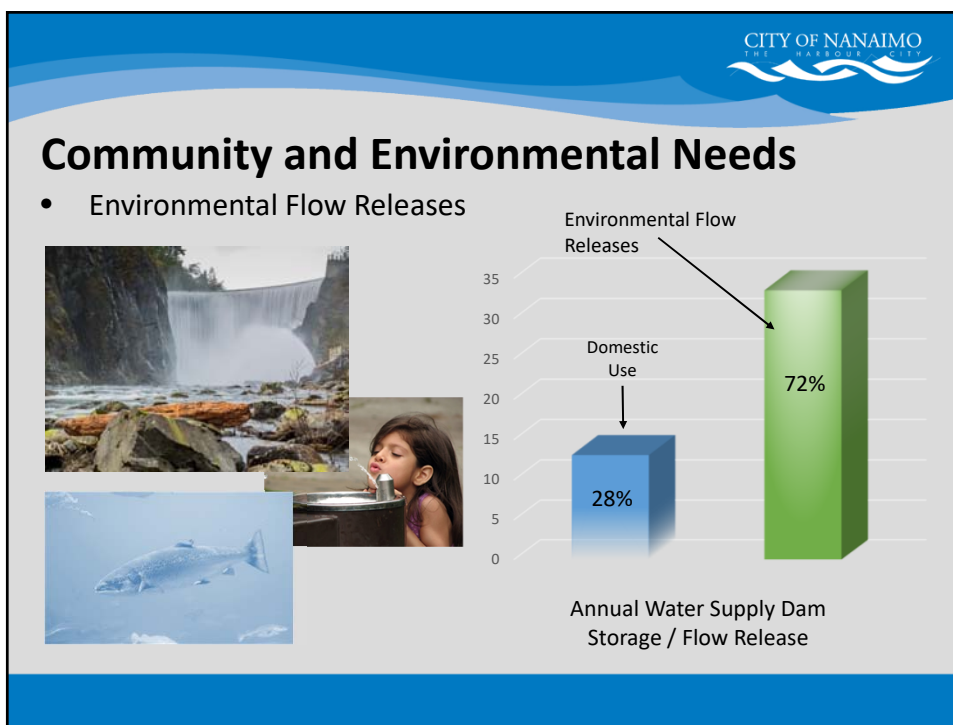
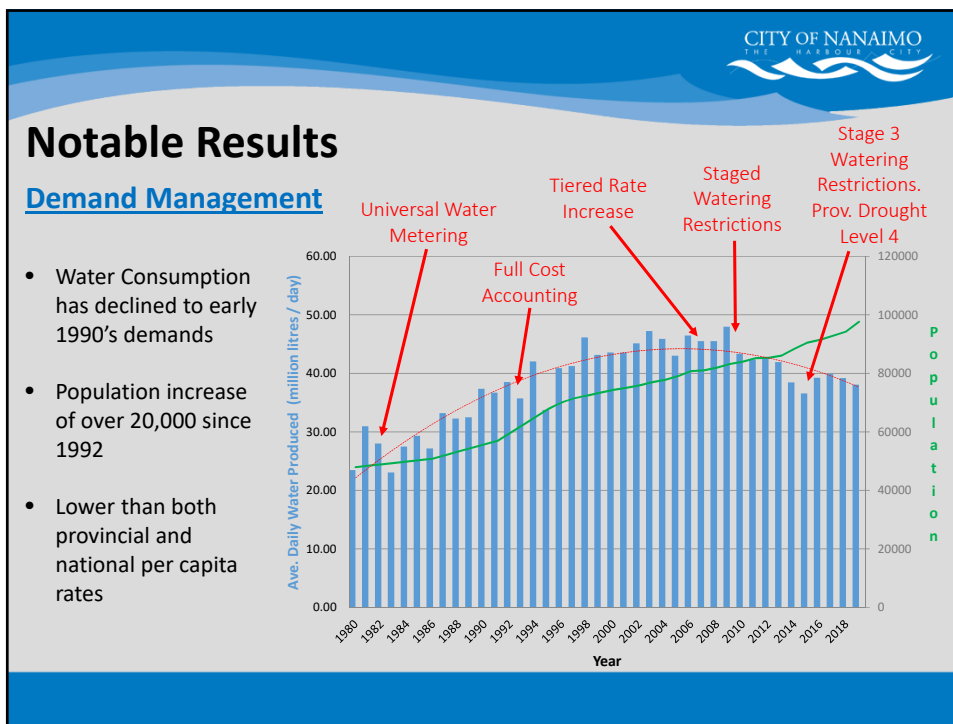
- Plan for continued population growth
- Help protect the environment
- Manage aging infrastructure
- Build resilience to climate change and emergencies



Previous Plan Focus

- Energy Recovery - 2014
- Above Ground Storage Upgrades - 2014
- Enhanced Water Treatment - 2015
- Transmission Main Upgrades - 2016





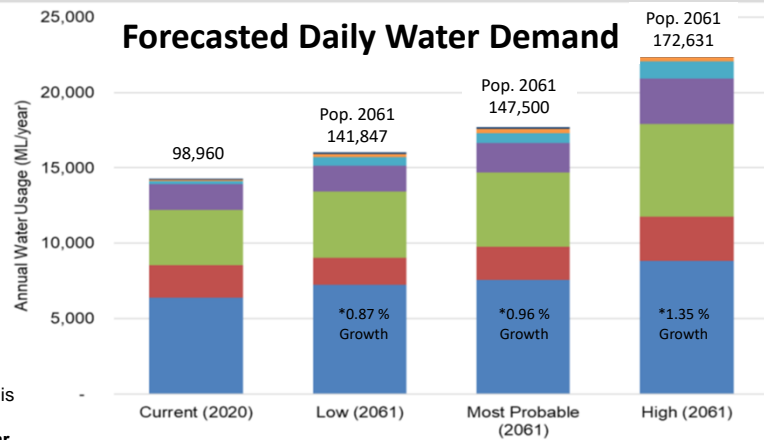
Community Safety

- Emergency Services – Fire Protection



Approx. **70 %** of Above Ground Reservoir Storage and Watermain Capacity is Reserved for Community Fire Storage / Protection

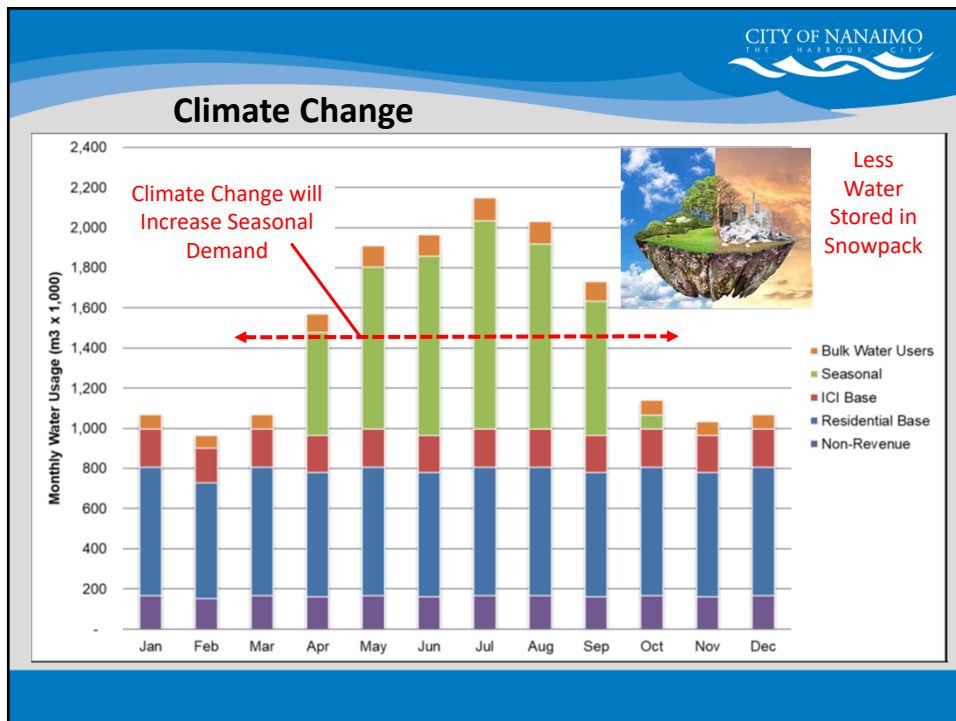
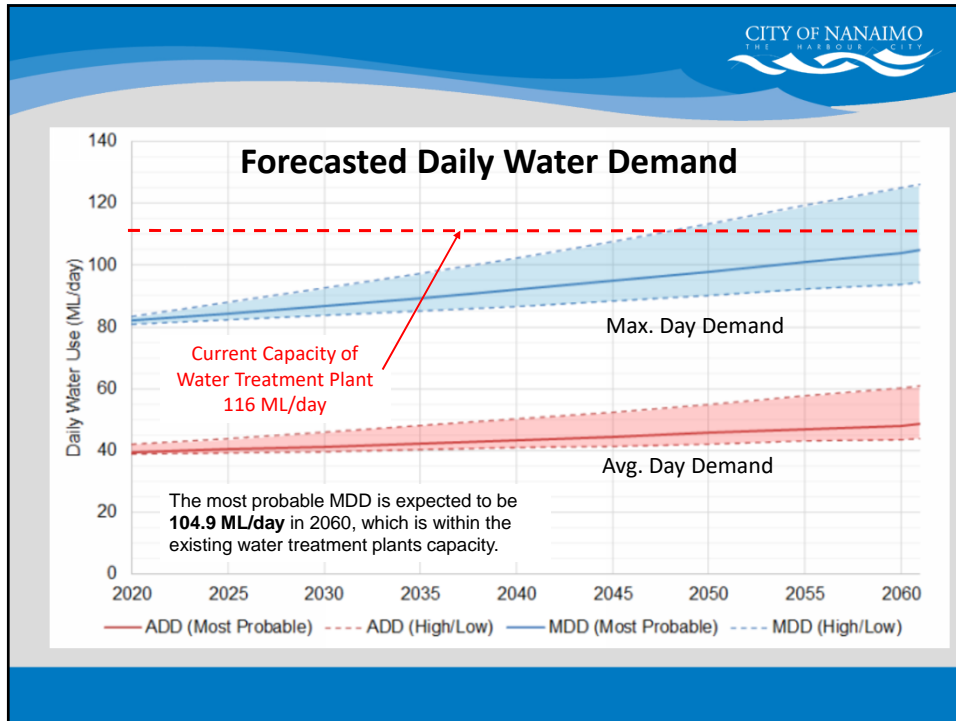
Forecasted Daily Water Demand

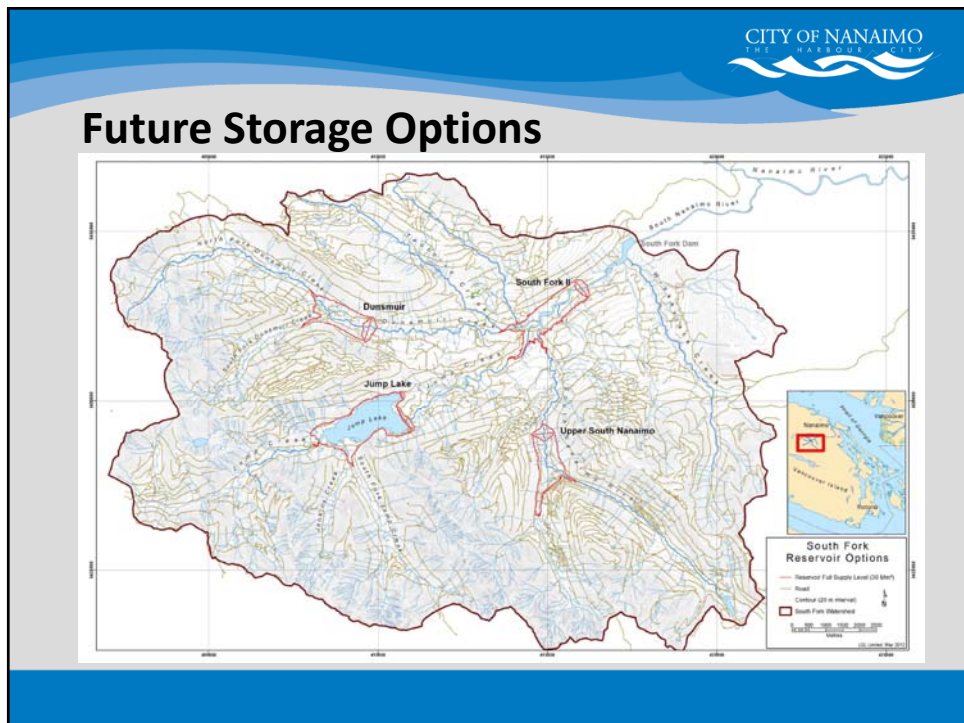
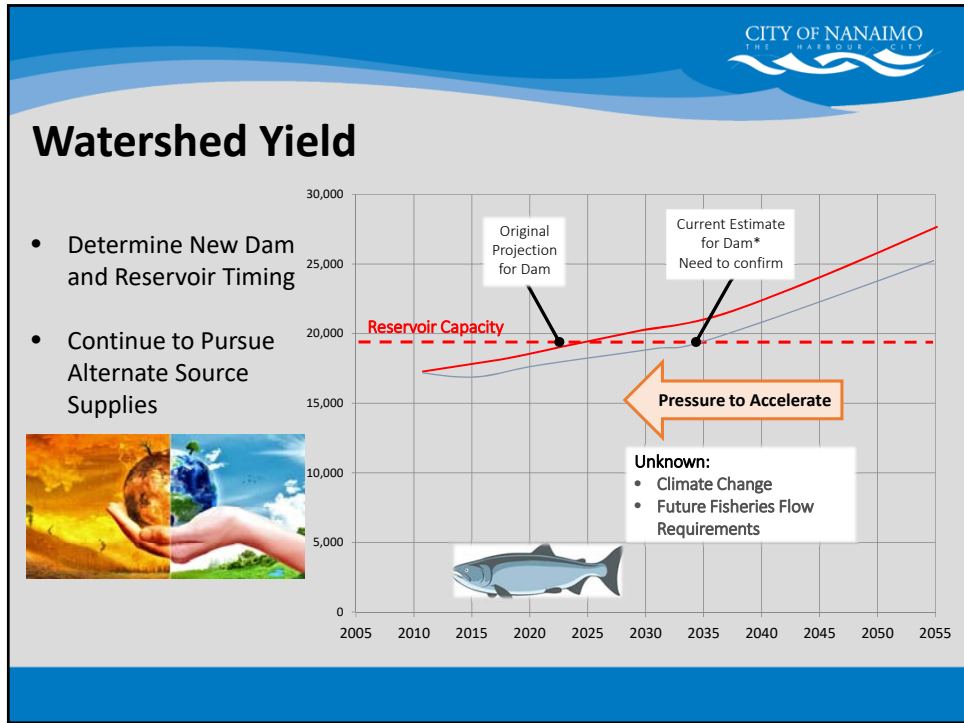


The most probable 2061 water demand is estimated at **17,690 ML/year** or a **24%** increase to current usage.

■ Residential Base - Nanaimo
 ■ ICI Base - Nanaimo
 ■ Seasonal - Nanaimo
■ Non-Revenue - Nanaimo
 ■ District of Lantzville
 ■ Snuneymuxw First Nation
■ Village Extension (RDN)

* Housing and Employment Projections Report (Van Struth 2020)



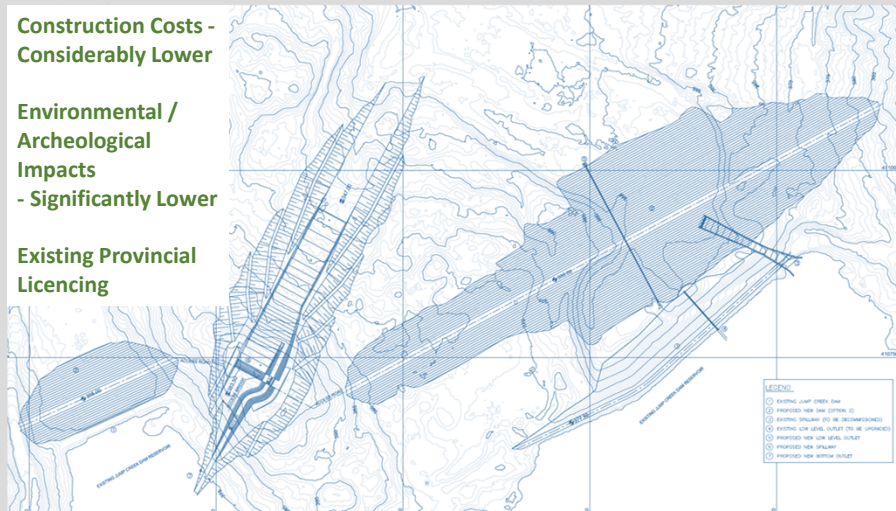


Jump Creek Option

Construction Costs -
Considerably Lower

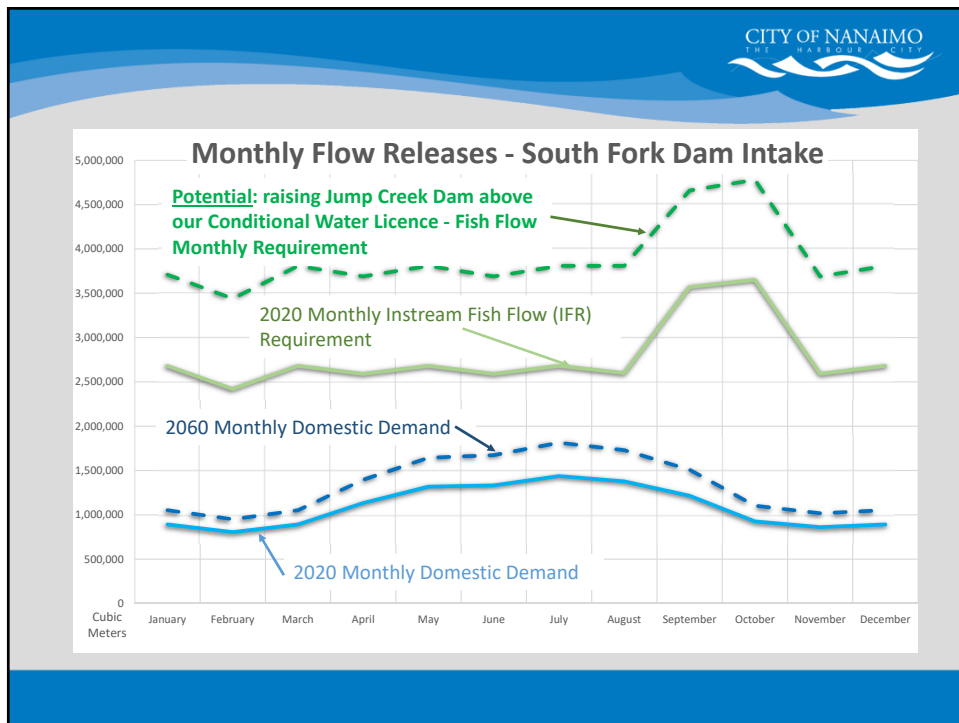
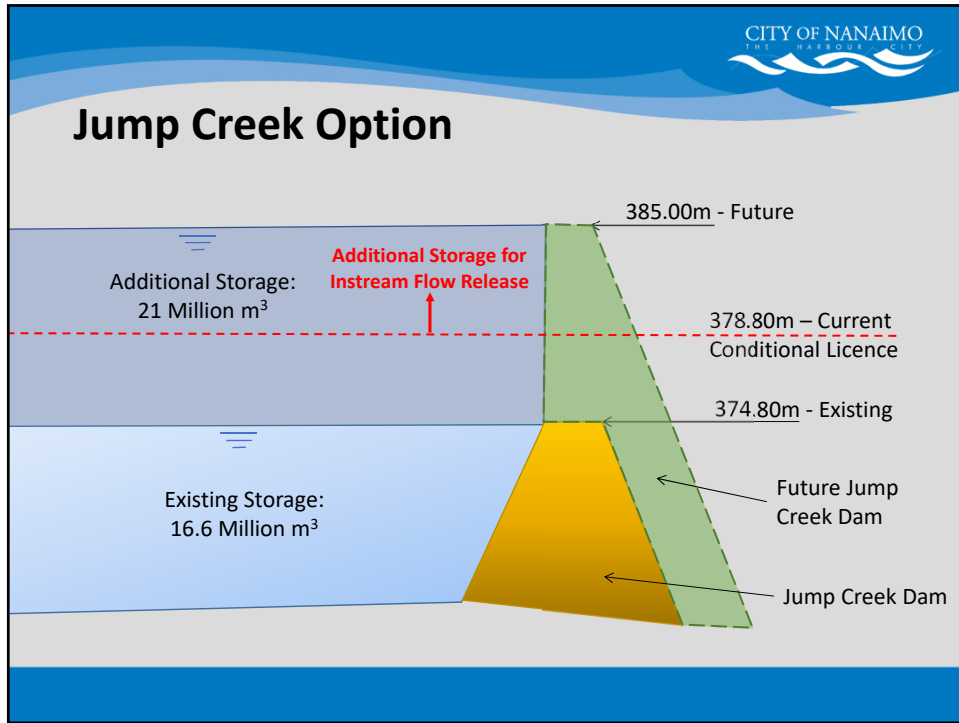
Environmental /
Archeological
Impacts
- Significantly Lower

Existing Provincial
Licencing



Jump Creek Option






CITY OF NANAIMO
THE HARBOUR CITY

Preliminary Findings


- Possibility that with increased reservoir storage, it [may not fill to max. storage](#) during certain drought return events.
- Expanded reservoir storage combined with future IFR, compared to current reservoir storage and current IFR, there was [little improvement in reliability](#) of water supply with additional storage added.
- Review raising the dam to [existing licence requirement](#) (~4m), could be potentially more beneficial, less expensive, provide more reliability during certain drought years and not trigger any provincial licence amendments



CITY OF NANAIMO
THE HARBOUR CITY

Schedule

- [Review Background Data](#)
 - ✓ Complete
- [Public Outreach](#)
 - Developing Communication Strategy / participation with REIMAGINE Nanaimo
- [Demand Management](#)
 - ✓ Complete
- [Regionalization Alternatives / Regulatory Modifications](#)
 - March 2021
- [Review of Water Conservation Strategies and Regional Participation](#)
 - April 2021
- [Alternate Water Supply Source / Emergency Supply](#)
 - May 2021
- [Plan Implementation](#)
 - May 2021 – September 2021
- [Review the Risk, Redundancy and Resiliency of the Water Supply System](#)
 - April – September 2021



Thank You – Questions?

Over the next year, the City of Nanaimo will be engaging with First Nations governments, local, regional, provincial and federal governments, businesses, interest groups, and residents and working with technical experts to evaluate a range of water supply options and update the Strategic Plan.

