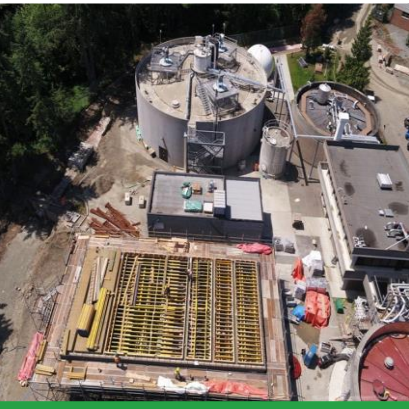




REGIONAL
DISTRICT
OF NANAIMO



2020 Annual Report

Liquid Waste Management Plan

Submitted to the Ministry of Environment and Climate Change Strategy
envauthorizationsreporting@gov.bc.ca

June 2021

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www.rdn.bc.ca

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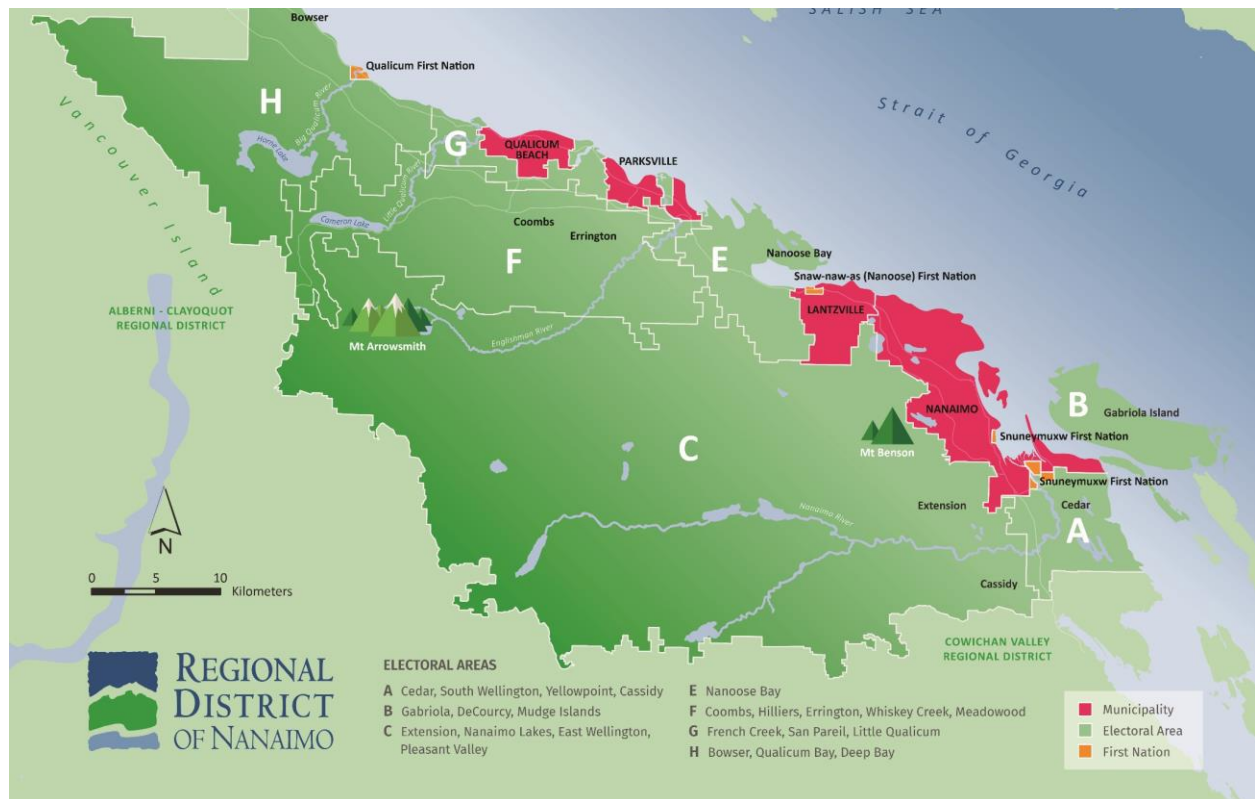
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1) Introduction

1.1 Regional District of Nanaimo

The Regional District of Nanaimo (RDN) provides regional governance and services to 155,000 people on the central east coast of Vancouver Island. Communities in the RDN include the municipalities of Nanaimo, Lantzville, Parksville, and Qualicum Beach, as well as seven unincorporated Electoral Areas and communities of three First Nations, as shown in Figure 1.

Figure 1. Communities in the Regional District of Nanaimo



1.2 Wastewater Services

Wastewater treatment and disposal are among the services provided by the RDN. The RDN treats wastewater from 130,000 people. To do so, the RDN operates four treatment facilities:

- Greater Nanaimo Pollution Control Centre (GNPCC)
- French Creek Pollution Control Centre (FCPCC)
- Nanoose Bay Pollution Control Centre (NBPCC)
- Duke Point Pollution Control Centre (DPPCC).

About 25,000 people and businesses are outside sewer areas and use privately-owned onsite (septic) systems for wastewater treatment. Island Health also authorizes a small number of properties to use holding tanks. The RDN also accepts and treats trucked liquid waste from septic tanks and holding tanks.

1.3 Liquid Waste Management Plan

The RDN Liquid Waste Management Plan (LWMP) is the region's long-range plan to manage wastewater. It is a commitment to manage wastewater in a manner that aligns with the provincial Municipal Wastewater Regulation and forms our Provincial Authorization to Discharge along with permits PE-338 (GNPCC), PE-4200 (FCPCC), PE-7214 (NBPCC) and Operational Certificate ME-05989 (DPPCC).

The LWMP organizes specific commitments into ten programs. The ten LWMP Programs are:

1. Public Wastewater Systems Program
2. Private Onsite Systems Program
3. Source Control Program
4. Odour Control Program
5. Rainwater Management / Drinking Water & Watershed Protection (DWWP) Program
6. Volume Reduction Program
7. Inflow & Infiltration (I&I) Program
8. Pollution Control Centres Program
9. Resource Recovery Program
10. Biosolids Program

Within each program are objectives, targets and actions. Program objectives are the long-range goals. Targets are ten-year commitments that measure progress towards the objectives. Actions are incremental strategies designed to achieve the target.

1.4 Annual Reporting and 5-Year Audit

The RDN submits an annual report by June 30 of each year. Additionally, an independent audit of plan implementation is performed every 5 years. The 2019 LWMP Annual Report included the first audit since the LWMP was approved on October 30, 2014. The independent audit identified two conditions of approval, 118 commitments across the 10 LWMP programs, and five topics of emerging issues to follow. The RDN met the two approval conditions by 2015. The audit determined that, of the 118 program commitments, there was evidence that 101 were met and 17 were in progress or outstanding.

The 2020 annual report outline builds upon the audit results.

- Section 2 updates the status commitments that the audit listed as in progress or outstanding.
- Section 3 documents ongoing progress towards commitments that the audit listed as met.
- Section 4 documents progress to address emerging issues.
- Section 5 summarizes minor revisions and adjustments made to the commitments.

2) LWMP Commitments

As mentioned in Section 1.4, the independent audit identified 118 commitments across the 10 LWMP program areas. Of the 118 commitments, the audit determined that, by the end of 2019, there was evidence that 101 have been met and 17 were in progress or outstanding.

Table 1 provides an updated status of those 17 commitments. In 2020:

- 4 were met (one of the 4 commitments was revised and is considered met).
- 6 were in Progress.
- 7 are scheduled for the future.

Table 1. Status of In Progress and Outstanding Commitments

Program	Commitment	Status
Public Wastewater Systems	Improve public awareness of areas which may connect to RDN sewer systems for health and environmental reasons (failing onsite system) and create a guide which walks homeowners through the sewer connection application process.	Met: A guide is posted at www.rdn.bc.ca/rdn-sewer-systems .
	Develop a webpage to inform the public of historic sewer servicing studies and of the criteria for the provision of future sewer services.	Scheduled: 2022-2023
Private Onsite Systems	Work with Development Services to adopt draft changes to Land Use and Subdivision Bylaw (No. 500) which would enable the RDN to acquire privately-owned onsite systems serving at least 60 parcels, if petitioned.	Met (Revised): RDN will assess a petition on a on a case-by-case basis. To date, RDN has not received a petition so bylaw changes are not justified.
Rainwater Management / Drinking Water and Watershed Protection	Collaborate with Development Services, Water Services, Energy & Sustainability Services, and member municipalities to create a Rainwater Management Plan.	In Progress: The Revised 2020-2030+ Drinking Water and Watershed Protection Action Plan takes on the responsibility for LWMP commitments in this program. For more information, see Section 2.1.
	Subject to Board approval of the Rainwater Management Plan, Wastewater Services and Water Services will coordinate the plan, administer the budget, and oversee collaboration with other departments and jurisdictions.	Scheduled: After the Rainwater Management Plan is completed

Program	Commitment	Status
Inflow & Infiltration	Design upgrades to RDN infrastructure so flows up to 2 times ADWF will receive secondary treatment and all flows in excess of this amount will receive primary treatment.	Met at GNPCC / In Progress at NBPCC GNPCC design was complete in 2017 and the upgrade was commissioned in 2020. At NPBCC, preliminary design is scheduled for 2021.
	Enhance the source control program to encourage landowners to check gutters and outside drains for connection to the sewer system, avoid planting trees and shrubs over sewer laterals, ensure basement drains and sump pumps are not connected to the sanitary sewer, and replace broken or leaky pipes located on private property.	Scheduled: Est. 2023. Applied for an infrastructure planning grant in 2020 to complete an I&I Homeowners Best Practices Guide but was application was not successful.
	Consider providing incentives to enable residents to reduce private property I&I.	Met: Considered using DCC funds to address I&I but this is not possible with the current funding model. RDN will support efforts led by member municipalities to reduce I&I on private property.
Pollution Control Centres	Upgrade GNPCC to provide secondary treatment [by 2018].	Met: GNPCC commissioned Secondary treatment in 2020. For more information, see Section 2.2.
	Upgrade NBPCC to provide secondary treatment by 2023.	In Progress: Issued a request for proposals for engineering design in 2020. Awarded contract for preliminary design in January 2021. Estimated completion of upgrade is 2023.
	Expand FCPC capacity.	In Progress: 60% Detailed design completed in 2020. Estimated completion of expansion is 2024.
	Coordinate with Development Services through the OCP review process to identify property owners in growth containment boundaries [in Nanoose Bay] who are interested in establishing public wastewater services.	Scheduled: Determined by Development Services' OCP review schedule. An Electoral Area E OCP review has not occurred since LWMP approval in 2014.

Program	Commitment	Status
	[For NBPCC] Consider resource recovery, visual, and olfactory buffers and the number of pump stations required.	Scheduled: Engineering design for secondary treatment upgrade will consider resource recovery, visual buffers and olfactory buffers. Preliminary design is scheduled for 2021. Pump stations will be addressed in a separate project in the future.
	Review and update the Fairwinds sewer servicing agreement and DCC bylaw for the Nanoose Bay area.	Scheduled: Est. 2021 to 2022
	Develop a DCC bylaw to allow properties in the growth containment area to purchase capacity at DPPCC.	In Progress: a DCC bylaw review was completed in 2017.
Resource Recovery	Examine opportunities for using reclaimed water for the Fairwinds Golf Course.	Scheduled: Est. 2021 to 2023
Biosolids	Improve the quality of biosolids through upgrades to wastewater treatment infrastructure and innovative technologies and techniques (i.e. decrease volatile solids content and pathogen concentrations).	In Progress: Issued a Standing Request for Expression of Interest in 2020 to explore management opportunities.

2.1 Rainwater Management / Drinking Water and Watershed Protection

In 2020, Water Services revised their Drinking Water and Watershed Protection Action Plan to identify actions to 2030 and beyond. The Drinking Water and Watershed Protection Action Plan commits to taking the lead on developing a Regional Rainwater Management Strategy and will be the vehicle to efficiently deliver the LWMP commitments for Rainwater Management. Long-term and collaborative partnerships are a pillar of the Drinking Water and Watershed Protection Action Plan. These partnerships will be key to the success of a regional Rainwater Management Plan and other water management and stewardship initiatives.

In 2020, Water Services hosted two Rainwater Working Group virtual meetings to advance LWMP commitments for rainwater management. Section 3.1.3 provides more information on these meetings.

2.2 Greater Nanaimo Pollution Control Centre Secondary Treatment Upgrade Project

The GNPCC Secondary Treatment Upgrade Project is the cornerstone of the LWMP. GNPCC is the RDN's largest wastewater treatment facility and serves 100,000 people and businesses in the City of Nanaimo and District of Lantzville and on Snuneymuxw First Nations land. Before the upgrade, GNPCC provided chemically-enhanced primary treatment, a process which removed about 50% of the solids in the wastewater. Now that construction on the project is complete, GNPCC has replaced ageing structures, added capacity for our growing communities, and added secondary treatment to improve water quality.

With the addition of the secondary treatment process, GNPCC removes more than 90% of the solids from the wastewater.

The provision of secondary treatment meets a significant commitment in the LWMP. Some of the features of this project are shown below. More photographs and videos are posted on the project website at: www.getinvolved.rdn.ca/gnpcc-upgrade.



Secondary Treatment Bioreactor



Secondary Treatment Clarifiers



Odour Control Biofilter



Hammond Bay Frontage Trail Improvements

3) Ongoing Program Implementation

Activities continue on many LWMP commitments that were met in previous years. Table 2 documents some ongoing activities completed in 2020 that advance overall program objectives. Section 3.1 documents meetings held to support LWMP program implementation.

Table 2. Ongoing Program Implementation in 2020

Program	Commitment	Activity
Public Wastewater Systems	Coordinate with Development Services through the OCP review process to identify property owners in growth containment boundaries who are interested in establishing public wastewater services.	The OCP review schedule is led by Development Services. In 2020, Wastewater Services supported efforts to initiate the Area F OCP review before the OCP review was put on hold due in 2020 due to COVID-19 restrictions on gatherings.
	Work with property owners, as needed, in locations where there are known onsite system failures to establish connections to public wastewater infrastructure.	No properties joined the RDN sewer system in 2020 for health and environmental reasons. However, the RDN worked with 10 property owners on Manse Road, Reid Road, Cannon Road, Lundine Lane, Flamingo Drive, Wright Road and Bay Drive who expressed interest in connecting to RDN sewer.
Private Onsite Systems	Enhance the source control component of the SepticSmart program	<ul style="list-style-type: none"> ▪ Continued the SepticSmart Rebate Program. Since 2014, this program has granted \$260,000 in rebates and contributed to over \$2.5 million in septic system maintenance in the region. ▪ Four workshops were scheduled for May and June 2020 and a SepticSmart newsletter was drafted to advertise the events but both were cancelled due to COVID-19 restrictions on gatherings. ▪ Promoted Septic Awareness week September 14-18.
	Host at least four SepticSmart education workshops annually	
Source Control	Liaise with other local governments to share source control strategies	<ul style="list-style-type: none"> ▪ Revised the Source Control at GNPCC Operating Procedure GN-OP-05 (Revision 3) to improve response to periodic inputs of high-strength waste to GNPCC, in coordination with the City of Nanaimo. ▪ Promoted Septic Awareness week September 14-18 with six other regional districts.

Program	Commitment	Activity
	Other	The RDN submitted a resolution to the 2020 Association of Vancouver Island Communities Convention to request advocacy at the federal level for the development of clear standards for products labelled “flushable” and to increase regulatory oversight of labelling and advertising of such products. UBCM endorsed the resolution. As a result, UBCM will work with FCM to advocate at the federal level for the development of clear standards for products labelled “flushable” and to increase regulatory oversight of labelling and advertising of such products.
Odour Control	Incorporate odour controls into the design phase of future capital works projects including upgrade of GNPCC, NBPCC and expansion of FCPC	Installed a new biofilter and carbon filter at GNPCC in 2020.
	Investigate, document, and respond to odour complaints within 24 hours	Annual report for each facility documents odour reports and responses. In 2020, there were 34 odour reports for FCPC, 8 for GNPCC, 1 for NBPCC, and 0 for DPPCC.
Rainwater Management / Drinking Water and Watershed Protection	Establish watershed performance targets and standards to mitigate the impacts of land development	<ul style="list-style-type: none"> ▪ The Rainwater Management Working Group discussed watershed performance targets in the 2020 meetings on August 19 and November 17. ▪ The RDN invited qualified and experienced firms to submit Statements of Qualifications (20-063) to develop watershed performance targets for rainwater management in the French Creek Water Region. This process continued into 2021.
	Monitor water quality in selected streams to study the impact of land use on watershed health (e.g. Community Watershed Monitoring)	<ul style="list-style-type: none"> ▪ Completed the 10th year of surface water quality sampling with the RDN Community Watershed Monitoring Network program continued in 2020. This includes 14 trained stewardship groups in over 20 watersheds.
	Implement the Water Conservation Plan	<ul style="list-style-type: none"> ▪ Updated the Regional District of Nanaimo Water Service Areas Water Conservation Plan (2020-2030).

Program	Commitment	Activity
	Continue to provide water education, incentive programs and watershed monitoring partnerships	<ul style="list-style-type: none"> ▪ Provided over 130 rebates to residents for rainwater harvesting; wellhead upgrades; well water testing; and irrigation and soil improvements. ▪ Offered virtual workshops and activities to engage the community in water stewardship education: <ul style="list-style-type: none"> ○ 15 activities for Water to Earth Month ○ 2 WellSmart webinars ○ 1 virtual watershed field trip video shared with SD68 educators. ▪ Completed the 5-Year Wetland Mapping and Monitoring Research Project with Vancouver Island University / Mt. Arrowsmith Biosphere Region Research Institute. ▪ Completed the 7th year of groundwater monitoring via the RDN Volunteer Observation Well Network which includes 30 wells.
Inflow and Infiltration	Use CCTV to inspect GNPCC and FCPC interceptors on a 5-year cycle	Ongoing GNPCC and FCPC CCTV programs inspect accessible sections of the gravity interceptor. (Forcemain sections are not part of the CCTV program and poor access limits CCTV of some sections.)
	Maintain and install flow meters and rainfall gauges as needed	<p>The following maintenance was done in 2020:</p> <ul style="list-style-type: none"> ▪ Monthly inspections of Lantzville, Johnstone Rd (Qualicum Beach), Ocean Place (Parksville) flow meters, and FCPC effluent meter. ▪ Replacement of depth sensor on the Lantzville flow meter in January 2020. ▪ Replacement of depth sensor on Johnstone Rd flow meter in January 2020 following a surcharge event at Lee Road pump station.
	Repair manholes as needed; perform regular maintenance of interceptors	<ul style="list-style-type: none"> ▪ Detail design to repair a section of the Departure Bay Forcemain began in 2020 and continued into 2021.

Program	Commitment	Activity
Pollution Control Centres	Work with MOE staff to establish reasonable timelines and scope of any required receiving environment monitoring programs	Completed the 2020 GNPCC Receiving Environment Monitoring Program.
	Explore federal and provincial grant options to fund secondary treatment	<ul style="list-style-type: none"> ▪ Applied to the Investing in Canada Infrastructure Program for grant funding: <ul style="list-style-type: none"> ○ FCPCCE Expansion and Odour Control Upgrade ○ DPPCC UV Upgrade ○ Departure Bay Pump Station and Forcemain Upgrade (GNPCC) ○ NBPCCE Secondary Treatment Upgrade
	Other	<ul style="list-style-type: none"> ▪ Continued to inform residents of major projects through the RDN website.
Biosolids	Other	<ul style="list-style-type: none"> ▪ Beneficially managed 5,623 tonnes of biosolids in 2020

3.1 Meetings

3.1.1 LWMP Monitoring Committee

A LWMP Monitoring Committee meeting scheduled for May 21, 2020 was cancelled due to COVID-19 protocols. Email updates replaced the formal committee meeting. A virtual meeting was held on October 22, 2020. Recent meeting agendas and minutes are available, under Advisory Committees & Commissions, at rdn.bc.ca/agendas-minutes-videos.

3.1.2 W3C

The RDN hosts Wastewater and Water Collaborative (W3C) meetings twice a year to meet with staff from City of Nanaimo, District of Lantzville, City of Parksville and Town of Qualicum Beach to advance regional programs and policies related to the LWMP. In 2020, virtual W3C meetings were held on June 18 and September 28. Meeting minutes are attached in Appendix A.

3.1.3 Rainwater Working Group

Water Services hosted virtual Rainwater Working Group meetings on August 19, 2020 and November 17, 2020 to advance LWMP commitments for rainwater management.

4) Emerging Issues

The LWMP recognizes that new issues may emerge from innovations in water quality monitoring and from an evolving regulatory environment. The LWMP commits to keeping informed on the emerging issues listed below.

- Shellfish Harvesting Areas

- Contaminants of Emerging Concern
- Heritage Resources
- Climate Change
- Non-point Sources of Pollution.

In 2020, COVID-19 became the most prevalent topic across the RDN and worldwide. While not required by the LWMP, this section also documents some initiatives related to COVID-19.

4.1 Shellfish Harvesting Areas

The Canadian Shellfish Sanitation Program (CSSP) is a federal food safety program, jointly administered by the Canadian Food Inspection Agency, Environment Canada, and Fisheries and Oceans Canada (DFO). The purpose of the program is to provide assurance that bivalve molluscan shellfish (e.g. mussels, oysters, and clams) meet food safety and quality standards for both domestic and international markets, thereby protecting the public from the health risks of consuming contaminated shellfish.

Under the CSSP, Conditional Management Plans may be developed to allow shellfish harvesting in areas in proximity to wastewater infrastructure. These areas meet the standards for safe harvest of bivalve molluscan shellfish (i.e. mussels, oysters, and clams), except in times where a temporary source of pollution exists. As long as the pollution source is not present, the Conditional Management Plan allows the shellfish harvesting area to remain open.

French Creek Pollution Control Centre currently operates with a Conditional Management Plan for two pump stations that have bypasses. The bypasses are designed to allow untreated wastewater to discharge to the marine environment if the volume of wastewater entering the interceptor exceeds the capacity of the pump station. Bypasses prevent damage to infrastructure and reduce the risk of flooding private residences. These bypasses have been in place since the system was built in the 1970's and during this time there has been no reported need to bypass the flow. Furthermore, pump redundancy, back-up power, and a Supervisory Control and Data Acquisition System make it unlikely that an overflow would occur at these locations. RDN's Conditional Management Plan clearly outlines the roles and responsibilities of each partner, as well as immediate actions to be taken to close these conditionally classified areas should a discharge of untreated wastewater occur from the pump station bypasses. These plans clearly identify what events will trigger a temporary closure of the area and what response protocol would follow if a trigger event was to occur.

The FCPC Conditional Management Plan came into effect in 2015 and was renewed in 2016, 2019 and 2020.

4.2 Contaminants of Emerging Concern

Contaminants of emerging concern, sometime called emerging contaminants, refer to an array of pharmaceuticals, personal care products, and industrial contaminants (CCME 2009). Many contaminants of emerging concern lacks established methods for sample collection and testing and many lack standards set by Provincial or Federal levels of government.

Recognizing that most of the contaminants entering the wastewater stream originate from private residences and businesses, the RDN will continue to work to improve the quality of effluent through the

Source Control Program, the Sewer Use Regulatory Bylaw, and through strategic investments in critical infrastructure.

To better understand contaminants of emerging concern in RDN wastewater:

- In 2018, the RDN commissioned an advisory memorandum on Emerging Substances of Concern (ESOCs) and microplastics, included in that year's annual report.
- In 2020, the RDN initiated a study to investigate contaminants of emerging concern in wastewater at GNPCC and FCPC. Samples were collected and analyzed in 2020 and 2021. Results will be interpreted in a report in 2021.

4.3 Heritage Resources

The Province protects heritage sites through the *Heritage Conservation Act*. This protection applies to both private and Crown land and a provincial heritage permit is required before altering or developing a heritage site. In 2018, the RDN applied for a Blanket Archaeological Permit from the Archaeology Branch. A Blanket Permits is a Heritage Inspection Permit that covers a broad geographic area for multiple assessments. The RDN's Blanket permit was granted May 6, 2019 and expires December 30, 2020. In 2020, the RDN obtained a second Blanket Archaeological Permit with a second archaeology firm that expires December 31, 2021.

4.4 Climate Change

Sea level rise is driven by a global increase in average temperature which is causing glacier and ice caps to melt, and the expansion of ocean waters. At the regional and local scale, sea level rise will differ and change in response to these global effects. For the east coast of Vancouver Island, the mean sea level rise is estimated to increase by least 0.8 m by the year 2100¹. Potential impacts associated with these changes include:

- More frequent and extreme high water levels in coastal areas
- Increased erosion and flooding
- Increased risk to coastal infrastructure, as well as increased maintenance and repair costs
- Loss of property due to erosion
- Loss of habitat and reduced biodiversity
- Saltwater intrusion into coastal aquifers
- Loss of cultural and historical sites.

4.4.1 Sea Level Rise Adaptation

The RDN is preparing for sea level rise through the Sea Level Rise Adaptation Program. Progress is as follows:

- 2015: Terms of Reference completed

¹ BC Ministry of Environment. 2011 *Climate Change Adaption Guidelines for Sea Dikes and Coastal Flood Hazard Land Use - Guidelines for Management of Coastal Flood Hazard Land Use*. By Ausenco Sandwell. Accessed June 17, 2019 from http://www.env.gov.bc.ca/wsd/public_safety/flood/pdfs_word/coastal_flooded_land_guidelines.pdf.

- 2017: the RDN acquired the LIDAR data (with a \$10,000 contribution from Wastewater Services)
- 2017: the RDN was awarded a \$150,000 grant to acquire coastal floodplain mapping
- 2018-2019: Coastal flood hazard mapping.

The coastal flood hazard mapping information was used to update the Floodplain Management Bylaw No. 1469 in 2018. This will inform future decisions relating to land use, servicing and emergency preparedness planning, and infrastructure planning and adaptation. More information is available at: <https://www.rdn.bc.ca/sea-level-rise-adaptation-program>.

4.4.2 Departure Bay Pump Station Vulnerability Assessment

In 2019, Wastewater Services invested \$15,000, with the aid of an Infrastructure Planning Grant, to investigate the vulnerability of the Departure Bay Pump Station to the effects of sea level rise. The draft study was completed in 2020.

4.5 Non-Point Sources of Pollution

Non-point sources of pollution come from sources other than an outfall pipe. Some examples of non-point pollution include agricultural and stormwater runoff, onsite sewage systems, and discharges from vessels.

- The LWMP Private Onsite Systems Program addresses pollution from onsite sewage systems.
- The RDN also has agreements with BC Ferries and Seaspan to establish a pump ashore program at GNPCC and DPPCC to accept and treat the wastewater produced on the vessels.

4.6 COVID-19

The COVID-19 pandemic became an emerging issue in 2020. To adapt, Wastewater Services:

- Led the creation and execution of a Mutual Aid Agreement with seven neighbouring local governments to ensure the continued delivery of drinking water and wastewater services.
- Entered into a partnership with the University of Victoria and Pani Energy to monitor wastewater samples at GNPCC and FCPCC for genetic material of the COVID-19 virus.

5) Revisions and Adjustments

The Liquid Waste Management Plan states that the LWMP Monitoring Committee may recommend refinements to the actions to keep implementation on track with the overall objectives and targets. Refinements may also reflect lessons learned from other jurisdictions through communication and benchmarking exercises. Refinements are not considered an amendment or update. Rather, annual review and refinement will provide the flexibility to sustainably manage wastewater and respond to changes such as the pace of development, technical issues, study results, regulatory changes, requests from the public and Board, and availability of funding and grants. Refinements to the LWMP are summarized below.

5.1 Public Wastewater Systems

The LWMP identifies an action to draft a bylaw to allow properties with failing onsite systems to connect to sewer services, where available. Implementation of such a bylaw requires the modification of several bylaws, some which are not implemented by Wastewater Services. Instead of a bylaw, the RDN will continue to assess properties case by case. A guide that walks homeowners through the sewer connection application process is posted on the [RDN website](#).

5.2 Private Onsite Systems

The LWMP identifies an action item to:

- Review and revise the Pump & Haul Local Service Establishment Bylaw (No. 975) and the Sewage Disposal Regulation Bylaw (No. 1224) so only grandfathered properties and properties with failed onsite systems qualify for the septage receiving rate reduction, and
- Work with VIHA and Building Inspection Services to limit holding tanks on new developments.

Holding tanks are permitted by Island Health and the authority to limit pump and haul tanks lies with the Province. When addressing the action items above, it became clear that the role of Wastewater Services is to set quality standards and establish a rate structure for wastewater treatment. To this extent, in 2017, the RDN repealed Bylaws No. 975, 988, 1217, and 1224 and replaced them with Bylaw No. 1732 which establishes the quality criteria and rate structure for wastewater treatment. Key points are summarized in Appendix C of the 2016 LWMP Annual Report. RDN Wastewater Services will work with Island Health in the future if there are efforts led by that agency to limit holding tanks.

The LWMP identifies an additional action item to work with Development Services to adopt draft changes to Land Use and Subdivision Bylaw (No. 500) which would enable the RDN to acquire privately-owned onsite systems serving at least 60 parcels, if petitioned. To date, RDN has not received a petition so bylaw changes are not justified. The RDN will continue to assess a petition on a on a case-by-case basis.

5.3 Pollution Control Centres

The LWMP says that the RDN will expand and provide secondary treatment at GNPCC by 2018. GNPCC began providing secondary treatment in 2020.

5.4 Audit Recommendations

The audit recommended that, if the commitments in the 2014 LWMP are updated in the future, items which are not under the direct control of Wastewater Services should be removed or revised. It also recommended that the RDN should continue to focus on assessing emerging issues and communicating with the public through open houses, workshops and other meetings.

Appendix A – Meeting Minutes



W3C: WASTEWATER & WATER COLLABORATIVE MEETING

Thursday, June 18, 2020; 10:30 am – 12:00 pm
Zoom Meeting

MINUTES

ATTENDEES:

Adrian Limpus – RDN

Bob Weir – Qualicum Beach

Dean Mousseau – Nanaimo

Doris Fournier – Nanaimo

Gerald St. Pierre – RDN

Ian Lundman – RDN

James Haddou – RDN

Joe Doxey – Parksville

John Elliot – Nanaimo

Julie Pisani – RDN

Lorena Mueller – RDN

Mike Squire – Nanaimo

Murray Walters – RDN

Randy Alexander – RDN

Rebecca Graves – RDN

Shelley Norum – RDN

1. ROUNDTABLE UPDATE

RDN Wastewater Services:

- S. Norum provided an update on:
 - Mutual Aid Agreement
 - Biosolids Management Program.
- J. Haddou provided an update on the GNPCC Secondary Treatment Project.
- K. Maynes provided an update on the following capital projects:
 - Departure Bay Pump Station
 - Bay Avenue Pump Station.

City of Nanaimo

- J. Elliot provided an update on:
 - Seasonal Public Works programs
 - COVID changes
 - Maintenance on wastewater system
 - Bowen water main break
 - Source control response maps are finished. Will reach out to I. Lundman to set up a test.
- D. Fournier provided an update on:
 - 7th Street Pump Station and Brookwood Pump Station upgrades
 - Engineering Standards
 - CCTV program
 - Millstone trunk upgrade
 - Eagle Point Master Plan
 - Metral Complete Street Corridor



- Drones images will be shared with the public to show what is done during the projects
- M. Squire provided an update on:
 - Capital Plan
 - Water Supply Strategic Plan Update

City of Parksville:

- J. Doxey provided an update on the Englishman River Water Treatment Plant.

Town of Qualicum Beach:

- B. Weir provided an update on:
 - Marine Spit Construction Project
 - Sewer trunk under Highway #19
 - Discussions with RDN water utilities.

RDN Water Services:

- M. Walters provided an update on:
 - Whiskey Creek Water System
 - Nanoose Fairwinds #1 well
 - Coordinating with Qualicum Beach for Sandpiper Subdivision
 - Overall water consumption during COVID is below seasonal average
- G. St. Pierre gave an update on the SCADA for the Nanoose water system

Drinking Water and Watershed Protection Program (DWWP)

- J. Pisani provided a reintroduction to the Rainwater Working Group

2. FLOW MONITORING

A. Limpus provided a flow monitoring update for the Northern and Southern Communities.

3. CLOSE AND PROPOSE NEXT MEETING

The next W3C meeting is scheduled for September 2020.



W3C: WASTEWATER & WATER COLLABORATIVE MEETING

Monday, September 28, 2020; 10:30 am – 12:00 pm
Zoom Meeting

MINUTES

ATTENDEES:

Adrian Limpus – RDN

Bob Weir – Qualicum Beach

Dean Mousseau – Nanaimo

Doris Fournier – Nanaimo

Fred Spears – Lantzville

Gerald St. Pierre – RDN

James Haddou – RDN

Joe Doxey – Parksville

John Elliot – Nanaimo

Kyle Maynes – RDN

Lorena Mueller – RDN

Mike Squire – Nanaimo

Murray Walters – RDN

Randy Alexander – RDN

Rebecca Graves – RDN

Sean De Pol – RDN

Shelley Norum – RDN

1. ROUNDTABLE UPDATE

RDN Wastewater Services:

- J. Haddou provided an update on the GNPCC Secondary Treatment Project and the Hammond Bay Frontage Project.
- K. Maynes provided an update on the Departure Bay Forcemain Project and the Bay Avenue Pump Station Project.

City of Nanaimo:

- Dean Mousseau highlighted the OCP Amendments for the Sandstone development in south Nanaimo and the Green Thumb property in north Nanaimo.
- D. Fournier provided an update on:
 - 7th Street Pump Station
 - Millstone Sewer Trunk
 - New monitoring station for the Linley Valley catchment. Monitoring stations for Cilaire and Northfield are rescheduled for next year
 - Departure Bay Sewer Master Plan and Brechin Sewer Master Plan
 - Development Standards adopted September 14th
 - Reimagine Nanaimo project: www.getinvolvednanaimo.ca/reimagine-nanaimo.
- J. Elliot provided an update on:
 - Public works busy with redeployed staff from the recreation department
 - Automated Sanitation Program
 - Construction projects on Bowen Road, Metral Drive, Caspers Way and Millstone trunk.
 - New COVID-19 WorkSafe procedures
 - Colour-coded source control maps.



- M. Squire provided an update on:
 - Water Treatment Plant
 - Bowen Road watermain break – inhouse re-routing study.
 - Cathodic protection review
 - Annual dam safety review
 - Water Supply Strategic Plan (part of ReImagine Nanaimo).

District of Lantzville:

- F. Spears provided an update on the Phase III Sanitary Sewer Collection System project.

City of Parksville:

- J. Doxey provided an update on:
 - Englishman River Water Treatment Plant.
 - Pym Street water renewal.
 - Sewer and storm replacement on Forsythe Avenue.

Town of Qualicum Beach:

- B. Weir provided an update on the Memorial Street roundabout.

RDN Water Services:

- M. Walters provided an update on:
 - French Creek and Whiskey Creek water systems
 - DWWP Rebates are restarting now that staff have been rehired
 - Rainwater Working Group
 - i. Watershed Performance Target – feedback to Julie requested by October 15th
 - ii. Next working group meeting scheduled for November 17th.

2. MUTUAL AID AGREEMENT

- S. De Pol led a discussion on the potential to enter into a Mutual Aid Agreement beyond the COVID-19 State of Emergency. Potentially between RDN, member municipalities and the Town of Ladysmith.



3. FLOW MONITORING

A. Limpus provided a flow monitoring update for the Northern and Southern Communities.

4. CLOSE AND PROPOSE NEXT MEETING

The next W3C meeting is scheduled for March 10, 2021 from 10:30 to 12:00.



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