



LIQUID WASTE MANAGEMENT PLAN MONITORING COMMITTEE

Friday, March 17, 2017; 12:30 pm – 3:00 pm
6300 Hammond Bay Road – RDN Committee Room

AGENDA

PAGES

CALL TO ORDER

Committee Introductions (I. Thorpe)

ADOPT AGENDA

DELEGATIONS

MINUTES

3-9

Minutes of the LWMPMC meeting held October 18, 2016

BUSINESS ARISING FROM THE MINUTES

COMMUNICATIONS / CORRESPONDENCE

UNFINISHED BUSINESS

REPORTS

Project / Program Updates:

- GNPCC Secondary Treatment (S. De Pol – verbal)
 - Open House
- FCPC Expansion – Preliminary Design (S. De Pol – verbal)
- Update on the Sewer Servicing Studies (S. De Pol – verbal)
- Bay Avenue Pump Station (S. De Pol – verbal)
- DCC Review (S. De Pol – verbal)
- Receiving Environment Monitoring (S. Norum – verbal)
- Biosolids Update (S. Norum – verbal)
- Update on the Septic Maintenance Rebate Program (S. Norum – verbal)
- Trucked Liquid Waste Bylaw 1732 (S. Norum – verbal)

10-15

W3C meeting – September 30, 2016 (S. Norum)

Next LWMP MC Meeting (S. Norum – verbal)

ADDENDUM

BUSINESS ARISING FROM COMMUNICATIONS / CORRESPONDENCE

NEW BUSINESS

ADJOURNMENT

Distribution:

- | | |
|--|---|
| Alec McPherson.....Director Electoral Area ‘A’ | Glenn Gibson.....Island Health |
| Ian Thorpe.....Director (Nanaimo) | Doug Muir.....Snuneymuxw First Nation |
| Bob Rogers.....Director Electoral Area ‘E’ | Juanita Rogers.....Fisheries and Oceans Canada |
| Marc Lefebvre.....Director (Parksville) | Daniel Hooper.....Public (District 68) |
| Vaughn Figueira.....City of Parksville | Vacant.....Public (District 69) |
| Bob Weir.....Town of Qualicum Beach | Blake Medlar.....Business Community (District 68) |
| Fred Spears.....District of Lantzville | Peter Law.....Business Community (District 69) |
| John Elliot.....City of Nanaimo | |

- Randy Alexander, General Manager, Regional and Community Utilities, RDN
- Sean De Pol, Manager, Wastewater Services, RDN
- Shelley Norum, Wastewater Program Coordinator, RDN
- Rebecca Graves, Recording Secretary, RDN
- Matt O’Halloran, Legislative Coordinator, RDN

For Information Only: Chief & Council (Qualicum First Nation); Chief & Council (Nanoose First Nation); Kirsten White (Ministry of Environment); James Arnott (Environment Canada); Janelle Erwin (Ministry of Transportation and Infrastructure); Brad McRae (City of Nanaimo)

**REGIONAL DISTRICT OF NANAIMO
LIQUID WASTE MANAGEMENT PLAN MONITORING COMMITTEE MEETING
HELD ON TUESDAY OCTOBER 18, 2016
COMMITTEE ROOM**

MINUTES

Present:

Ian Thorpe	Chair, Director (Nanaimo)	Rosa Telegus	City of Parksville
Bob Rogers	Director Electoral Area E	John Elliot	City of Nanaimo
Alec McPherson	Director Electoral Area A	Daniel Hooper	Public (District 68)
Bob Weir	Town of Qualicum Beach	Ted Malyk	Business Community (District 69)
Fred Spears	District of Lantzville	Glenn Gibson	Island Health

Also in Attendance:

Jason Clarke	Director, GreatPacific Consulting
Randy Alexander	GM, Regional and Community Utilities, RDN
Sean De Pol	Manager Wastewater Services, RDN
Shelley Norum	Wastewater Program Coordinator, RDN
Deanna McGillivray	Special Projects Coordinator, Wastewater Services, RDN
Ryan Powell	GNPCC Lab Technician, Wastewater Services, RDN

Regrets:

Doug Muir	Snuneymuxw First Nation	Blake Medlar	Business Community (District 68)
Marc Lefebvre	City of Parksville	Vaughn Figueira	City of Parksville
Juanita Rogers	Fisheries and Oceans Canada		

CALL TO ORDER

Chairperson I. Thorpe called the meeting to order at 12:30 PM and respectfully acknowledged the Coast Salish Nations on whose traditional territory the meeting took place.

ADOPT AGENDA

MOVED Director Rogers, SECONDED T. Malyk, that the agenda be adopted.

CARRIED

PRESENTATIONS

J. Clarke gave a presentation on the refined Greater Nanaimo Pollution Control Centre (GNPCC) Receiving Environment Monitoring Program. This presentation was a follow-up to the draft scoping report presentation given at the March 29, 2016 LWMP Monitoring Committee meeting.

A discussion of the presentation followed and the main topics are discussed below:

- Receiving environment monitoring is a regulatory requirement associated with the GNPCC outfall replacement. The goal is to monitor the effects of the effluent at the boundary of the initial dilution zone (IDZ) and to give confidence in the treatment levels provided at the plant.
- “Trapping depth” for water quality sampling was determined through predictive modelling for both summer and winter conditions, and will be field tested during the first year of sampling.
- All monitoring stations were carefully chosen. The bioaccumulation sampling station locations chosen through modelling will be field tested and evaluated for appropriateness during the first year of sampling.

- B. Rogers asked if some substances accumulate farther down in the sediment column than others, and if so, would the proposed grab sampling methodology be at risk of missing these substances. J. Clarke replied that most parameters of interest to the monitoring program are either dissolved in water or attached to very light, fine flocculants that are suspended in the water column and unlikely to descend to the ocean floor.
- Throughout the three-year monitoring cycle of the program, preliminary sampling results and program methodology will be reevaluated to ensure that the program is informed by current industry standards and is continuing meet the regulatory requirements and objectives. Regulatory updates which come into effect during the three-year monitoring cycle will also be reviewed.
- The program as a whole will be reviewed after the three-year monitoring cycle is complete to evaluate efficacy and identify opportunities for reducing costs associated with the monitoring program.

DELEGATIONS

MINUTES

MOVED Director McPherson, SECONDED Director Rogers, that the minutes from the Liquid Waste Management Plan Monitoring Committee meeting held on June 21, 2016, be adopted.

CARRIED

BUSINESS ARISING FROM THE MINUTES

Director McPherson followed up on an action item which arose from discussion at the June 21st Monitoring Committee meeting and inquired about the name of the company responsible for the incineration of medications collected through the B.C. Medications Return Program. S. Norum answered that following the June meeting, RDN staff determined that the company responsible for incineration is Stericycle. She added that this information was included in the minutes from the June meeting.

COMMUNICATIONS/CORRESPONDENCE

UNFINISHED BUSINESS

REPORTS

Committee Appointments

S. Norum gave an update on the LWMP Monitoring Committee appointments. She notified the Committee that the term for two general public Committee appointments and two business community Committee appointments expires in December 2016. The deadline for applications for these positions is November 14th. New appointments for public and business community committee members and 2017 appointments for Regional Board members sitting on LWMP Committee will be announced in December 2016.

Chairperson I. Thorpe inquired if there was a limit to the number of terms at-large committee members can serve.

S. Norum answered that there is no limit set out in the Monitoring Committee's Terms of Reference.

GNPCC Outfall Update

S. De Pol gave an update on the GNPCC outfall project. The construction contract for the project was awarded to McNally Construction on November 3, 2015. The June 2016 replacement of the GNPCC marine outfall proceeded without issue. Aerial footage of the outfall installation was shown, and an explanation of the float & sink installation process undertaken by the contractor was given. This installation process was completed on-schedule and on-budget. While the project was substantially completed with the installation of the outfall, there are a few remaining items to be addressed, including the restoration of Morningside Park and eelgrass replanting in the outfall right-of-way. Park restoration will occur in Spring 2017. To maximize the probability of successful reestablishment, staff are waiting for sediment on and around the site of the new outfall to settle before eelgrass replanting is authorized. At completion, the entire outfall replacement project is expected come in below the project budget of \$16 million. On July 6, 2016, the RDN received a Gas Tax grant for \$6 million for the outfall replacement project. The new outfall is now online.

T. Malyk asked if there are any environmental implications associated with the old outfall pipe remaining on the ocean floor.

S. De Pol replied that there are no expected adverse effects as the old outfall pipe is steel. It will also provide an artificial reef, creating habitat for marine organisms.

I. Thorpe congratulated S. De Pol and RDN staff on the project's success.

J. Elliot added that City of Nanaimo staff were impressed with the way communications were handled throughout project. The City received very few questions or complaints from the public relating to the outfall project, and was able to maintain special events bookings in the park throughout the construction process.

GNPCC Secondary Treatment Update

S. De Pol provided an update on the Secondary Treatment Upgrade Project. 100% design has been completed by AECOM, and an internal review of the design documents is underway. In preparation for tendering, the RDN released a Request for Qualifications for the GNPCC Secondary Treatment Upgrade Project. A number of responses were received, and after a thorough review process, the list of Qualified General Contractors has been posted on the RDN website. The project is expected to go to tender in late 2016. It is anticipated that the contract will be awarded in Spring 2017. The total project cost is approximately \$82 million; if required, the budget will be adjusted following tendering.

Director Rogers asked if the review process for submissions to the Request for Qualifications included the applicants' past records for reliability and professionalism.

S. De Pol replied that extensive reference checks were completed for all shortlisted applicants.

G. Gibson asked what the GNPCC Secondary Treatment Upgrade Project has to do with the receiving environment monitoring.

S. De Pol answered that the receiving environment monitoring is a regulatory requirement associated with the construction of the new outfall. However, information collected via the sampling program will be evaluated to determine whether a UV disinfection upgrade will be needed at the GNPCC in future.

T. Malyk asked where the budget for the Receiving Environment Monitoring Program comes from.

S. De Pol explained that capital projects are funded by Development Cost Charges, while ongoing operation and maintenance expenses are funded by property taxes. Year one of the program will

be funded through the capital projects budget. Beyond that, the sampling program will be included in the operations and maintenance budget.

Update on the Sewer Servicing Studies

S. De Pol provided an update on the sewer servicing studies. Wastewater Services received \$350,000 in federal Gas Tax grant funds for sewer servicing studies. This funding was divided into two separate studies: a \$50,000 sewer servicing study in Cedar, and \$300,000 sewer servicing study in Bowser.

The Cedar study centred on the Duke Point Pollution Control Centre's available capacity, and evaluated whether a future upgrade of the facility could allow the connection of currently unserviced properties in the Cedar area. Currently, the City of Nanaimo and the RDN have an agreement in place restricting further connection of Cedar properties to the collection system. The study produced a conceptual plan for the expansion of the Duke Point treatment plant, projected costs for the project, and estimated cost per connection. The required capacity for the projected build-out of the Duke Point industrial area over the next twenty years was also considered in the plan. Next steps in this project include discussions with the City of Nanaimo regarding a possible update of the existing agreement, and the amendment of existing RDN Wastewater bylaws. It is important to note that if an update to the agreement with the City is approved and a plan for expansion is devised, there will still be much work to be done before any new connections will be authorized.

T. Malyk asked if there was an indication from the City of Nanaimo prior to the commencement of the study that the agreement can be amended.

S. De Pol answered that RDN staff did consult with City staff prior to commencing the study, and that there was support in principle to move forward with the study. The results of the study will inform further discussion about updating the agreement.

J. Elliot commented that City is concerned with ensuring that properties in the Duke Point industrial area retain access to their allotted service if there are new connections to the system. The Cedar servicing study is a necessary step towards understanding the upgrades to the treatment plant that would be necessary to allow for the expansion of sewer servicing in the Cedar area without impacting existing customers, or any build-out of the industrial park, and the costs associated with the upgrades.

The Sewer Servicing Study for Bowser Village Centre includes predesign and detail design on collection and treatment, and predesign on disposal options. A public meeting was held in Area H on July 11, 2016, when predesign on the project was 60% complete. The most significant update shared at that meeting was the cost for the project. The ground disposal and outfall options have very similar cost estimates. The outfall is estimated to cost \$1.3 million, while ground disposal is estimated to cost \$1.8 million. Costs to construct a treatment plant are estimated at \$3.4 million, while the collection system is estimated to cost \$4.9 million. The estimated total for the project, whether ground or marine disposal is chosen, is estimated at approximately \$10 million. If the project receives support from residents, the RDN will pursue two-thirds funding (\$6.6 million), leaving \$3.3 million to be collected from residents. Funding options and estimates of cost per household are to be determined.

T. Malyk asked if the RDN had already applied for grant funding, or if RDN staff were aware if any grant funding was available for a Bowser sewer servicing project.

S. De Pol replied that a new federal-provincial grant program was recently announced, and that staff are currently evaluating whether this project meets the grant criteria.

G. Gibson asked what the justification for choosing the Bowser area for this servicing study was.

S. De Pol answered that the Regional Growth Strategy and Area H Official Community Plan identify Bowser as a “village centre”, an area of growth and densification in years to come. Sewer servicing is required before densification can occur.

Biosolids Update

S. Norum gave an update on the Biosolids program. For the last several years, the RDN has had a partnership agreement with Vancouver Island University (VIU) and SYLVIS Environmental for the beneficial use of biosolids through land application at the VIU Woodlot. The RDN has received notification that VIU will not be renewing their woodlot lease, and therefore the RDN will not be able to renew the partnership agreement that allows the woodlot to be used for land application. The current contract will come to term in March 2017. The RDN can send biosolids to the Regional Landfill if the VIU woodlot is not available; however, Wastewater Services has hired SYLVIS to explore other potential beneficial use options including other land application and landfill closure opportunities.

S. De Pol added that VIU has chosen not to renew their woodlot lease due to requirements imposed by TimberWest to address liability concerns associated with recreational use in the area. Over the last several years, the biosolids program and the partnership with VIU and SYLVIS has been very successful, and has even been recognized with a national award.

Director McPherson asked how many tonnes of biosolids are produced at RDN Wastewater facilities each year.

S. De Pol answered that between the four treatment plants, 4,000 tonnes of biosolids are produced annually. This quantity is expected to increase when the GNPCC secondary treatment upgrades are completed.

Director McPherson noted that long term disposal of biosolids at the Region Landfill may have implications for solid waste management planning.

T. Malyk asked about the possibility of using an existing parcel of RDN land to dispose of biosolids or of purchasing a parcel for this purpose. He also mentioned the possible use of agricultural land for land application.

S. De Pol replied that the RDN is not considering at purchasing new land for land application as an option at this time, as there are many other opportunities for land application to be explored. The RDN is not exploring options for farmland application at this time as there are several other viable options for beneficial use.

SepticSmart and Septic Maintenance Rebate Program

S. Norum gave an update on the SepticSmart and Septic Maintenance Rebate program. A total of four SepticSmart workshops were held in 2016: two in spring and two in September. G. Gibson attended this year’s workshops as part of the expert panel, and his knowledge has been a great asset to the program. 2016 was the best attended year since the first year of the program, which may be in part due to the popularity of the Septic Maintenance Rebate Program. A rebate top-up bonus of up to \$100 is offered to rebate program participants who attend a SepticSmart workshop; however, not all workshop attendees participate in the rebate program.

The Septic Maintenance Rebate program is in its third year. Funds are fully allocated for 2016, and a waitlist is being taken for new applicants. Wastewater Services anticipates offering the rebate program again in 2017, with minor improvements. The program has been very well received, in part because it is the only program of its kind in the province. Areas E, B and A have the highest number

of rebate program participants this year. The RDN has invested approximately \$74,000 in the Septic Maintenance Rebate. Funding for this program comes from a portion of the RDN's septage receiving revenue. In addition, the program received \$17,000 in grant funding from WCOWMA BC in its first two years. In total this equals about \$91,000 in rebate funding over the three years of the program, with the program's 209 participating households to date spending a total of \$500,000 on septic upgrades. This year, the rebate program budget was increased due to an increase in funds from septage revenue.

T. Malyk asked if there were any plans to increase the rebate program budget next year.

S. Norum explained that the funding for the program is directly tied to septage receiving fees, and that funding cannot increase unless the funding model is changed. However, there is the opportunity to reallocate additional funds to the rebate program mid-year, if more septage fees are collected than projected.

S. De Pol added that septage revenues are increasing, in part due to the SepticSmart program.

Chairperson Thorpe called upon G. Gibson to comment on his experience attending the workshops.

G. Gibson replied that the workshops were well organized and offer valuable information. Attendance in 2016 was good. There are always more people who could attend the program..

2017 Work Plan

S. Norum presented the key LWMP action items in the 2017 Wastewater Services work plan. At least two meetings of the LWMP Monitoring Committee will be held next year, and are expected to be scheduled in close proximity to the annual LWMP reporting deadline and GNPCC Secondary Treatment Upgrade Project milestones. In addition, staff will host two Wastewater & Water Collaborative (W3C) meetings, and three W3C working groups will meet to address source control, inflow & infiltration, and rainwater management. Four SepticSmart workshops will be offered in 2017: two in the spring and two in the fall. The Septic Maintenance Rebates will be offered again; \$35,000 has been allocated for that program in the preliminary 2017 budget. In addition, the implementation of the Trucked Liquid Waste Rates and Regulations Bylaw (Bylaw 1732) will require industry outreach to familiarize local businesses with the changes that will affect them. Public communication regarding the GNPCC Secondary Treatment Upgrade and other major capital projects remains a priority for 2017. The Bowser Village Sewer Servicing Study will be completed, as per the Gas Tax funding agreement. The Wastewater Services website content will also be reviewed to align with the look and feel of the new 2017 RDN Website.

Director Rogers asked if there were any items in the work plan regarding consultation of, and/or opportunities for partnership with, First Nations on matters related to liquid waste.

R. Alexander replied that the RDN has ongoing communications with First Nations about the LWMP and all related projects. He added that Wastewater Services will undertake communications about new initiatives or opportunities through the RDN's Intergovernmental Liaison as warranted.

Director McPherson inquired as to whether completion of remaining tasks relating to the Cedar Village Sewer Servicing Study would be included in the 2017 work plan.

S. De Pol replied that these tasks would be included in the work plan for 2017.

Next LWMP MC Meetings

The next LWMP Monitoring Committee meetings are tentatively scheduled March, May/June, and October 2017.

ADDENDUM

BUSINESS ARISING FROM COMMUNICATIONS/CORRESPONDENCE

NEW BUSINESS

ADJOURNMENT

MOVED G. Gibson, SECONDED T. Malyk that this meeting be adjourned.

TIME: 2:37 PM

CHAIRPERSON



W3C: WASTEWATER AND WATER COLLABORATIVE MEETING

Friday, September 30, 2016; 9:00 am – 1:00 pm
6300 Hammond Bay Road – RDN Committee Room

MINUTES

ATTENDEES:

Adrian Limpus – RDN	Doris Fournier – Nanaimo	Lorena Mueller – RDN
Bill Sims – Nanaimo	Fred Pakkala – Parksville	Sean De Pol – RDN
Bob Weir – Qualicum Beach	John Elliot – Nanaimo	Shelley Norum – RDN
Deanna McGillivray – RDN		

CALL TO ORDER AND INTRODUCTIONS

The meeting was called to order at 9:05 am.

ROUNDTABLE UPDATE

(1) RDN Wastewater Services:

Sean De Pol updated the group on RDN capital projects and DCC bylaw review:

- GNPCC Outfall: The June 2016 replacement of the Greater Nanaimo Pollution Control Centre (GNPCC) marine outfall went smoothly. The new outfall is now online. Restoration of Morningside Park will follow; a landscape plan has been submitted to the City of Nanaimo. In addition, there is some eelgrass replanting to be completed in the outfall right-of-way. Aerial footage of the outfall installation was shown, and an explanation of the float & sink installation process undertaken by the contractor was given.
Action Item: RDN staff to consider sharing the Outfall Replacement Project as a conference paper or presentation.
- Sewer DCC Bylaw Review: Development Cost Charges are fees collected from land developers to offset costs directly related to growth. DCC definitions and requirements are set out in the *Local Government Act*. The RDN applies sewer DCCs to pay for projects that increase the capacity of RDN wastewater facilities. DCCs are established by bylaw and are updated from time-to-time. The RDN sewer DCC bylaws were last updated in 2009. The RDN retained a consulting engineer to lead the current DCC review process. The review focused on three main areas: development projections, capital project cost estimates, and new DCC rates. Adoption of the amended RDN Wastewater DCC bylaws is anticipated for Spring 2017. Memos detailing the proposed amendments to RDN sewer DCC bylaws were circulated to those in attendance. Please see attachments 1 and 2.
- GNPCC Secondary Treatment: RDN staff are reviewing the 100% design drawings submitted by the engineer. The RDN received a number of responses to a Request for Qualifications for the GNPCC Secondary Treatment Upgrade Project. The list of Qualified General Contractors is posted on the RDN website: <http://www.rdn.bc.ca/cms.asp?wpID=3766>. The RDN intends to provide tender documents to the qualified contractors in late October.



- FCPCC Expansion: The consulting engineer completed a project scoping exercise with French Creek Pollution Control Centre operators for the upcoming plant expansion. Pre-design will begin in 2017.
- Bay Avenue Pump Station: Koers & Associates is conducting an accessibility review and exploring options for relocation of the Bay Avenue Pump Station. This review is timely as the original pump station is difficult to access and the genset is due for replacement. A few options for improving the accessibility of the pump station have been identified, but a plan for the project has not yet been finalized. City of Parksville Public Works staff are being consulted throughout the process.

Shelley Norum reported on the Liquid Waste Management Plan and SepticSmart & Biosolids Programs:

- Liquid Waste Management Plan (LWMP): The LWMP Annual Report was submitted to the Province in June 2016.
- SepticSmart: Two SepticSmart workshops were held in March of this year, and two in September. 2016 was the best attended year since the first year of the program, which may be in part due to the popularity of the SepticSmart rebate program. The rebate program is fully allocated for 2016, and we are taking a waitlist. Funds for this program come from a portion of the septage receiving revenue. This year, we increased the rebate program budget due to an increase in funds from septage revenue. Feedback about the rebate program has been very positive, especially as septic rebates are not offered in other regional districts. We plan to offer the rebate program again in 2017, with minor improvements.
Action Item: RDN staff to consider sharing their experience with the SepticSmart Rebate program as a conference paper or presentation.
- Biosolids: The Biosolids Program has been running successfully for a number of years, but will be changing in 2017. VIU may not be renewing their woodlot lease, and therefore the RDN will likely not be able to renew the partnership agreement that allows the woodlot to be used for land application. Wastewater Services has hired SYLVIS Environmental to explore other potential beneficial use options. In the short term, the Regional Landfill is an alternative disposal option to land application.

(2) City of Parksville:

Fred Pakkala provided an update on the City of Parksville's activities:

- City of Parksville plans to conduct a study on the environmental impacts of Highway 19A and City of Parksville storm water discharge into the Englishman River Estuary. The study will guide the upgrade of the existing storm water outfalls to the estuary to improve fisheries health.

(3) Town of Qualicum Beach:

Bob provided an update on the Town of Qualicum Beach's activities:

- The Town continues to focus on filling asset management data gaps.
- Qualicum Beach is currently researching options for purchasing a CCTV/remote imaging unit to inspect underground storm and sanitary infrastructure.

(4) District of Lantzville:

Fred Spears was absent but did not have any updates from the District of Lantzville.

(5) City of Nanaimo:

Doris Fournier provided an update on the City of Nanaimo’s activities:

- The City is working on preliminary design for the City of Nanaimo Chase River force main and pump station on Seventh Street. Challenges exist with the preferred location, and alternative options are being explored. This project will continue into 2017.
- A modelling exercise is underway to determine the effect of a development increase on the Millstone Trunk Sewer.
- Two new City of Nanaimo sanitary sewer monitoring stations are now online. One station is at the Chase River pump station measuring flows in the Chase River trunk and one on Zorkin Road measuring flows from the Brechin area catchment. Data from these stations is stored in FlowWorks.
- The City of Nanaimo’s DCC Review is ongoing. It is anticipated that proposed updates will be presented to Council in late Fall 2016.

John Elliot provided an update on the City of Nanaimo’s activities:

- Brad McRae will be starting as Chief Operating Officer at the City on Monday, October 3. He will be tasked with overseeing Engineering & Public Works, Nanaimo Fire Rescue and Facilities.
Action Item: Include Brad McRae in W3C & LWMP Steering Committee communications.
- The City has split their Inflow & Infiltration budget into four focus areas: Harewood wyes, services (general), mains (general), manholes. Some grouting injection equipment was purchased and has been used successfully to repair mains and manholes. The City is looking to do a comparison of historical flow monitoring data and present flow monitoring data in Harewood area to identify the effects of the Harewood Wyes I&I Mitigation Project on flows.
Action Item: City staff to send the Harewood I&I Monitoring Report to Shelley when it is available in 2017.
- The City has seen an increase in water service leaks this year and is mapping the frequency, location and nature of these leaks to identify possible patterns and trends.
- The City has observed some corrosion on ductile iron water mains in the downtown area. Design work for replacement of impacted mains is planned for 2017, with replacements scheduled for 2020.

Bill Sims provided an update on the City of Nanaimo’s Water Services activities:

- The City is adding soda ash for pH adjustment at the water treatment plant to get an optimal pH of 7.
- There have been some customer inquiries about higher chlorine taste and smell in water since the new water treatment plant came online in December. With the new treatment process, less chlorine is being added to the water, but the chlorine residuals in the distribution system are slightly higher because the mains are much cleaner and so is the water moving through them. This is because there is less organic matter in the water for the chlorine to react with, creating higher chlorine residuals for the end user. Chlorine levels throughout the system and treatment process are being monitored closely and may be further reduced if necessary.

(6) RDN Wastewater Services & City of Nanaimo Source Control Discussion:

City of Nanaimo and RDN Wastewater staff discussed a specific influent quality event.

Action Item: RDN Wastewater Services to schedule a meeting between GNPCC Operators and City of Nanaimo Public Works staff to discuss this source control issue.

(7) RDN Water Services:

Deanna provided an update on the Drinking Water & Watershed Protection Program in relation to the LWMP:

- The 2016 CWMN Monitoring program is underway, with water quality sampling at 56 sites, on 30 rivers/creeks, by 12 community groups completed for the summer low-flow. The fall flush monitoring period is scheduled commence October 11. This is the sixth year of monitoring on many sites. Trends show that urban creeks with storm water runoff issues have the most water quality exceedances.
- In June, physical assessments of Millstone River and Holden Creek were performed by stewardship volunteers led by biologist Dave Clough. Reports recommend remediation (i.e. riparian plantings, bioswales/sumps/rain gardens, storm water runoff management) on specific reaches of the waterways, especially on the Millstone. These recommendations could be useful in working with the City of Nanaimo and individual rural property owners to improve creek health through remediation.
- The Rainwater Harvesting Incentive Program was expanded to 60 rebates this year to meet increased demand and all have been allocated. This demand demonstrates the growing interest in rainwater harvesting from residents across all municipalities and EAs in the Region.
- A Phase 2 Water Budget Study is underway for Nanoose (Area E) and Phase 2 scoping exercises are being conducted for French Creek and Cedar-Yellow Point. Phase 2 is an expanded data collection exercise to gather data on groundwater, surface water, climate, and water demand in order to better calculate water supply and demand via a numerical model (Phase 3).
- Water Conservation Plan Implementation: The WaterSmart Yard Campaign & Contest is now complete for 2016. This year was the campaign's most successful to date, with 164 entries over the summer for weekly prizes and a grand prize rain barrel draw.

Water Services is piloting a Water Efficient Landscapes Rebate for irrigation efficiency upgrades & soil augmentation in RDN Water Service Areas. There is potential to expand this program to municipalities and electoral areas as a region-wide pilot in 2017.

- BCCF is collecting spot flow measurements on the Englishman River to better understand surface water-groundwater interaction in the area. The measurements are taken at different flow levels to create a flow rating curve. The measurements are taken above and below identified bedrock fault lines that intersect the river.
- A water balance study and sediment reduction plan is underway on Shelly Creek in the Englishman River Watershed. Mid Vancouver Island Habitat Enhancement Society is spearheading the study, with support from DWWP. It involves the preparation and calibration of models using the Water Balance Methodology to calculate run-off and infiltration in the watershed. The study is a pilot project for this approach, which could be replicated for other watersheds in the Region if successful.

FLOW MONITORING

Adrian Limpus provided a flow monitoring billing update for the current billing period ending in September 2016. Flow monitoring data up until August 2016 was presented and it was noted that there would be one more month of meter readings and account information to incorporate in the final results for the period.

Adrian also reported that wireless routers were recently installed on all flow meters, and provided an update on the Lantzville sanitary flow meter. The old sensor in the Lantzville meter was damaged during a high flow event in April and was replaced in July. As such, flow data is missing between April and July. Historical flow averages will be used to fill in this data gap.

Action Item: Adrian to send flow monitoring packages to all municipalities.

WORKING GROUP 1: Source Control / Sanitary Sewer Use Bylaw

A main commitment of the LWMP Source Control Program is to enhance regional source control through a single unified bylaw or through consistent municipal bylaws. The RDN updated its source control bylaw in November 2015. The Source Control/Sanitary Sewer Use Bylaw Working Group met for the first time on April 6, 2016. One of the main action items from that meeting was to revise and align individual bylaws for consistency.

At the last W3C, the RDN provided wording that could be used by the municipalities to reference the RDN bylaw 1730. In July 2016, the RDN distributed a letter from its lawyer. That letter provided advice on how the source control bylaw from each municipality could be modified for consistency.

Action Item: Shelley to forward copy of the RDN's solicitor's advice on this topic to Doris for review by the City of Nanaimo's solicitor.

Action Item: Deanna and Shelley to summarize and send out a list of action items with a timeline for municipal sewer use/source control bylaw updates.

WORKING GROUP 2: Inflow and Infiltration

The I&I Working Group met on November 10, 2015, February 2, 2016 and February 29, 2016. The working group reviewed the York Region Inflow and Infiltration Reduction Strategy and created a ten-page summary of sections that are applicable in the RDN. This summary report was distributed to W3C attendees following the March 4, 2016 W3C meeting. The York report is available online at http://sectrunksewer.ca/images/uploads/Inflow_and_Infiltration_Reduction_Strategy_web1.pdf. I&I Working Group resources are stored on the City of Nanaimo's OwnCloud site. Please contact Doris if you are interested in reviewing these documents and she will forward you the username and password.

Action item: Doris to explore City of Nanaimo funding options for hiring a consultant in late 2016 to develop an I&I strategy from the York Region strategy summary report.

Action Item: Doris to send Fred Pakkala & Deanna invites to the I&I OwnCloud storage site.

WORKING GROUP 3: Rainwater Working Group

The Rainwater Working Group met on November 26, 2015 and February 15, 2016. Discussion topics included the regional context for rainwater management; existing policies, bylaws, and DPAs from each jurisdiction; and a review of successes and challenges. Topics for follow-up include:

- A case study review of sediment and erosion controls and enforcement tools for the development of single-family residences
- Developing partnerships with building inspectors
- Looking into the potential to align storm water bylaws and engineering standards.

Next steps will include identifying achievable goals and actions for the working group on identified topics of interest.

City of Nanaimo staff also provided an update that a review and update of Section 7 of the City's engineering standards has been completed and approved by Council. The new standards will come into effect in November 2016.

ACTION ITEMS

The following action items are identified:

1. RDN staff to consider sharing experiences with the GNPCC Outfall installation and SepticSmart rebate program as conference papers or presentations.
2. Include Brad McRae, City of Nanaimo COO in W3C & LWMP Steering Committee communications. – DONE
3. Doris will send Shelley a copy of the Harewood I&I Monitoring Report when it comes available in 2017.
4. Ian Lundman to schedule a meeting between GNPCC Operators and City of Nanaimo Public Works staff to discuss a unique source control issue that has occurred in the same period of time two years in a row. – DONE
5. Adrian to send flow monitoring packages to all municipalities.
6. Shelley to forward copy of the RDN's solicitor's advice re: referencing the RDN's source control bylaw in municipal sewer use/source control bylaws to Doris for review by City of Nanaimo's solicitor. – DONE
7. Deanna and Shelley to summarize and send out a list of action items with a timeline for municipal sewer use/source control bylaw updates.
8. Doris to explore City of Nanaimo funding options for hiring a consultant to develop an I&I strategy from the York Region Inflow & Infiltration Reduction Strategy summary in late 2016.
9. Doris to send Fred Pakkala & Deanna invites to the I&I Working Group OwnCloud storage site.

CLOSE AND PROPOSE NEXT MEETING

The next W3C meeting is scheduled for Friday, March 10, 2017.

ATTACHMENTS

1. Staff Report: Bylaw No. 1547.01 – A bylaw to amend the wastewater development cost charge bylaw for the Southern Community Sewer Service Area (Greater Nanaimo Pollution Control Centre)
2. Staff Report: Bylaw No. 1442.03 – A bylaw to amend the wastewater development cost charge bylaw for the Northern Community Sewer Service Area (French Creek Pollution Control Centre)