



REGIONAL DISTRICT OF CENTRAL OKANAGAN  
WESTSIDE WASTEWATER SERVICE STANDING COMMITTEE MEETING

Thursday, November 14, 2024

10:00 a.m.

Woodhaven Board Room  
1450 K.L.O. Road, Kelowna, BC

Pages

1. CALL TO ORDER

Chair Milsom to call the meeting to order.

As an open meeting, a live audio-visual feed is being broadcast and recorded on rdco.com

2. LAND ACKNOWLEDGEMENT

The RDCO acknowledges our presence on the traditional, ancestral, and unceded tmx<sup>w</sup>úla<sup>?</sup>x<sup>w</sup> (land) of the syilx / Okanagan people who have resided here since time immemorial. We recognize, honour, and respect the syilx / Okanagan lands upon which we live, work, and play.

3. ADOPTION OF THE AGENDA

To adopt the November 14, 2024 Westside Wastewater Service Standing Committee agenda.

4. ADOPTION OF MINUTES

To adopt the November 9, 2023 Westside Wastewater Service Standing Committee meeting minutes.

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5. NEW BUSINESS

5.1 **2024 Source Control Program Update**

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To inform the Westside Wastewater Service Committee on the progress of the 2024 Source Control program specific to the Westside Regional Wastewater System

<b>5.2</b>	<b>2024 Westside Regional Wastewater Treatment Plant Process Update</b>	20 m	22 - 34
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To update the Westside Wastewater Service Committee on the 2024 Westside Regional Wastewater Treatment Plant performance.

<b>5.3</b>	<b>Westside Wastewater 2025-2029 Financial Plan - Draft</b>	20 m	35 - 54
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To present, for review, the draft 2025-2029 Financial Plan for the Westside wastewater service.

**6. ADJOURN**



# Westside Wastewater Service Standing Committee Meeting

## Minutes

**Date:** Thursday, November 9, 2023  
**Time:** 10:00 a.m.  
**Location:** Woodhaven Board Room  
1450 K.L.O. Road, Kelowna, BC

**Committee Members**  
G. Milsom, Chair (City of West Kelowna)  
P. Van Minsel, Vice Chair (District of Peachland)  
J. Coble (Westbank First Nation)  
S. Johnston (Regional District of Central Okanagan)

**Committee Members Absent:** L. Wooldridge, RDCO Chair, ex-officio

**Staff:**  
T. Kendel, Acting Director of Engineering Services  
M. Wyman, Acting Manager of Engineering Services  
C. Kruiswyk, Acting Supervisor Utilities Services  
A. Lambrecht, Senior Water & Wastewater Process Technologist  
M. Mill, Asset Management Supervisor  
T. McCabe, Director of Financial Services  
S. Ginter, Chief Administrative Officer  
S. Horning, Deputy Corporate Officer  
K. Newman-Renwick, Administrative Assistant, Engineering Services (Recording Secretary)

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### 1. **CALL TO ORDER**

Chair Milsom called the meeting to order at 10:06 a.m.

### 2. **LAND ACKNOWLEDGEMENT**

The Chair acknowledged the Committee's presence on the traditional, ancestral, and unceded  $\text{tr}\acute{\text{x}}^{\text{w}}\acute{\text{u}}\text{l}\text{a}^{\text{?}}\text{x}^{\text{w}}$  (land) of the syilx / Okanagan people who have resided here since time immemorial. We recognize, honour, and respect the syilx / Okanagan lands upon which we live, work, and play.

**3. ADOPTION OF THE AGENDA**

VAN MINSEL/JOHNSTON

**THAT** the November 9, 2023, Westside Wastewater Service Standing Committee agenda be adopted as amended by including updated information for Agenda Item 5.4.

CARRIED

**4. ADOPTION OF MINUTES**

JOHNSTON/VAN MINSEL

**THAT** the February 22, 2023, Westside Wastewater Service Standing Committee meeting minutes be adopted.

CARRIED

**5. BUSINESS ARISING**

5.1 East Trunk Lift Station Upgrade

Report by Clarke Kruiswyk, Acting Supervisor of Utilities Services (Regional District of Central Okanagan)

A PowerPoint presentation on the East Lift Station Upgrade was provided to the Committee and included:

- Reviewed background history and service areas
- Existing limited capacity levels and growing changes for maximum flow rates
- Description of upgrades and transition of existing lift station to West Kelowna
- Marina Park site acquisition plans
- RD/CO/City of West Kelowna land ownership agreements
- Next steps expanding RFP for design, engineering, and construction.

A discussion took place regarding construction of washrooms and concession regarding City of West Kelowna operations.

JOHNSTON/COBLE

**THAT** the Westside Wastewater Service Standing Committee receives the East Trunk Lift Station Upgrade report from the Acting Director of Engineering Services dated November 9, 2023, for information.

CARRIED

5.2 Odour Control Update

Report by Clarke Kruiswyk, Acting Supervisor of Utilities Services (Regional District of Central Okanagan)

A PowerPoint presentation on the Odour Control Update was presented to the Committee and included:

- Background of WWTP and wastewater components and sewer processes.
- Odour complaint decreases and related improvements.
- Investigation of odour complaint sources and steps taken with West Kelowna
- Odour assessment and mitigation reporting and proposed upgrades
- Odour control upgrade design RFP and phase timeline

A discussion took place regarding sources of odour complaints, identifying sources, and capital cost assessments as required by growth and changes.

#### VAN MINSEL/JOHNSTON

**THAT** the Westside Wastewater Service Standing Committee receives the Odour Control Update from the Acting Director of Engineering Services dated November 9, 2023, for information.

CARRIED

#### 5.3 Source Control 2023 Update

Report by Angela Lambrecht, RDCO Senior Wastewater Process Technologist (Regional District of Central Okanagan)

A PowerPoint presentation on the Wastewater Source Control was provided to the Committee and included:

- Description of Source Control program and sewer processes
- Demand for wastewater components and services
- Quality control processes and loading capacity.
- Concerns regarding increase in organic load and capacity demands
- Permit compliance regarding loads and environmental impacts
- Winery waste being a large contributor and requests for bylaw winery compliance.
- Next steps expanding testing and engagement.
- Continue to investigate, provide assistance, and monitor.
- Amendments to bylaw penalties and collecting tiered surcharges.
- Next steps support sewer uses bylaw updates within jurisdictions.

A discussion took place regarding bylaw fine structure by jurisdiction with RDCO direction and winery compliance. Request for presentation to WFN Chief and Council. Intent to develop guidance language for bylaw surcharges for all jurisdictions operational teams and council consideration.

#### COBLE/VAN MINSEL

**THAT** the Westside Wastewater Service Standing Committee receives the 2023 Source Control Update from the Acting Director of Engineering Services dated November 9, 2023, for information.

CARRIED

#### 5.4 Westside Regional Wastewater Treatment Plant - Asset Management Plan 2023

Report by Mimi Miller, Asset Management Analyst, (Regional District of Central Okanagan)

A PowerPoint presentation on the Westside Regional Wastewater Treatment Plant – Asset Management Plan was provided to the Committee and included:

- Description of Asset Management plan and capital options for WWTP
- Background of asset priorities
- Scope of Plan covers only Wastewater Treatment Plant facility, not collections systems, lift stations, or fleet.
- Key points that plan is holistic, risk-based, and reviews increased total value of assets inventory and conditions.
- Review of total asset risk profile and financial planning
- Reserves in place to fund high risks assets and grants for lower risk items.
- 20-year capital reinvestment funding needs by Asset categories
- Reserve contribution options including annual capital contributions, changes from budget, annual increases and funding.
- Targeting renewal funding using risk-based approaches
- Reserve contribution options and increases
  - Updated graph slide provided as original contained calculation error.
- Recommendations for:
  - 2A: Staff Recommended \$1.47 million contribution to reserves in 2024, \$200,000 increases starting 2025.
  - 2B: \$1.47 million contribution to reserves in 2024, \$100,000 increases starting 2025.
  - 3: \$2.5 million contribution in to reserves in 2024, \$195,000 in 2025

A discussion took place regarding staff recommendations for funding options and timelines. Engagement with municipalities financial planning.

#### 5.5 Westside Wastewater Service 2024-2028 Financial Plan – Draft

Report by Tanya McCabe, Director of Financial Services (Regional District of Central Okanagan)

A PowerPoint presentation summarizing the Westside Wastewater Service 2024-2028 Financial Plan includes:

- Description of Draft financial plan.
- Admin overhead policy not yet included.
- Financial plan reflects option 2A.
- Description of contributions and increases of service fees by participants.
- Operational Expenditures and offsetting changes with the WWTP with the biosolids removal project, RDCO, Westbank First Nation, and Peachland lift stations and collector systems.
- Capital Expenditures decrease by service with the WWTP and RDCO lift stations and collector systems. Driven by stage four upgrades delay and change in lift station upgrade timelines.
- Projected reserve levels of capital facility reserve based on risk analysis.

A discussion took place regarding to clarifying contribution and reserve amounts and future review of user cost distribution.

VAN MINSEL/JOHNSTON

**THAT** the Westside Wastewater Service Standing Committee receives the Draft Westside Wastewater Service 2024-2028 Financial Plan from the Director of Financial Services and the Westside Regional Wastewater Treatment Plant Asset Management Plan from the Acting Director of Engineering Services dated November 9, 2023, for information;

**AND THAT** the Westside Wastewater Service Standing Committee recommends the Regional Board approve annual contributions to the Westside Regional Wastewater Treatment Plant capital reserve equaling \$1,473,220 starting in 2024 and a \$200,000 annual increase to reserve contributions beginning in 2025. (Option 2A)

**AND FURTHER THAT** the Westside Wastewater Service Standing Committee recommends the draft Westside Wastewater Service 2024-2029 Financial Plan to be forwarded the Regional Board.

CARRIED

**6. NEW BUSINESS**

There was no new business.

**7. ADJOURN**

The meeting was adjourned at 11:08 a.m.

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G. Milsom (Chair)



# Standing Committee Report

## Westside Wastewater Service Committee

**To:** Westside Wastewater Service Committee  
**From:** Associate Director of Development and Engineering Services  
**Date:** November 14, 2024

**Subject:** 2024 Source Control Program Update

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**Objective:** To inform the Westside Wastewater Service Committee on the progress of the 2024 Source Control program specific to the Westside Regional Wastewater System.

### Discussion:

The Westside Regional Wastewater Treatment Plant (WRWTP) receives approximately 11,000 m<sup>3</sup> of domestic wastewater a day from Peachland, West Kelowna and Westbank First Nation (WFN) Reserves #9 & #10. The WRWTP, and all other wastewater treatment plants are designed to treat a specific wastewater load (volume of liquid m<sup>3</sup>/day and a mass of organic load (COD kg/day). Over the years, the organic load has increased without a corresponding increase in volume. Sampling indicates that the source of extra organic loading continues to be associated to the wine production industry.

As per RDCO and member municipality Sewer Use Bylaws, industrial users must pre-treat their wastewater to meet specific quality requirements before discharge, to protect the regional wastewater system. This is required because high-strength wastewater can impact the operation and performance of the plant, and in some cases also impact the wastewater collection system. The plant is not designed to treat large industrial loads, which have likely contributed to Operational Certificate exceedances on at least 7 occasions in 2024.

### Source Control Program 2024

RDCO staff sampled 11 facilities in total, for a sum of approximately 110 samples so far in 2024. Out of those 110 samples, 35% were non-compliant with sewer use bylaws. This is an improvement from 2023 when 67% of samples were non-compliant. Correspondence was sent to all facilities that did not meet compliance, requesting confirmation of steps to be taken to limit immediate impacts and achieve bylaw compliance.

Awareness of the Source Control Program continues to evolve and overall improvement in general wastewater quality has been observed through sampling; however, the higher rate of compliance could be attributed to less wine production rather than improved pre-treatment.

### Bylaw Enforcement

Participants of the WRWTP service have historically aligned their community's bylaws with the RDCO sewer use bylaw. Residential, commercial or industrial users are accountable for their compliance with local jurisdiction bylaws, and each jurisdiction is responsible for enforcement of their bylaws. Across the



Region, bylaw enforcement typically begins with education and reasonable timelines for corrective action before the application of penalties.

In 2023, RDCO staff confirmed that in the context of existing service agreements with each service participant, the RDCO cannot impose or collect any rates, charges, or fees directly from residents or businesses. Collection of penalties, surcharges, or fees will need to occur through the local jurisdiction. All participating jurisdictions utility and bylaw enforcement operations departments were notified of this finding, and no concerns were identified.

To best support service participants, the RDCO has invested resources into carrying out monitoring, reporting, and education before engaging jurisdictional bylaw teams for enforcement. This includes multiple follow-ups with non-compliant businesses to check in on improvements and progress.

With educational activities surrounding bylaw requirements and wastewater quality largely completed with existing wineries, the RDCO plans to adjust the enforcement strategy for 2025.

The RDCO plans to continue monitoring, with all non-compliant samples referred to local jurisdictions for action. Based on the severity of non-compliant activity, the RDCO will issue financial penalties directly to the jurisdictional authority, which in turn will be recoverable through ticketing or other means, via the local authority.

All revenue received by the RDCO through this process will be used to offset Source Control program expenses, with any surplus, if applicable, contributed to WRWTP Financial Reserves.

RACI Table – Enforcement of Local Sewer Bylaws		
	<b>Definition</b>	<b>Who?</b>
Responsible	Does the enforcement	Service Participant
Accountable	Ensures enforcement is complete	Service Participant
Consult	Provides input on enforcement as subject matter experts	RDCO & Service Participant
Inform	Updated on enforcement activities.	RDCO & Service Participant

RDCO staff will work with all participating jurisdictions to operationalize this strategy for 2025 and are exploring with all participating jurisdictions the willingness for regular staff meetings to discuss concerns and jointly support system-level efforts to reduce non-compliant wastewater.

### Bylaw Update

RDCO Staff previously advised the Committee that work was ongoing to develop general recommendations for consideration within participating community's sewer use bylaws to support recovery of penalties, surcharges, or fees.

A cross-country analysis of methods used for overstrength surcharges was undertaken. While many options are available, standardized methods were all reliant upon accurate measurement of volume. Typically, measurement was completed at the residential level indirectly through water meter data. At the industrial level, flow monitoring was completed at the treatment facility via a dedicated sewer line or truck, or at the industrial complex, via a flow meter prior to entering the community wastewater system.

Because of the cost and complexity involved in implementing and maintaining industrial measurement systems retroactively, staff have ceased efforts to draft bylaw language around a specific volume of high-strength wastewater. The RACI table outlined above is a more reasonable and operationally feasible approach.

Staff have pivoted to use existing language, and better work within the requirements of the existing bylaw frameworks. Under the current Bylaw framework, the RDCO may apply penalties of \$1,000 per day, for each of the following related offenses to a participating jurisdiction:

- Allowing prohibited or restricted materials into the sewer system.
- Pre-treatment not installed where required.
- Pre-treatment not properly designed, maintained, or operated.
- Pre-treatment records not available for review.
- Pre-treatment records not retained for 3 years; and
- RDCO Officer or designate refused access.

The participating jurisdictions have associated language to recover those costs, directly from offenders through their local Sewer Use Bylaw provisions. This approach allows for some flexibility in the application of penalties, through the frequency of application based on the severity of the non-compliance and the effort undertaken by the offender to limit wastewater system damage.

**Next Steps:**

The Source Control Program will:

- Continue with the ongoing education, sampling and monitoring program.
- Work with participating jurisdictions to operationalize 2025 enforcement strategy.
- Inform facilities and service participants of non-compliant results.
- Issue financial penalties to participating jurisdictions where applicable; and
- Support participating local governments with local sewer use bylaw updates, as necessary.

In summary, based on the effectiveness of the compliance measures outlined above to change behaviours, the changes identified within this report could lead to a reduction in organic loading to the WRWTP, deferring capital investments necessary to increase WRWTP capacity to treat high strength wastewater and maintain regulatory compliance.

**Recommendation(s):**

**THAT** the Westside Wastewater Service Committee receives the 2024 Source Control Program Update from the Associate Director of Development and Engineering Services dated November 14, 2024, for information.

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Respectfully submitted by: Mike Wyman, Manager of Engineering Services

Report Approved by: Travis Kendel, Associate Director of Development and Engineering Services

Approved for Agenda: Sally Ginter, Chief Administrative Officer

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Attachment(s): 1. PowerPoint Presentation

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# 2024 Source Control Program Update

Westside Wastewater Service Committee

November 14, 2024

1450 K.L.O. Road  
Kelowna, BC, V1W 3Z4  
rdco.com



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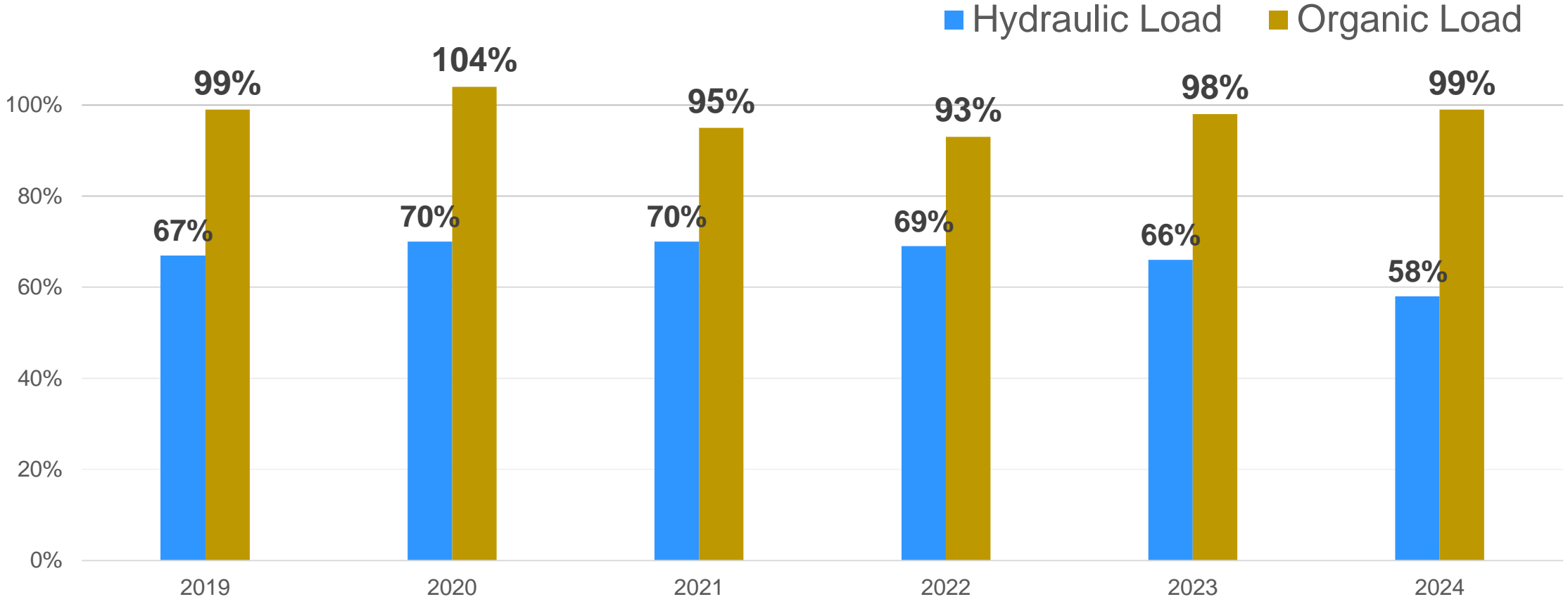
## What are the Objectives of a Source Control Program

- Manage the Demand for Services
- Protect Sewer Workers and the Public
- Protect the Sewer Infrastructure
- Protect Wastewater Treatment Process
- Protect and Improve the Quality of Biosolids



# Background

## PLANT LOADING CAPACITY



# Impact to Wastewater Treatment

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- Biological process performance
- Exceedance to Operating Certificate (OC)





# Review of 2023 efforts

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- Established lines of communication
- Facility tours
- Program awareness
- 12 unique facilities sampled
- 115 total samples, 77 non-compliant (67%)
- Non-compliance letters issued

# Facility Work Plans

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- 4 largest - engaged consultants to retrofit or add treatment systems
- Other facilities - increased maintenance
- Too early to see impacts (2025)





# 2024 Performance

- 11 facilities sampled
- 26 site visits
- 110 samples analyzed
- 39 (35%) were non-compliant
- # facilities with out of compliance samples

	Sample Locations	Site Visits	Samples	Non-Compliant Samples
1	Winery	2	7	0
2	Winery	3	13	12
3	Winery	3	9	5
4	Winery	1	7	3
5	Winery	5	17	1
6	Winery	2	11	1
7	Winery	2	12	3
8	Winery	3	13	11
9	Winery	2	5	1
10	Winery	2	8	1
11	Metals	1	8	1
	Total	26	110	39

# Bylaw Update – New Direction

- **Previous Exploration:**
  - Update bylaws with new penalties, surcharges, or fees
- **Challenge:**
  - Confirming volumes to apply surcharge rates or penalties
- **Opportunity:**
  - Use existing language within the current bylaw
  - Less complex and administrative

# Bylaw Enforcement

- RDCO cannot collect fines or surcharge fees directly
- Financial penalties issued directly to the jurisdictional authority
  - Recoverable via the local authorities' bylaw
- RDCO staff will:
  - explore with all participating jurisdictions the willingness for regular staff meetings to support system-level source control efforts
  - work with all participating jurisdictions to operationalize this strategy in 2025

# RDCO Fees and Charges Bylaw

- RDCO may apply penalties of \$1,000 per day
  - Allowing prohibited or restricted material into the sewer system
  - Pre-treatment not installed where required
  - Pre-treatment not properly designed, maintained, or operated
  - Pre-treatment records not available for review
  - Pre-treatment records not retained for 3 years
- The participating jurisdictions have associated language to recover those cost directly from the offenders through their local Sewer Use Bylaw provisions

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## Next Steps

1. Continue with the ongoing education, sampling, and monitoring program
2. Work with participating jurisdictions to operationalize 2025 enforcement strategy
3. Inform facilities and service participants of non-compliant results
4. Issue financial penalties to participating jurisdictions
5. Support service participants with local sewer use bylaw updates, as necessary





# Recommendation

**THAT** the Board receive the report from the Associate Director of Development and Engineering Services titled 2024 Source Control Program Update, dated November 14, 2024.



End of Presentation



# Standing Committee Report

## Westside Wastewater Service Committee

**To:** Westside Wastewater Service Committee  
**From:** Associate Director of Development and Engineering Services  
**Date:** November 14, 2024  
  
**Subject:** 2024 Westside Regional Wastewater Treatment Plant Process Update

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**Objective:** To update the Westside Wastewater Service Committee on the 2024 Westside Regional Wastewater Treatment Plant performance.

**Background:**

The British Columbia Environmental Operators Certification Program (EOCP) classifies the Westside Regional Wastewater Treatment Plant (WRWTP) as a Level IV facility, EOCP #157. The WRWTP is in the City of West Kelowna (CWK), British Columbia and is operated by the Regional District of Central Okanagan (RDCO). The WRWTP receives wastewater from the City of West Kelowna (CWK), the District of Peachland and Westbank First Nation (WFN) Reserves #9 and #10.

The WRWTP is a complex system and removes nutrients and other pollutants through a process referred to as the ‘Westbank Process’. This process, along with chemical and physical treatment processes, cleans the water before it flows into Okanagan Lake.

The WRWTP operations are regulated through Operating Certificate #11652, issued under the *Environmental Management Act*. The Operating Certificate (OC) stipulates the guidelines and parameters of which the WRWTP must work within. If these parameters are exceeded, reporting procedures dictate the Ministry of Environment must be informed. In extreme circumstances, penalties and or fines can be applied by the Ministry of Environment against the RDCO.

Set out in the OC are 5 specific water quality guidelines related to the water discharged from the WRWTP into Okanagan Lake.

Parameter Type	Daily Maximum Value (Annual Average)
Carbonous 5-day Biological Oxygen Demand (BOD <sub>5</sub> )	10.0 mg/L
Total Suspended Solids (TSS)	10 mg/L
Total Phosphorus (TP)	2.0 mg/L (0.20 mg/L)
Total Nitrogen (TN)	10.0 mg/L (6.0 mg/L)
Fecal Coliform	50 CFU / 100 mL

The Maximum values are daily (24h) limits, and Annual Average is between Jan 1 and Dec 31 of each year.



## Discussion:

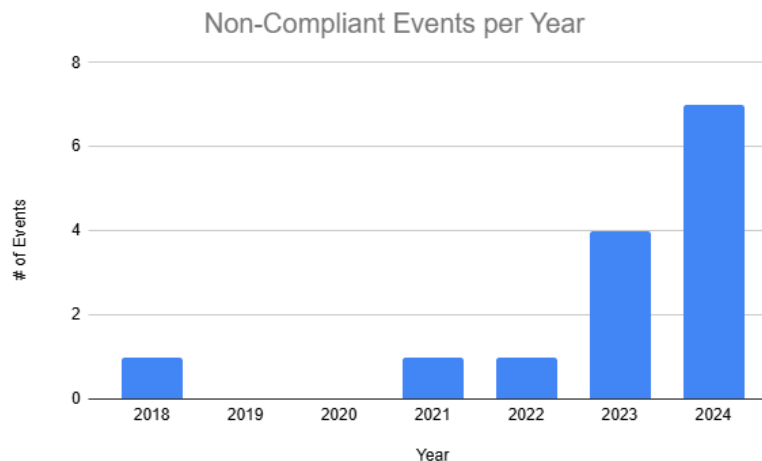
Treatment plants are designed with a key outcome: treating wastewater so that it can be safely discharged into the environment. The efficiency and costs of the treatment process are directly influenced by the quantity and quality of wastewater entering the WWTP. Treatment systems are typically designed to process domestic wastewater but not to remove other contaminants such as metals.

Domestic, or residential impacts on wastewater quantity is typically associated with community growth. Wastewater quality is relatively consistent from domestic sources, with the exception being the improper disposal of hazardous materials or other items such as sand and rocks.

Industrial or commercial wastewater can range significantly in both quantity and quality. Large scale enterprises can overwhelm collection systems by discharging large quantities of wastewater, or by concentrating wastes. The WRWTP is designed to treat domestic sewage and produce world-class clean treated effluent that can be returned safely to Lake Okanagan. The introduction of high concentrations of other compounds, such as metals, acids, yeasts, or alcohol, can compromise that process.

The WRWTP has experienced a growing number of upset conditions over the last 3 years, which have cumulated in OC exceedances. WRWTP OC exceedances over the past 6 years are listed below:

- 2018 - 1 non-compliant event due to power loss and generator failure.
- 2021 - 1 non-compliant event, exceedance of TN max daily limit of 10 ppm.
- 2022 - 1 non-compliant event, exceedance of TN max daily limit of 10 ppm.
- 2023 - 4 non-compliant events.
  - 1 TN/TP annual average exceedance.
  - 3 exceedance of TN max daily limit of 10ppm.
- 2024 - 7 non-compliant events to date.
  - All 7 exceedances are TN max daily limit of 10 ppm.



In 2023 staff engaged AECOM Canada to investigate and enhance standard operating procedures to reduce winery-related impacts to WRWTP. Several process improvements within the WRWTP were made to improve overall performance but have not resulted in continuous compliance.

Work has continued into 2024, in lockstep with industry leaders and specialized experts, to fully identify and respond to all factors that are negatively impacting facility performance. Plant staff along with consultants continue to investigate, including further exploration of the possibility of a chemical inhibitor impacting the process.

Testing equipment and laboratories for this suspected chemical inhibitor are not widely available, which has increased the complexity in confirming its presence. Further investigation and trials are being completed to confirm the presence and determine the source of this potential toxin.

**Next Steps:**

Plant staff are working to troubleshoot the plant performance with the following activities:

1. Continuing to adjust standard operating procedures (SOP) to respond to fluctuating wastewater quality.
2. Continuing enforcement with industrial users through our Source Control Program to reduce organic loading.
3. Plant operational and control adjustments.
4. Ongoing consulting with the original process design engineer to troubleshoot the problems identified above with targeted solutions.

Plant staff partnered with the design engineer continue to investigate the ongoing issue and will report back to the committee with the results. If WRWTP organic loading capacity remains high, capital upgrades may be required to be fast-tracked to ensure adequate long-term treatment capacity of the WRWTP. Should this be required, the WWSC would receive a related report from Staff at the next scheduled committee meeting (~spring 2025).

**Recommendation(s):**

**THAT** the Westside Wastewater Services Committee receives the 2024 Westside Regional Wastewater Treatment Plant Process Update from the Associate Director of Development and Engineering Services dated November 14, 2024 for information.

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Respectfully submitted by: Mike Wyman, Manager of Engineering Services

Report Approved by: Travis Kendel, Associate Director of Development and Engineering Services

Approved for Agenda: Sally Ginter, Chief Administrative Officer

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Attachment(s): 1. PowerPoint Presentation

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# 2024 Treatment Plant Process Update

Westside Wastewater Services Committee

November 14, 2024

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1450 K.L.O. Road  
Kelowna, BC, V1W 3Z4  
rdco.com



# Westside Regional Wastewater Treatment Plant

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- Constructed in 1988
- Three major expansions
  - 1995
  - 2005
  - 2013
- Current average day flows = 10,800 m<sup>3</sup>/day
- Plant capacity = 16,800 m<sup>3</sup>/day



# Background

- The Treatment Plant is certified by the British Columbia Environmental Operators Certification Program (EOCP) as a Level IV facility.
- The plant uses a biological nutrient removal (BNR) system, called the Westbank Process, to remove waste from the water.
- The plant receives wastewater from WFN's IR #9 & #10, Peachland and West Kelowna.
- Plant operations are guided by an Operating Certificate (OC) issued under the Environmental Management Act.
- The OC stipulates the effluent quality guidelines the plant is responsible to achieve.

# OC Effluent Quality Guidelines

Carbonous 5-day Biological Oxygen Demand (BOD<sub>5</sub>)

- Maximum: 10 mg/L

Total Suspended Solids (TSS)

- Maximum: 10mg/L

Total Phosphorous (TP)

- Maximum: 2.0 mg/L
- Annual avg. 0.20 mg/L

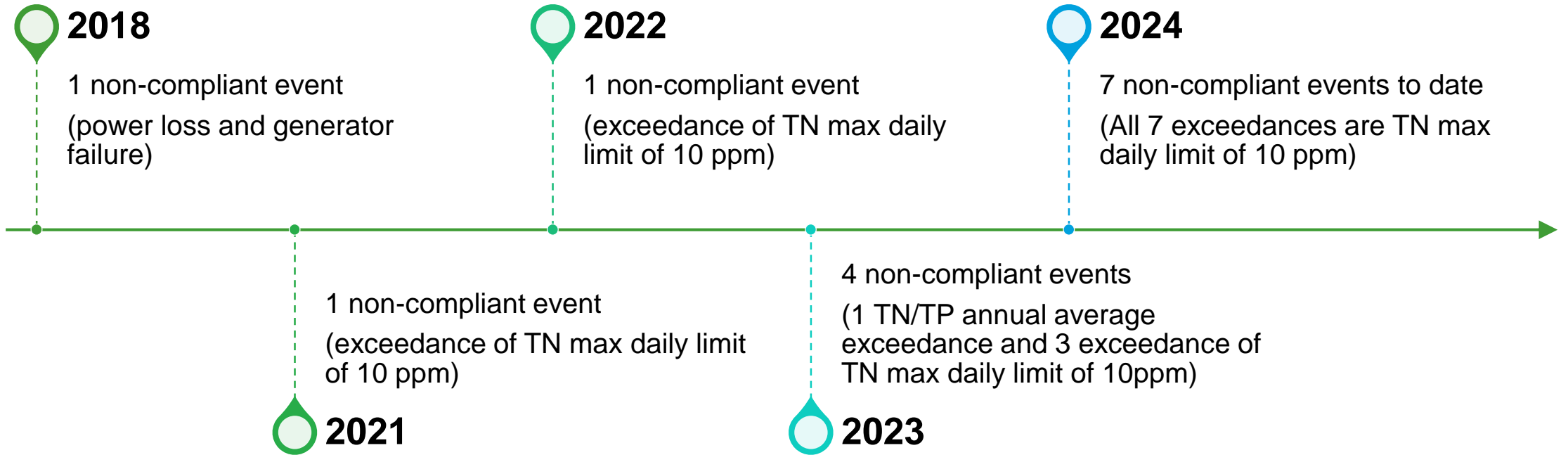
Total Nitrogen (TN)

- Maximum: 10mg/L
- Annual avg. 6.0 mg/L

Fecal Coliform

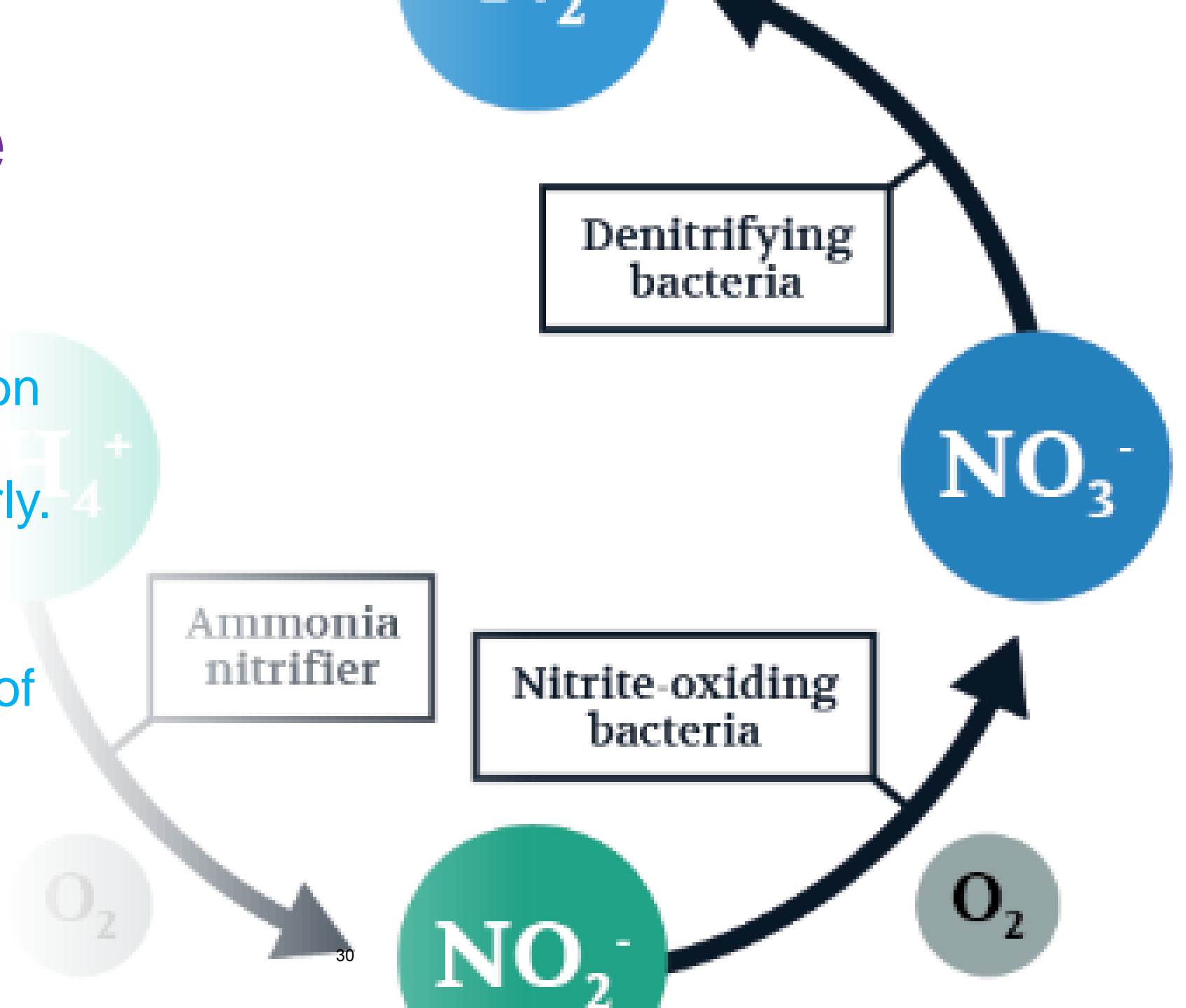
- Maximum: 50 CFU or (MPN) / 100 ml

# OC exceedances previous 6 years



# What's the Problem ?

- The Denitrification process is performing poorly.
- Something is inhibiting the normal function of the process.





# How do we fix it?

1. Continued effort with industrial users through the Source Control Program.
2. Work with our participating partners to ramp up enforcement and fines.
3. Investigate the potential of an inhibiting element coming in through the raw wastewater from an unknown source.
4. Working with the original design engineer to help determine the problem.
5. Adjusting standard operator procedures (SOP), and process controls.

# What if we can't fix it?

- Exceeded Organic Loading design capacity
- Performance must meet OC on an ongoing basis
- Fast-tracked capital projects to increase capacity
  
- Impact: Adjusted Future Financial Plan
  - Phase 4 shifts from early 2030s to ~2027/2028
  - ~\$30 million

# Recommendation

**THAT** the Westside Wastewater Services Committee receives the 2024 Westside Regional Wastewater Treatment Plant Process Update from the Associate Director of Development and Engineering Services dated November 14, 2024 for information.



Thank you



# Standing Committee Report

## Westside Wastewater Service Committee

**To:** Westside Wastewater Service Committee  
**From:** Director of Financial Services  
**Date:** November 14, 2024  
**Subject:** Westside Wastewater 2025-2029 Financial Plan - DRAFT

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**Objective:** To present, for review, the draft 2025-2029 Financial Plan for the Westside wastewater service.

### Discussion:

The draft financial plan for the Westside Wastewater service has been prepared following key financial planning goals and considerations to help the Regional District achieve long-term financial sustainability using sound financial planning practices. In turn, long-term financial sustainability will lead to stable and predictable user fee changes over time.

On the funding side, the draft plan reflects an increase in user fees of \$307K, or 5.3%. This is due to the following changes:

Changes in:

- Operating expenditures – increase of \$238K
- Transfers to reserves – increase of \$193K
- Use of operating reserves – decreased by \$55K

Offset by decreases in:

- Overhead cost allocation – decrease of \$178K

The financial plan continues to focus on maintaining stable user fee increases by building reserves to fund capital and irregular operating expenditures.

## OPERATING PLAN

Appendix A provides a summary view of the financial plan for each Westside Wastewater service.

### Operational Funding

On the funding side, the share of net costs is split among the participants based on a five year average of the flow-rates. These flow rates will change, but it is not known, at this time, by how much. For the purposes of preparing the draft financial plan, the average flow rates have been estimated. Using this estimate, the share of costs would be:

<i>Service Fees by Participant</i>				
Service Type	2024	2025	Change \$	Change %
City of West Kelowna	\$ 4,500,310	\$ 4,665,604	\$ 165,294	3.5%
District of Peachland	660,981	709,438	48,457	6.8%
Westbank First Nation	1,720,434	1,813,888	93,454	5.2%
<b>TOTAL</b>	<b>\$ 6,881,725</b>	<b>\$ 7,188,929</b>	<b>\$ 307,204</b>	<b>4.5%</b>

The key driver of the increase in service fees is

- Operating expenditures – explained below in the section on Operational Expenditures.
- Transfers to reserves – the \$200K annual increase to the transfer to capital reserves for the WWTP, endorsed by the Committee in 2023.

These increases are offset, in part, by a reduction in overhead charges, which is explained below, in the section “Overhead Rates”.

### Operational Expenditures

There are three components to operational expenditures:

- Operating expenditures
- Operating project costs
- Transfers to reserves

Operating expenditures, overall, have seen an increase of \$238K, or 6.6%.

<i>Operating Expenditures by Service</i>				
Service Type	2024	2025	Change \$	Change %
Wastewater Treatment Plant	\$ 2,958,827	\$ 3,159,739	\$ 200,912	6.8%
RDCO Lift Stations/Collector System	321,131	309,345	(11,786)	-3.7%
WFN Lift Stations/Collector System	137,968	172,127	34,160	24.8%
Peachland Lift Stations/Collector System	196,484	210,931	14,448	7.4%
<b>TOTAL</b>	<b>\$ 3,614,409</b>	<b>\$ 3,852,143</b>	<b>\$ 237,733</b>	<b>6.6%</b>

Inflationary pressures account for the bulk of the increases being planned for (\$230K). These pressures are affecting costs in the areas of wages (\$120K), maintenance (\$80K), utilities (\$11K) and supplies (\$19K). There was also an increase in insurance costs arising from an updated appraisal that was obtained in the fall of 2023 (\$40K). Some savings in contracted services costs have helped to offset the impact of the increases in other expenses (\$40K).

Operating project costs are new in 2025. Historically, irregular maintenance costs were funded from either user fees (operational expenditures) or capital reserves (capital expenditures); going forward these expenses will be funded by operating reserves,

These expenditures are all operational in nature as they do not represent an improvement to assets. Beginning in 2025, those costs that were historically included in capital expenditures have been shifted and included with operating expenditures. In addition, because these expenditures are irregular in nature, they are funded from operating reserves.

<i>Operating Projects by Service</i>				
<b>Service Type</b>	<b>2024</b>	<b>2025</b>	<b>Change \$</b>	<b>Change %</b>
Wastewater Treatment Plant	\$ -	\$ 367,000	\$ 367,000	100.0%
RDCO Lift Stations/Collector System	-	54,000	54,000	100.0%
WFN Lift Stations/Collector System	-	24,500	24,500	100.0%
Peachland Lift Stations/Collector System	-	29,500	29,500	100.0%
<b>TOTAL</b>	<b>\$ -</b>	<b>\$ 475,000</b>	<b>\$ 475,000</b>	<b>100.0%</b>

The final component of operational expenditures are transfers to reserves. Please see the section on "Reserves" for information on how reserves are funded and used. For 2025, transfers to reserves have changed as follows:

<i>Transfers to Reserves by Service</i>				
<b>Service Type</b>	<b>2024</b>	<b>2025</b>	<b>Change \$</b>	<b>Change %</b>
Wastewater Treatment Plant	\$ 1,782,931	\$ 1,969,969	\$ 187,038	10.5%
RDCO Lift Stations/Collector System	252,855	261,085	8,230	3.3%
WFN Lift Stations/Collector System	12,781	8,400	(4,381)	-34.3%
Peachland Lift Stations/Collector System	32,000	33,912	1,912	6.0%
<b>TOTAL</b>	<b>\$ 2,080,567</b>	<b>\$ 2,273,366</b>	<b>\$ 192,799</b>	<b>9.3%</b>

## CAPITAL PLAN

### Capital Expenditures

The 2025 - 2029 Capital Plans are shown in Appendix A. Capital budgets are developed through the service planning and budget processes and consider:

- condition of existing assets and infrastructure
- new or changed service levels to meet the needs & wants of the community
- Board priorities
- regulatory, environmental, risk, and health and safety factors

The proposed 2025 capital plan for the wastewater service is \$3.7 million, an increase of \$505 thousand. The following table provides a summary of the planned spending by service type:

Service Type	2024	2025	Change \$	Change %
Wastewater Treatment Plant	\$ 2,010,997	\$ 3,245,127	\$ 1,234,130	61.4%
RDCO Lift Stations/Collector System	1,237,160	507,625	(729,535)	-59.0%
<b>TOTAL</b>	<b>\$ 3,248,157</b>	<b>\$ 3,752,752</b>	<b>\$ 504,595</b>	<b>15.5%</b>

Highlights of the capital plans include:

Department	Project	Description	Cost (thousands)
Treatment Plant	Primary effluent channel	Repair to concrete channel	\$1,300
	Crane truck	Replacement of unit. Moved from 2026 at mechanics recommendation	\$270
	WWTP electrical replacement	Replacement of corroded electrical equipment within the sludge loading bay	\$260
RDCO Lift Stations	Casaloma lift station	Land purchase for lift station upgrades	\$500

### Capital Funding

The key source of funding for the capital plan is capital reserves. Reserves are maintained for the purposes of funding the purchase and upgrades of equipment, facilities, and infrastructure. Other sources of funding are grants from external sources, proceeds from the sale of redundant assets, property owner contributions and external borrowing.



The funding sources for the 2025 capital plans for the Westside Wastewater services are:

<i>Capital Funding Sources</i>					
<b>Service Type</b>	<b>2024</b>	<b>2025</b>	<b>Funding Share</b>	<b>Change \$</b>	<b>Change %</b>
Proceeds from sale of assets	\$ 20,000	\$ 50,000	1.3%	\$ 30,000	150.0%
Grants	80,075	308,554	8.2%	228,479	285.3%
Reserves	3,117,063	3,394,198	90.4%	277,135	8.9%
<b>TOTAL</b>	<b>\$ 3,217,138</b>	<b>\$ 3,752,752</b>	<b>100.0%</b>	<b>\$ 535,614</b>	<b>16.6%</b>

The grant funding is related to medium and low risk asset renewal projects for the treatment plan. If the RDCO is not successful in obtaining grant funding, they will be completed on a priority basis with available funding from reserves. Anything that is unfunded will be deferred to a future year.

The above table reflects the importance of ensuring sufficient reserves, to fund planned capital expenditures, for the ongoing financial stability of the services.

**RESERVES**

Reserves are a local governments way of saving for future capital activities as well as one-time or limited duration activities. Each of the services provided has a capital reserve account and an operating reserve account. The projected, year-end balances for each reserve, by service, are provided in Appendix A.

**Operating Reserve**

The use of these funds is restricted to operating expenditures that are either unanticipated or do not occur on an annual basis. Examples of this are updates to the Development Cost Charge Bylaw and the Liquid Waste Management Plan, or irregular maintenance items. To fund these costs, annual transfers to the operating reserve are included in the plan. When costs are incurred they are funded from this reserve. This reduces fluctuations in annual expenditures, thereby smoothing out annual fee requirements.

**Capital Reserves**

The use of these funds is restricted to expenditures related to the purchase or upgrades of capital assets. These expenditures are included in the capital plan. Annual contributions to capital reserves are established to maintain a level that provides for funding of capital expenditures based on their identified risk level as follows:

- High risk        100%
- Medium risk    60%
- Low risk        20%

A risk based approach ensures that funding is available for the renewal of high risk assets when required. The renewal of medium risk assets is more flexible and provides the opportunity to look for other sources of funding. Low risk assets are not critical to the operations of the service and therefore provide the most flexibility around timing and funding sources.

Reserve fund balances are built up with regular contribution over time, and then drawn down on an irregular basis to fund capital expenditures. Because of this, the balances in reserve funds will fluctuate over time.

Service Type	2024	2025	2026	2027	2028	2029
Capital (equipment, facility)	\$ 5,324,795	\$ 4,526,624	\$ 5,876,030	\$ 8,081,423	\$ 8,030,325	\$ 8,157,909
Operating	1,624,835	1,396,821	1,194,097	1,089,853	1,178,827	1,274,468
<b>TOTAL</b>	<b>\$ 6,949,630</b>	<b>\$ 5,923,445</b>	<b>\$ 7,070,127</b>	<b>\$ 9,171,276</b>	<b>\$ 9,209,152</b>	<b>\$ 9,432,377</b>

## OVERHEAD RATES

The Regional District has several administration functions. The costs of providing these functions are covered through overhead rates that are included in the financial plans for most services. Overhead rates have been determined in accordance with policy BP7.19 Administration Overhead.

Service Type	2024	2025	Change \$	Change %
Administration Overhead	\$ 1,016,836	\$ 841,139	\$ (175,697)	-17.3%
Engineering Administration Overhead	227,313	224,682	(2,631)	-1.2%
<b>TOTAL</b>	<b>\$ 1,244,149</b>	<b>\$ 1,065,821</b>	<b>\$ (178,328)</b>	<b>-14.3%</b>

Overhead rates are charged based on the prior year's planned operating expenditures, excluding transfer to reserves and debt costs. When there are increases in planned operating expenditures, there is a corresponding increase in overhead charges in the following year. Inversely, when operating expenditures are decreased, there is a corresponding decrease in overhead charges in the following year. The latter is the situation for the Wastewater Treatment Plant where a reduction in operating expenditures in 2024 has resulted in a corresponding reduction in the overhead charges in 2025.

## Next Steps:

With the Committee's approval, the 2025-2029 Five-Year Financial Plan for the Westside Wastewater Services will be included in the Regional District of Central Okanagan's 2025-2029 Five-Year Financial Plan when it is brought to the Regional Board for consideration.

**Recommendation(s):**

Option 1 – Financial Plan as Presented:

**THAT** the Westside Wastewater Service Standing Committee recommends the draft Westside Wastewater Service 2025-2029 Financial Plan to the Regional Board.

**OR**

Option 2 – Financial Plan with Committee Recommended Amendments:

**THAT** the Westside Wastewater Service Standing Committee recommends the incorporation of the Committee endorsed amendments to the Westside Wastewater Service 2025-2029 Financial Plan;

**AND THAT** the Westside Wastewater Service Standing Committee recommends the draft Westside Wastewater Service 2025-2029 Financial Plan, as amended, to the Regional Board.

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Report Approved by: Tania McCabe, CPA, CA, Director of Financial Services

Approved for Agenda: Sally Ginter, Chief Administrative Officer

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Attachment(s):    1. Appendix A – Financial Plan – By Service – WWS – 2025-2029 Draft  
                          2. 2025-2029 Five-Year Financial Plan – Draft – WWP - Presentation

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**2025-2029 FINANCIAL PLAN  
SERVICE SUMMARY**

APPENDIX A

401 - WESTSIDE SEWER SYSTEM: WASTEWATER TREATMENT PLANT							
OPERATING							
	2024		2025	2026	2027	2028	2029
	PLAN	ACTUAL	PLAN	PLAN	PLAN	PLAN	PLAN
<b>OPERATING COSTS</b>							
Operations	2,958,827	2,107,610	3,159,739	3,231,396	3,377,476	3,430,877	3,583,718
<b>TOTAL OPERATING COSTS</b>	<b>2,958,827</b>	<b>2,107,610</b>	<b>3,159,739</b>	<b>3,231,396</b>	<b>3,377,476</b>	<b>3,430,877</b>	<b>3,583,718</b>
*Percentage Increase over prior year	-14.1%	-22.1%	6.8%	2.3%	4.5%	1.6%	4.5%
<b>TRANSFERS TO RESERVE</b>							
Transfer to Capital Facilities Reserve	1,512,931	-	1,707,569	1,907,569	2,107,569	2,307,569	2,530,000
Transfer to Equipment Replacement Reserve	200,000	-	100,000	100,000	100,000	100,000	100,000
Transfer to Operating Reserve	70,000	-	162,400	162,400	162,400	162,400	162,400
<b>TOTAL TRANSFERS</b>	<b>1,782,931</b>	<b>-</b>	<b>1,969,969</b>	<b>2,169,969</b>	<b>2,369,969</b>	<b>2,569,969</b>	<b>2,792,400</b>
<b>TOTAL COSTS</b>	<b>4,741,758</b>	<b>2,107,610</b>	<b>5,129,708</b>	<b>5,401,365</b>	<b>5,747,445</b>	<b>6,000,846</b>	<b>6,376,118</b>
*Percentage Increase over prior year	6.8%	-55.6%	8.2%	5.30%	6.41%	4.41%	6.25%
<b>Projects</b>							
Costs	-	-	367,000	350,000	330,000	100,000	80,000
Funding (excl tax req)	-	-	(367,000)	(350,000)	(330,000)	(100,000)	(80,000)
<b>Net Project Costs (Funded From Tax Req)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL Cost Center Expenditures</b>	<b>4,741,758</b>	<b>2,107,610</b>	<b>5,496,708</b>	<b>5,751,365</b>	<b>6,077,445</b>	<b>6,100,846</b>	<b>6,456,118</b>
<b>FUNDING SOURCES (REVENUE)</b>							
Grants	-	-	(17,000)	-	-	-	-
Administration Overhead Recovery	883,976	883,976	713,513	749,189	786,648	825,980	867,280
Engineering Administration Overhead Recovery	189,529	189,529	173,546	182,223	191,335	200,901	210,946
Revenue - Other	(2,400)	(2,400)	(2,400)	(2,400)	(2,400)	(2,400)	(2,400)
<b>TOTAL REVENUE</b>	<b>1,071,105</b>	<b>1,071,105</b>	<b>867,659</b>	<b>929,012</b>	<b>975,583</b>	<b>1,024,482</b>	<b>1,075,826</b>
<b>TRANSFERS FROM RESERVE</b>							
From Operating Reserve	(35,000)	-	(350,000)	(350,000)	(330,000)	(100,000)	(80,000)
<b>City of West Kelowna Contribution</b>	<b>(4,020,045)</b>	<b>(3,015,034)</b>	<b>(4,184,597)</b>	<b>(4,404,466)</b>	<b>(4,677,660)</b>	<b>(4,887,990)</b>	<b>(5,184,816)</b>
*Dollar increase over prior year Requisition	(620,326)	384,685	(164,552)	(219,869)	(273,193)	(210,331)	(296,825)
*Percentage increase over prior year Requisition	18.25%	-11.32%					
<b>District of Peachland Contribution</b>	<b>(394,960)</b>	<b>(296,220)</b>	<b>(411,127)</b>	<b>(432,728)</b>	<b>(459,569)</b>	<b>(480,233)</b>	<b>(509,396)</b>
*Dollar increase over prior year Requisition	(32,644)	66,096	(16,167)	(21,602)	(26,841)	(20,664)	(29,162)
*Percentage increase over prior year Requisition	9.01%	-18.24%					
<b>Westbank First Nation Contribution</b>	<b>(1,362,858)</b>	<b>(1,022,144)</b>	<b>(1,418,643)</b>	<b>(1,493,183)</b>	<b>(1,585,799)</b>	<b>(1,657,105)</b>	<b>(1,757,733)</b>
*Dollar increase over prior year Requisition	(309,950)	30,765	(55,785)	(74,539)	(92,617)	(71,305)	(100,628)
*Percentage increase over prior year Requisition	29.44%	-2.92%					
<b>Total Partner Contribution</b>	<b>(5,777,863)</b>	<b>(4,333,397)</b>	<b>(6,014,367)</b>	<b>(6,330,377)</b>	<b>(6,723,027)</b>	<b>(7,025,328)</b>	<b>(7,451,944)</b>
*Dollar increase over prior year Requisition	(962,920)	481,546	(236,504)	(316,010)	(392,650)	(302,301)	(426,616)
*Percentage increase over prior year Requisition	20.00%	-10.00%	4.09%	5.25%	6.20%	4.50%	6.07%
<b>TOTAL FUNDING</b>	<b>(4,741,758)</b>	<b>(3,262,292)</b>	<b>(5,496,708)</b>	<b>(5,751,365)</b>	<b>(6,077,445)</b>	<b>(6,100,846)</b>	<b>(6,456,118)</b>
<b>Surplus/(Deficit)*</b>	<b>-</b>	<b>1,154,682</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**2025-2029 FINANCIAL PLAN  
SERVICE SUMMARY**

APPENDIX A

401 - WESTSIDE SEWER SYSTEM: WASTEWATER TREATMENT PLANT							
CAPITAL							
	2024		2025	2026	2027	2028	2029
	PLAN	Actual	PLAN	PLAN	PLAN	PLAN	PLAN
<b>EXPENDITURES</b>							
9500 - Capital Assets Under \$50K	312,735	121,040	50,000	-	-	-	-
9503 - Blower 2021	406,000	104,882	-	300,000	-	-	-
9505 - HVAC System Admin Building	274,000	2,250	-	-	-	-	-
9507 - Vehicles	111,000	-	362,000	45,113	-	-	92,500
9508 - Facility Renewal	28,215	5,789	50,000	-	-	-	-
9510 - Bioreactor	340,000	-	-	-	-	-	-
9517 - WWTP Stage 4 Upgrades	142,000	-	-	250,000	-	2,266,000	2,575,000
9521 - WWTP Auto Analyzer	150,000	98,705	-	-	-	-	-
9523 - ML Recycle Pump	85,000	5,977	-	-	-	-	-
9529 - Asset Renewal (High Risk)	3,500	-	-	239,750	199,958	170,595	606,799
9530 - Asset Renewal (Medium Risk)	156,257	-	495,297	503,233	23,543	1,006,624	178,778
9531 - Asset Renewal (Low Risk)	2,290	-	12,830	11,120	73,195	168,655	114,708
9534 - FPS Pumps	-	-	200,000	-	-	-	-
9536 - WWTP Control Improvements	-	-	200,000	115,000	100,000	-	-
9537 - WWTP Centrifuge VFD Panel	-	-	200,000	-	-	-	-
9538 - WWTP Electrical Replacement	-	-	260,000	-	-	-	-
9539 - WWTP Security System	-	-	75,000	-	-	-	-
9540 - WWTP PE Channel	-	-	1,300,000	-	-	-	-
9541 - Control System Renewal/Replacement	-	-	40,000	50,000	-	50,000	-
<b>TOTAL EXPENDITURES</b>	<b>2,010,997</b>	<b>338,643</b>	<b>3,245,127</b>	<b>1,514,217</b>	<b>396,696</b>	<b>3,661,873</b>	<b>3,567,785</b>
<b>FUNDING SOURCES</b>							
Grants	(80,075)	-	(308,554)	(306,069)	(73,987)	(646,669)	(186,891)
Sale of Assets	(20,000)	(93)	(50,000)	(5,000)	-	-	-
Transfer from Equipment Reserve	(137,010)	-	(312,000)	(40,113)	-	-	(92,500)
Transfer from Capital Facilities Reserve	(1,631,912)	-	(2,574,573)	(915,535)	(322,708)	(2,809,205)	(2,773,394)
Transfer from DCC Reserve	(142,000)	-	-	(247,500)	-	(206,000)	(515,000)
<b>TOTAL FUNDING</b>	<b>(2,010,997)</b>	<b>(93)</b>	<b>(3,245,127)</b>	<b>(1,514,217)</b>	<b>(396,696)</b>	<b>(3,661,873)</b>	<b>(3,567,785)</b>
	-	338,550	-	-	-	-	-
<b>RESERVES</b>							
	2024		2025	2026	2027	2028	2029
	PLAN	ACTUAL	PLAN	PLAN	PLAN	PLAN	PLAN
<b>EQUIPMENT RESERVE</b>							
Beginning Balance	271,950	271,950	336,980	127,507	188,351	289,763	391,937
Uses	(137,010)	-	(312,000)	(40,113)	0	0	(92,500)
Funding	200,000	-	100,000	100,000	100,000	100,000	100,000
Interest	2,040	10,868	2,527	956	1,413	2,173	2,940
<b>Ending Balance</b>	<b>336,980</b>	<b>282,818</b>	<b>127,507</b>	<b>188,351</b>	<b>289,763</b>	<b>391,937</b>	<b>402,376</b>
<b>FACILITIES RESERVE</b>							
Beginning Balance	3,479,652	3,479,652	3,386,769	2,545,166	3,556,288	5,367,821	4,906,444
Uses	(1,631,912)	-	(2,574,573)	(915,535)	(322,708)	(2,809,205)	(2,773,394)
Funding	1,512,931	-	1,707,569	1,907,569	2,107,569	2,307,569	2,530,000
Interest	26,097	-	25,401	19,089	26,672	40,259	36,798
<b>Ending Balance</b>	<b>3,386,769</b>	<b>3,479,652</b>	<b>2,545,166</b>	<b>3,556,288</b>	<b>5,367,821</b>	<b>4,906,444</b>	<b>4,699,848</b>
<b>OPERATING RESERVE</b>							
Beginning Balance	1,130,354	1,130,354	1,173,832	995,036	814,899	653,410	720,711
Uses	(35,000)	-	(350,000)	(350,000)	(330,000)	(100,000)	(80,000)
Funding	70,000	-	162,400	162,400	162,400	162,400	162,400
Interest	8,478	-	8,804	7,463	6,112	4,901	5,405
<b>Ending Balance</b>	<b>1,173,832</b>	<b>1,130,354</b>	<b>995,036</b>	<b>814,899</b>	<b>653,410</b>	<b>720,711</b>	<b>808,516</b>
<b>DCC RESERVE</b>							
Beginning Balance	11,777,843	11,777,843	12,474,177	13,317,733	13,920,116	14,774,517	15,429,327
Uses	(142,000)	-	-	(247,500)	-	(206,000.00)	(515,000)
Funding	750,000	-	750,000	750,000	750,000	750,001	750,001
Interest	88,334	-	93,556	99,883	104,401	110,809	115,720
<b>Ending Balance</b>	<b>12,474,177</b>	<b>11,777,843</b>	<b>13,317,733</b>	<b>13,920,116</b>	<b>14,774,517</b>	<b>15,429,327</b>	<b>15,780,048</b>
<b>NOTES</b>							

**2025-2029 FINANCIAL PLAN  
SERVICE SUMMARY**

APPENDIX A

470 - WESTSIDE SEWER SYSTEM: RDCO LIFT STATIONS/COLLECTOR SYSTEMS							
OPERATING							
	2024		2025	2026	2027	2028	2029
	PLAN	ACTUAL	PLAN	PLAN	PLAN	PLAN	PLAN
<u>OPERATING COSTS</u>							
Operations	321,131	177,381	309,345	325,387	409,732	344,381	354,146
<b>TOTAL OPERATING COSTS</b>	<b>321,131</b>	<b>177,381</b>	<b>309,345</b>	<b>325,387</b>	<b>409,732</b>	<b>344,381</b>	<b>354,146</b>
*Percentage Increase over prior year	-7.8%	-40.7%	-3.7%	5.2%	25.9%	-15.9%	2.8%
<u>TRANSFERS TO RESERVE</u>							
Transfer to Capital Facilities Reserve	223,593	-	231,085	243,161	255,675	268,640	281,000
Transfer to Operating Reserve	29,262	-	30,000	30,000	30,000	30,000	30,000
<b>TOTAL TRANSFERS</b>	<b>252,855</b>	<b>-</b>	<b>261,085</b>	<b>273,161</b>	<b>285,675</b>	<b>298,640</b>	<b>311,000</b>
<b>TOTAL COSTS</b>	<b>573,986</b>	<b>177,381</b>	<b>570,430</b>	<b>598,548</b>	<b>695,407</b>	<b>643,021</b>	<b>665,146</b>
*Percentage Increase over prior year	6.8%	-69.1%	-0.6%	4.93%	16.18%	-7.53%	3.44%
<u>Projects</u>							
Costs	-	-	54,000	1,000	1,000	17,000	1,000
Funding (excl tax req)	-	-	(54,000)	(1,000)	(1,000)	(17,000)	(1,000)
<b>Net Project Costs (Funded From Tax Req)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL Cost Center Expenditures</b>	<b>573,986</b>	<b>177,381</b>	<b>624,430</b>	<b>599,548</b>	<b>696,407</b>	<b>660,021</b>	<b>666,146</b>
<u>FUNDING SOURCES (REVENUE)</u>							
Prior Year Surplus	-	-	-	-	-	-	-
Administration Overhead Recovery	67,126	67,126	60,810	63,851	67,043	70,395	73,915
Engineering Administration Overhead Recovery	19,165	19,165	25,048	26,301	27,616	28,996	30,446
<b>TOTAL REVENUE</b>	<b>86,290</b>	<b>86,290</b>	<b>85,858</b>	<b>90,151</b>	<b>94,659</b>	<b>99,392</b>	<b>104,361</b>
<u>TRANSFERS FROM RESERVE</u>							
From Operating Reserve	(5,000)	-	(54,000)	(1,000)	(1,000)	(17,000)	(1,000)
<b>City of West Kelowna Contribution</b>	<b>(480,265)</b>	<b>(360,199)</b>	<b>(481,007)</b>	<b>(504,761)</b>	<b>(579,055)</b>	<b>(544,129)</b>	<b>(563,987)</b>
*Dollar increase over prior year Requisition	(46,210)	73,856	(742)	(23,755)	(74,294)	34,926	(19,858)
	10.65%	-17.02%					
<b>Westbank First Nation Contribution</b>	<b>(175,011)</b>	<b>(131,258)</b>	<b>(175,281)</b>	<b>(183,938)</b>	<b>(211,011)</b>	<b>(198,283)</b>	<b>(205,520)</b>
*Dollar increase over prior year Requisition	(40,931)	2,822	(270)	(8,656)	(27,073)	12,727	(7,236)
	30.53%	-2.10%					
<b>Total Partner Contribution</b>	<b>(655,276)</b>	<b>(491,457)</b>	<b>(656,288)</b>	<b>(688,699)</b>	<b>(790,066)</b>	<b>(742,412)</b>	<b>(769,507)</b>
*Dollar increase over prior year Requisition	(87,141)	76,678	(1,012)	(32,411)	(101,367)	47,653	(27,095)
*Percentage increase over prior year Requisition	15.34%	-13.50%	0.15%	4.94%	14.72%	-6.03%	3.65%
<b>TOTAL FUNDING</b>	<b>(573,986)</b>	<b>(405,167)</b>	<b>(624,430)</b>	<b>(599,548)</b>	<b>(696,407)</b>	<b>(660,021)</b>	<b>(666,146)</b>
<b>Surplus/(Deficit)*</b>	<b>-</b>	<b>227,786</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**2025-2029 FINANCIAL PLAN  
SERVICE SUMMARY**

APPENDIX A

470 - WESTSIDE SEWER SYSTEM: RDCO LIFT STATIONS/COLLECTOR SYSTEMS							
CAPITAL							
	2024		2025	2026	2027	2028	2029
	PLAN	Actual	PLAN	PLAN	PLAN	PLAN	PLAN
<b>EXPENDITURES</b>							
9501 - Capital Assets Under \$50K	84,141	29,168	-	-	-	-	-
9511 - East Trunk Land and Lift	920,000	-	-	4,200,000	3,000,000	-	-
9515 - Casaloma Lift Station	172,000	11,538	502,625	130,000	2,000,000	1,500,000	-
9518 - Transfer Switch and Electricity	30,000	-	5,000	-	-	-	-
9519 - East Trunk Generator Replacement	-	-	-	-	-	-	-
9520 - Various Sewer	-	-	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>1,237,160</b>	<b>40,706</b>	<b>507,625</b>	<b>4,330,000</b>	<b>5,000,000</b>	<b>1,500,000</b>	<b>0</b>
<b>FUNDING SOURCES</b>							
Transfer from Capital Facilities Reserve	(114,141)	-	(5,000)	-	-	-	-
Transfer from DCC Reserve	(1,092,000)	-	(502,625)	(4,330,000)	(5,000,000)	(1,500,000)	-
<b>TOTAL FUNDING</b>	<b>(1,237,160)</b>	<b>-</b>	<b>(507,625)</b>	<b>(4,330,000)</b>	<b>(5,000,000)</b>	<b>(1,500,000)</b>	<b>0</b>
		40,706	-	-	-	-	-
<b>RESERVES</b>							
	2024		2025	2026	2027	2028	2029
	PLAN	ACTUAL	PLAN	PLAN	PLAN	PLAN	PLAN
<b>FACILITIES RESERVE</b>							
Beginning Balance	1,202,509	1,202,509	1,320,979	1,556,972	1,811,810	2,081,073	2,365,322
Uses	(114,141)	-	(5,000)	0	0	0	0
Funding	223,593	-	231,085	243,161	255,675	268,640	281,000
Interest	9,019	-	9,907	11,677	13,589	15,608	17,740
<b>Ending Balance</b>	<b>1,320,979</b>	<b>1,202,509</b>	<b>1,556,972</b>	<b>1,811,810</b>	<b>2,081,073</b>	<b>2,365,322</b>	<b>2,664,061</b>
<b>OPERATING RESERVE</b>							
Beginning Balance	187,041	187,041	212,706	190,301	220,728	251,384	266,269
Uses	(5,000)	-	(54,000)	(1,000)	(1,000)	(17,000)	(1,000)
Funding	29,262	-	30,000	30,000	30,000	30,000	30,000
Interest	1,403	-	1,595	1,427	1,655	1,885	1,997
<b>Ending Balance</b>	<b>212,706</b>	<b>187,041</b>	<b>190,301</b>	<b>220,728</b>	<b>251,384</b>	<b>266,269</b>	<b>297,266</b>
<b>DCC RESERVE</b>							
Beginning Balance	5,159,686	5,159,686	4,256,383	6,274,310	4,444,310	1,944,310	2,944,310
Uses	(1,092,000)	-	(502,625)	(4,330,000)	(5,000,000)	(1,500,000)	-
Funding	150,000	-	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Interest	38,698	-	20,552	-	-	-	-
<b>Ending Balance</b>	<b>4,256,383</b>	<b>5,159,686</b>	<b>6,274,310</b>	<b>4,444,310</b>	<b>1,944,310</b>	<b>2,944,310</b>	<b>5,444,310</b>
<b>NOTES</b>							

**2025-2029 FINANCIAL PLAN  
SERVICE SUMMARY**

APPENDIX A

471 - WFN Lift Stations							
OPERATING							
	2024		2025	2026	2027	2028	2029
	PLAN	ACTUAL	PLAN	PLAN	PLAN	PLAN	PLAN
<u>OPERATING COSTS</u>							
Operations	137,968	112,759	172,127	176,162	180,332	185,345	189,813
<b>TOTAL OPERATING COSTS</b>	<b>137,968</b>	<b>112,759</b>	<b>172,127</b>	<b>176,162</b>	<b>180,332</b>	<b>185,345</b>	<b>189,813</b>
*Percentage Increase over prior year	-5.5%	-15.9%	24.8%	2.3%	2.4%	2.8%	2.4%
<u>TRANSFERS TO RESERVE</u>							
Transfer to Operating Reserve	12,781	-	8,400	8,400	8,400	8,400	8,400
<b>TOTAL TRANSFERS</b>	<b>12,781</b>	<b>-</b>	<b>8,400</b>	<b>8,400</b>	<b>8,400</b>	<b>8,400</b>	<b>8,400</b>
<b>TOTAL COSTS</b>	<b>150,749</b>	<b>112,759</b>	<b>180,527</b>	<b>184,562</b>	<b>188,732</b>	<b>193,745</b>	<b>198,213</b>
*Percentage Increase over prior year	27.1%	-25.2%	19.8%	2.23%	2.26%	2.66%	2.31%
<u>Projects</u>							
Costs			24,500	30,000	-	20,000	-
Funding (excl tax req)			(24,500)	(30,000)	-	(20,000)	-
<b>Net Project Costs (Funded From Tax Req)</b>			<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL Cost Center Expenditures</b>	<b>137,968</b>	<b>112,759</b>	<b>205,027</b>	<b>214,562</b>	<b>188,732</b>	<b>213,745</b>	<b>198,213</b>
<u>FUNDING SOURCES (REVENUE)</u>							
Administration Overhead Recovery	28,785	28,785	28,674	30,108	31,613	33,194	34,853
Engineering Administration Overhead Recovery	8,031	8,031	10,761	11,300	11,865	12,458	13,081
<b>TOTAL REVENUE</b>	<b>36,816</b>	<b>36,816</b>	<b>39,435</b>	<b>41,407</b>	<b>43,478</b>	<b>45,652</b>	<b>47,934</b>
<u>TRANSFERS FROM RESERVE</u>							
From Operating Reserve	(5,000)	-	(24,500)	(30,000)	-	(20,000)	-
<b>PARTNER CONTRIBUTIONS</b>	<b>(182,565)</b>	<b>(136,924)</b>	<b>(219,963)</b>	<b>(225,969)</b>	<b>(232,210)</b>	<b>(239,397)</b>	<b>(246,147)</b>
*Dollar increase over prior year Requisition	(37,022)	8,619	(37,398)	(6,006)	(6,241)	(7,187)	(6,750)
*Percentage increase over prior year Requisition	25.44%	-5.92%	20.48%	2.73%	2.76%	3.10%	2.82%
<b>TOTAL FUNDING</b>	<b>(150,749)</b>	<b>(100,107)</b>	<b>(205,027)</b>	<b>(214,562)</b>	<b>(188,732)</b>	<b>(213,745)</b>	<b>(198,213)</b>
<b>Surplus/(Deficit)*</b>	<b>-</b>	<b>(12,651)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>RESERVES</b>							
	2024		2025	2026	2027	2028	2029
	PLAN	ACTUAL	PLAN	PLAN	PLAN	PLAN	PLAN
<b>OPERATING RESERVE</b>							
Beginning Balance	93,875	93,875	102,360	87,028	66,081	74,976	63,939
Uses	(5,000)	-	(24,500)	(30,000)	-	(20,000)	-
Funding	12,781	-	8,400	8,400	8,400	8,400	8,400
Interest	704	-	768	653	496	562	480
<b>Ending Balance</b>	<b>102,360</b>	<b>93,875</b>	<b>87,028</b>	<b>66,081</b>	<b>74,976</b>	<b>63,939</b>	<b>72,818</b>
<b>NOTES</b>							



**2025-2029 FINANCIAL PLAN  
SERVICE SUMMARY**

APPENDIX A

472 - Peachland Lift Stations							
OPERATING							
	2024		2025	2026	2027	2028	2029
	PLAN	ACTUAL	PLAN	PLAN	PLAN	PLAN	PLAN
<u>OPERATING COSTS</u>							
Operations	196,484	134,690	210,931	217,488	224,260	231,253	238,274
<b>TOTAL OPERATING COSTS</b>	<b>196,484</b>	<b>134,690</b>	<b>210,931</b>	<b>217,488</b>	<b>224,260</b>	<b>231,253</b>	<b>238,274</b>
*Percentage Increase over prior year	2.1%	-8.1%	7.4%	3.1%	3.1%	3.1%	3.0%
<u>TRANSFERS TO RESERVE</u>							
Transfer to Capital Facilities Reserve	15,000	-	16,912	22,602	23,184	23,858	25,000
Transfer to Operating Reserve	17,000	-	17,000	17,000	17,000	17,000	17,000
<b>TOTAL TRANSFERS</b>	<b>32,000</b>	<b>-</b>	<b>33,912</b>	<b>39,602</b>	<b>40,184</b>	<b>40,858</b>	<b>42,000</b>
<b>TOTAL COSTS</b>	<b>228,484</b>	<b>134,690</b>	<b>244,843</b>	<b>257,090</b>	<b>264,444</b>	<b>272,111</b>	<b>280,274</b>
*Percentage Increase over prior year	1.8%	-41.1%	7.2%	5.00%	2.86%	2.90%	3.00%
<u>Projects</u>							
Costs	-	-	29,500	50,000	-	-	50,000
Funding (excl tax req)	-	-	(29,500)	(50,000)	-	-	(50,000)
<b>Net Project Costs (Funded From Tax Req)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL Cost Center Expenditures</b>	<b>228,484</b>	<b>134,690</b>	<b>274,343</b>	<b>307,090</b>	<b>264,444</b>	<b>272,111</b>	<b>330,274</b>
<u>FUNDING SOURCES (REVENUE)</u>							
Administration Overhead Recovery	36,949	36,949	38,142	40,049	42,052	44,154	46,362
Engineering Administration Overhead Recovery	10,588	10,588	15,326	16,092	16,897	17,741	18,629
<b>TOTAL REVENUE</b>	<b>47,537</b>	<b>47,537</b>	<b>53,468</b>	<b>56,141</b>	<b>58,948</b>	<b>61,896</b>	<b>64,990</b>
<u>TRANSFERS FROM RESERVE</u>							
From Operating Reserve	(10,000)	-	(29,500)	(50,000)	-	-	(50,000)
<b>PARTNER CONTRIBUTIONS</b>	<b>(266,021)</b>	<b>(199,515)</b>	<b>(298,311)</b>	<b>(313,232)</b>	<b>(323,392)</b>	<b>(334,007)</b>	<b>(345,265)</b>
*Dollar increase over prior year Requisition	(47,065)	19,441	(32,291)	(14,920)	(10,161)	(10,615)	(11,258)
*Percentage increase over prior year Requisition	21.49%	-8.88%	12.14%	5.00%	3.24%	3.28%	3.37%
<b>TOTAL FUNDING</b>	<b>(228,484)</b>	<b>(151,979)</b>	<b>(274,343)</b>	<b>(307,090)</b>	<b>(264,444)</b>	<b>(272,111)</b>	<b>(330,274)</b>
<b>Surplus/(Deficit)*</b>	<b>-</b>	<b>17,289</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>RESERVES</b>							
	2024		2025	2026	2027	2028	2029
	PLAN	ACTUAL	PLAN	PLAN	PLAN	PLAN	PLAN
<b>FACILITIES RESERVE</b>							
Beginning Balance	263,094	263,094	280,067	296,979	319,581	342,765	366,623
Uses	-	-	-	-	-	-	-
Funding	15,000	-	16,912	22,602	23,184	23,858	25,000
Interest	1,973	-	-	-	-	-	-
<b>Ending Balance</b>	<b>280,067</b>	<b>263,094</b>	<b>296,979</b>	<b>319,581</b>	<b>342,765</b>	<b>366,623</b>	<b>391,623</b>
<b>OPERATING RESERVE</b>							
Beginning Balance	127,977	127,977	135,937	124,456	92,389	110,082	127,908
Uses	(10,000)	-	(29,500)	(50,000)	-	-	(50,000)
Funding	17,000	-	17,000	17,000	17,000	17,000	17,000
Interest	960	-	1,020	933	693	826	959
<b>Ending Balance</b>	<b>135,937</b>	<b>127,977</b>	<b>124,456</b>	<b>92,389</b>	<b>110,082</b>	<b>127,908</b>	<b>95,867</b>
<b>NOTES</b>							

# Westside Wastewater Service Committee

## Draft 2025 – 2029 Five-Year Financial Plan

Presented November 14, 2024

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1450 K.L.O. Road  
Kelowna, BC, V1W 3Z4  
rdco.com

# Service Fees by Participant

## *Service Fees by Participant*

Service Type	2024	2025	Change \$	Change %
City of West Kelowna	\$ 4,500,310	\$ 4,665,604	\$ 165,294	3.5%
District of Peachland	660,981	709,438	48,457	6.8%
Westbank First Nation	1,720,434	1,813,888	93,454	5.2%
<b>TOTAL</b>	<b>\$ 6,881,725</b>	<b>\$ 7,188,929</b>	<b>\$ 307,204</b>	<b>4.5%</b>

# Operational Expenditures

*Operating Expenditures by Service & Type*

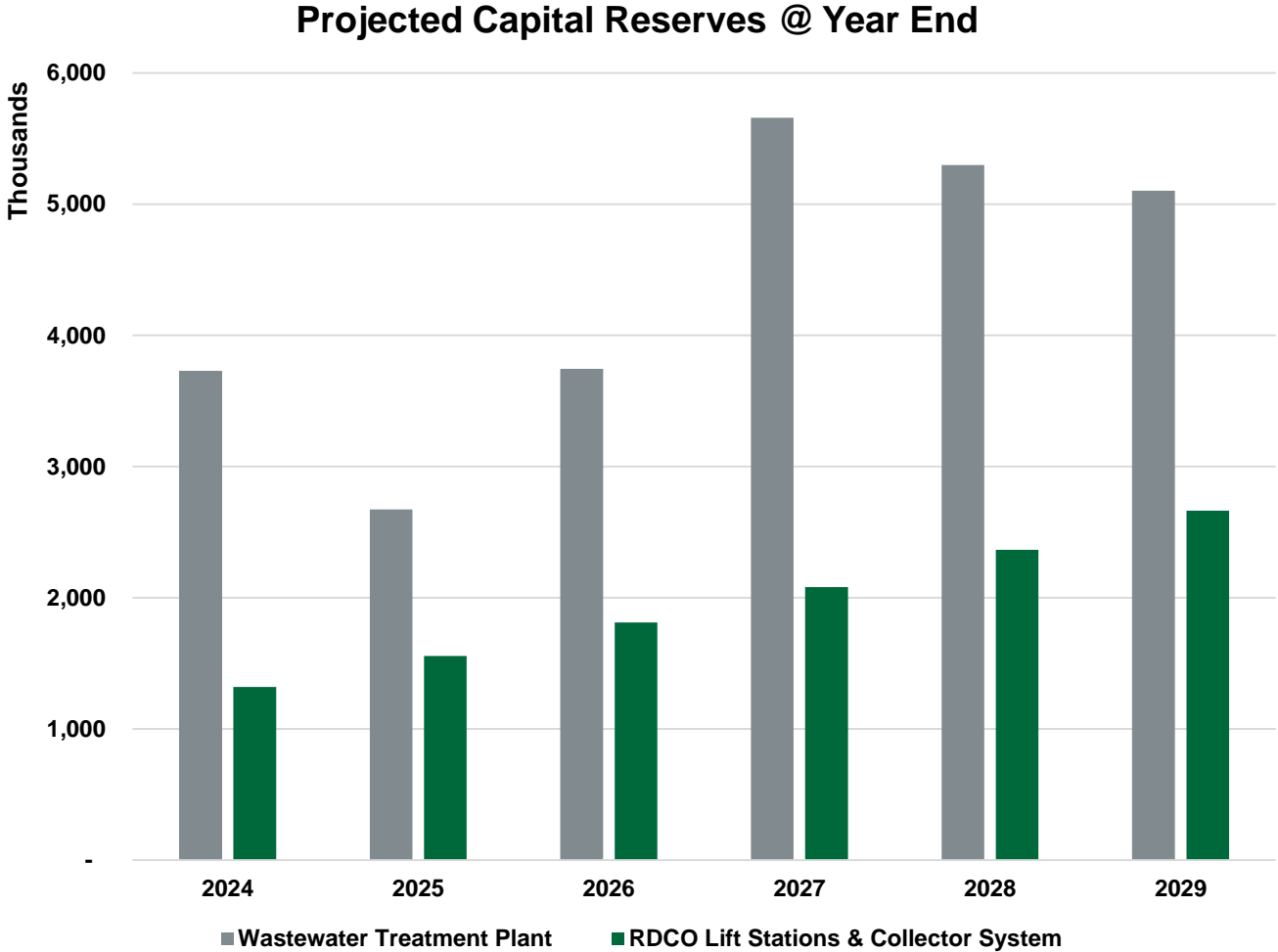
Service Type	Wastewater Treatment Plant	RDCO Lift Stations/ Collector System	WFN Lift Stations/ Collector System	Peachland Lift Stations/ Collector System	TOTAL
Operations	\$ 3,159,739	\$ 309,345	\$ 172,127	\$ 210,931	\$ 3,852,143
Projects	367,000	54,000	24,500	29,500	475,000
Transfers to Reserves	1,969,969	261,085	8,400	33,912	2,273,366
<b>Total</b>	<b>\$ 5,496,708</b>	<b>\$ 624,430</b>	<b>\$ 205,027</b>	<b>\$ 274,343</b>	<b>\$ 6,600,509</b>

# Capital Expenditures

## *Capital Expenditures by Service*

Service Type	2024	2025	Change \$	Change %
Wastewater Treatment Plant	\$ 2,010,997	\$ 3,245,127	\$ 1,234,130	61.4%
RDCO Lift Stations/Collector System	1,237,160	507,625	(729,535)	-59.0%
<b>TOTAL</b>	<b>\$ 3,248,157</b>	<b>\$ 3,752,752</b>	<b>\$ 504,595</b>	<b>15.5%</b>

# Capital Reserves



# Recommendation

**THAT** the Westside Wastewater Service Standing Committee recommends the draft Westside Wastewater Service 2025-2029 Financial Plan to the Regional Board.

# Recommendation

**THAT** the Westside Wastewater Service Standing Committee recommends the incorporation of the Committee approved amendments to the Westside Wastewater Service 2025-2029 Financial Plan

**AND THAT** the Westside Wastewater Service Standing Committee recommends the draft Westside Wastewater Service 2025-2029 Financial Plan, as amended, to the Regional Board.