



Fraser River – Northwest Langley Wastewater Treatment Plant

# Developing the Next Liquid Waste Management Plan

NEW DIRECTIONS FOR OUR REGIONAL CHALLENGES

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**metro**vancouver

# WHAT ARE LIQUID WASTE MANAGEMENT PLANS?

- Regulatory document approved by the Province
- Developed in consultation with community
- Key focus is on actions that support human and environmental health



White Rock Beach

# WHY DEVELOP A NEW PLAN?

Seeking to improve on the last plan by implementing action to:

- Integrate Indigenous values
- Strengthen climate resilience
- Reduce and eliminate sewer overflows
- Integrate affordability
- Improve water body health
- Increase resource recovery
- Advance innovation



# VISION FOR THE NEXT PLAN

Healthy Waters. For All. Forever.

## Healthy Waters

Protect the waters that sustain life and make this region a great place to be

## For All

Protect these waters for all life

## Forever

Protect these waters for generations to come





Waves hitting sea wall

## KEY CHALLENGES

- Accelerating climate change
- Regional growth increasing pressures on wastewater systems
- Cost and complexity of major projects
- Affordability and competing demands for funding
- Alignment across multi-jurisdictional landscape
- Environmental impacts of consumer and industrial products

# CLIMATE RESILIENCE

## Challenges

- Extreme weather
- Flooding and sewer overflows – health, safety, and environmental concerns
- Overbuilding not feasible or affordable

## Approach

- Requirements for climate vulnerability risk assessment
- Make best use of regional economies of scale for climate data
- Requirements to design or retrofit for resilience and integrate emergency response



Flooding in West Vancouver

# WATER QUALITY

## Challenges

- Multiple jurisdictions involved, each with their own priorities
- Complexity of linking actions to ecosystem improvements

## Approach

- Multi-jurisdictional collaboration with Metro Vancouver and members doing their part
- Integrate Indigenous-led water quality objectives that include action on CECs



# SEWER OVERFLOWS

## Challenges

- Wet weather sewer overflows
- Human and environmental health risk
- Some combined sewer separation / inflow and infiltration (I&I) efforts lagging

## Approach

- Wet weather pricing, two-tier lateral pricing, and other financial drivers for action
- Municipal action on private laterals supported by new regional guidelines
- Develop sanitary loading metrics to prioritize risk



Sewer overflow



# STORMWATER

## Challenges

- Climate change
- Developing science on stormwater impacts (e.g. CECs)
- Urban development

## Approach

- Support members on green infrastructure – tools, guidelines, and advocacy
- Increased accountability for Integrated Stormwater Management Plans



Barnston pump station green roof



Metro Vancouver wastewater treatment plants

# WASTEWATER TREATMENT

## Challenges

- Complexity and cost of major upgrades
- Biosolids volumes doubling by 2035, tripling by 2050

## Approach

- Design for the future – adaptable to new technology and climate resilience
- Targeted, cost-effective treatment, integrating source control as a first priority
- Enhanced resource recovery in a circular economy
- Expand new markets for biosolids

# AFFORDABILITY

## Challenges

- Competing demands for funding
- High cost of wastewater management
- Climate change resilience
- Aging assets

## Approach

- Integrate user-pay models
- Prioritize inflow management over capacity expansion
- Identify projects with multiple benefits
- Regional equity guidelines



Provincial funding announcement for Iona wastewater treatment plant, March 2023

# INTEGRATING INDIGENOUS PRIORITIES

Working to better integrate Indigenous priorities in the next plan through:

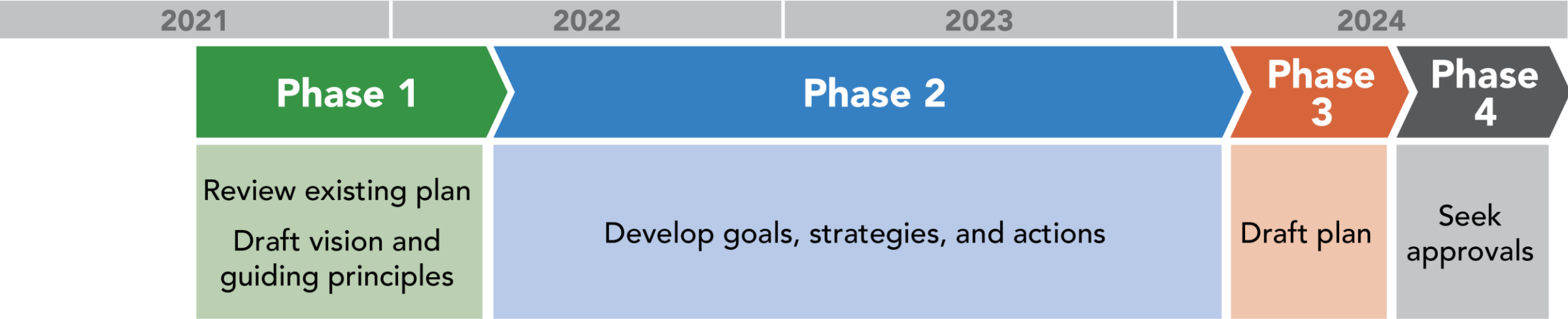
- One-on-one meetings
- Technical workshops
- Integrating and aligning with best practices and direction from senior governments



Fish in stream

# Development of a New Liquid Waste Management Plan

Liquid Waste Committee and Board direction at the end of each phase



**WE ARE  
HERE**



**TOGETHER**  
WE MAKE OUR REGION  
**STRONG**

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