

Regional District of Okanagan-Similkameen Liquid Waste Management Plan *Update* Gallagher Lake & Vaseux Lake Area Wastewater Advisory Committee Meeting

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Wastewater Advisory Committee Meeting

Agenda

- Introduction
- *What is a LWMP?*
- *Why develop a LWMP?*
- *How do you develop a LWMP?*
- *What is the LWMP Plan Area?*
- *What are your responsibilities?*
- *What options have been identified to date?*

Introductions...



Wastewater Advisory Committee (WAC) Members

Active
Members

ORGANIZATION	TITLE	FIRST_NAME	LAST_NAME
RDOS - Director Area C	Mr.	Allan	Patton
RDOS - Director Area D	Mr.	Bill	Schwarz
RDOS	Mr.	Alf	Hartviksen
RDOS	Ms.	Liisa	Bloomfield
RDOS	Ms.	Evelyn	Riechert
AECOM	Mr.	John	Van Andel
AECOM	Mr.	Tim	Forty
Interior Health	Mr.	John	Beaupre
Ministry of Environment	Mr.	Roger	Cavadini
Ministry of Transportation and Infrastructure	Mr.	Rob	Bitte
Local Citizen	Ms.	Madelon	Stevens
Local Citizen	Mr.	Swaranjit	Chahal
Local Citizen	Mr.	David	Nason
Local Citizen	Ms.	Karen	Kari
Local Citizen - possible	Mr.	Ronald	Worth
Local Citizen	Mr.	Ray	Moon
Local Citizen	Mr.	Dale	Hyworon
Local Citizen	Mr.	Barry	Barisoff
Local Citizen	Mr.	Mike	Sarell
Local Citizen - possible	Mr.	Michael	Ovenell
Local Citizen	Mr.	Lawrence	Green
Local Citizen	Ms.	Joy	Nobel
Local Citizen	Ms.	Arlene	Loverin
Local Citizen	Ms.	Dot	Ryrie
Local Citizen	Mr.	Bill	Morey
Local Citizen	Mr.	Hugh	Chown

LWMP Schedule

ACTIVITY	2010		2011										2012				
	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
Kickoff Meeting	◆																
Notify Ministry of Environment (MoE)		■															
Assemble Wastewater Advisory Committee (WAC)		■	■														
WAC Meeting 1 (Introduction)																	
Data Collection					■	■	■	■	■								
WAC Meeting 2				◆													
WAC Meeting 3								◆									
Public Information Meeting											◆						
Preparation of the Stage 1/2 Report									■	■	■						
Board Presentation of the Stage 1/2 LWMP													◆				
Preparation of the Stage 3 Report														■	■	■	■
Board Presentation of the Stage 3 LWMP																	◆

What is a LWMP?



What is a Liquid Waste Management Plan (LWMP)?

A LWMP is a plan for a municipality or specific area that charts the future course of action with respect to sewage, stormwater, and other wastewaters, including their collection, treatment, *and* the management of the effluent

What is a LWMP?

A LWMP covers more than just solutions for managing liquid wastes. It can also deal with:

- lot sizes
- zoning issues in unsewered areas
- water conservation programs, and
- public education programs for improving septic systems performance

What is a LWMP?

A LWMP is a tool used to develop cost-effective solutions to address local liquid waste issues, it allows a community to:

- Protect human health and the environment
- Develop strategies to minimize wastewater generation
- Meet water conservation goals
- Maximize use of reclaimed water, and
- Address stormwater issues

What is a LWMP?

Public participation is mandatory for the development of an effective LWMP, to ensure the Plan reflects the needs of the community, now and for the future.

This is especially important as the implementation of any recommendations will be funded by those in the Plan area

What is an Amendment to a LWMP?

- A change in direction from the previous Plan
 - Example: Several Satellite Waste Water Treatment Plants (WWTPs) vs. a single large WWTP
- A departure from the previous approach
 - Example: Outfall vs. Irrigation or Infiltration
- A new direction
 - Example: Community Collection vs. On-site disposal
- A new option or issue

Why develop a LWMP?



Why develop a LWMP?

Advance planning can ensure that current and future needs for the management of liquid wastes for the community are met.

It saves both the environment and the taxpayer by creating proactive solutions rather than the more costly option of reacting to problems as they arise

Why develop a LWMP?

A LWMP provides an opportunity for ratepayers to assist in the process of selecting the best options for the management of liquid wastes for their community and can increase local support for current and future implementations

Why develop a LWMP?

There is a higher likelihood of obtaining grant funding for implementation of a LWMP which not only shows the community's needs, but also identifies the environmental and health benefits

Why Amend this LWMP?

- There is an existing LWMP for RDOS Areas “C & D”
 - Completed in 1989
- The management of wastewater in the plan area currently consists of utilizing existing on-site systems or local small treatment systems
 - Several wastewater management options have been identified to date
 - Are there other options we need to consider before a final decision is made on the “Preferred Solution”?

Why do we really need a LWMP?

or, *in Graphic Detail,*

What can happen without a LWMP?



Algae Bloom due to Excessive Nutrients



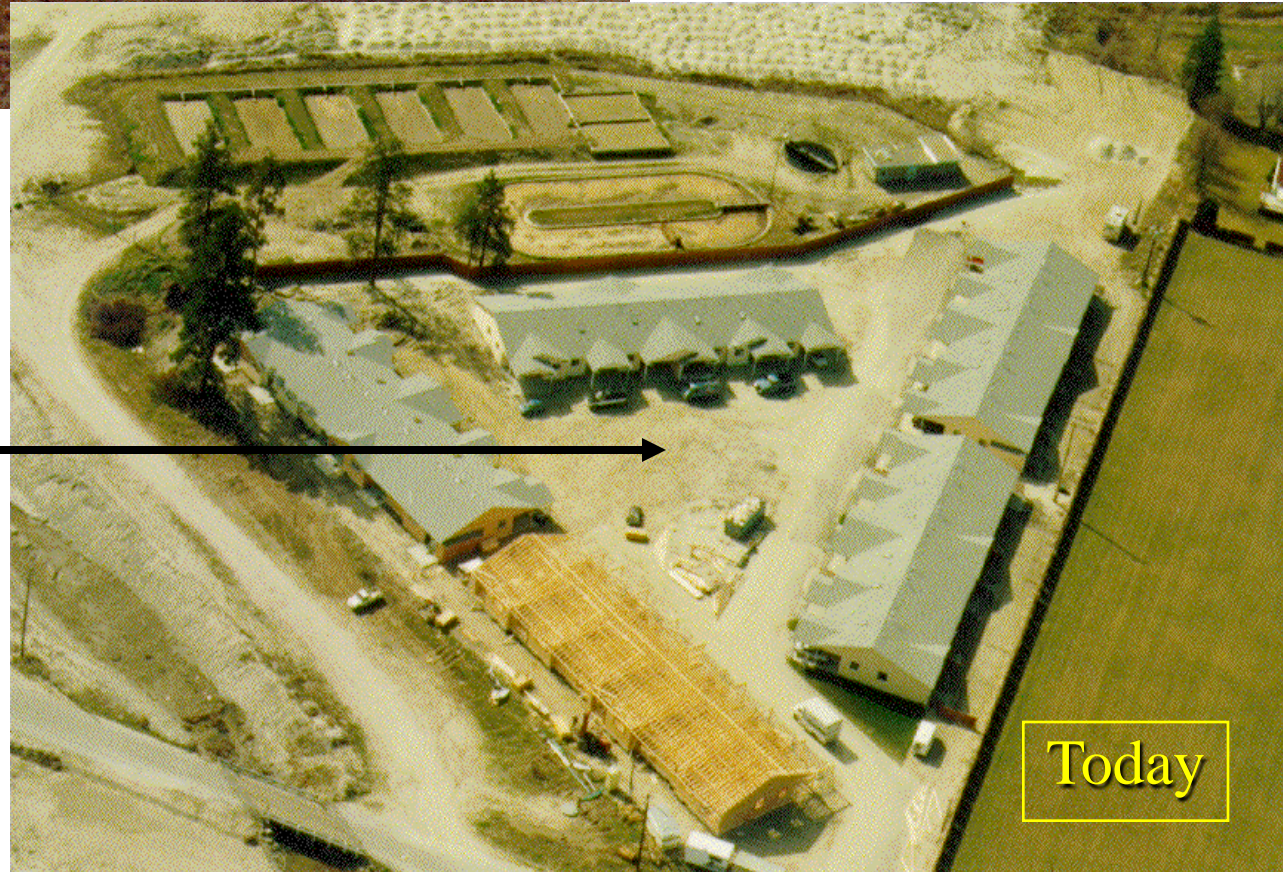
Municipal WWTP (Waste Water Treatment plant)



Originally

No Planning!

Seniors
residential
complex

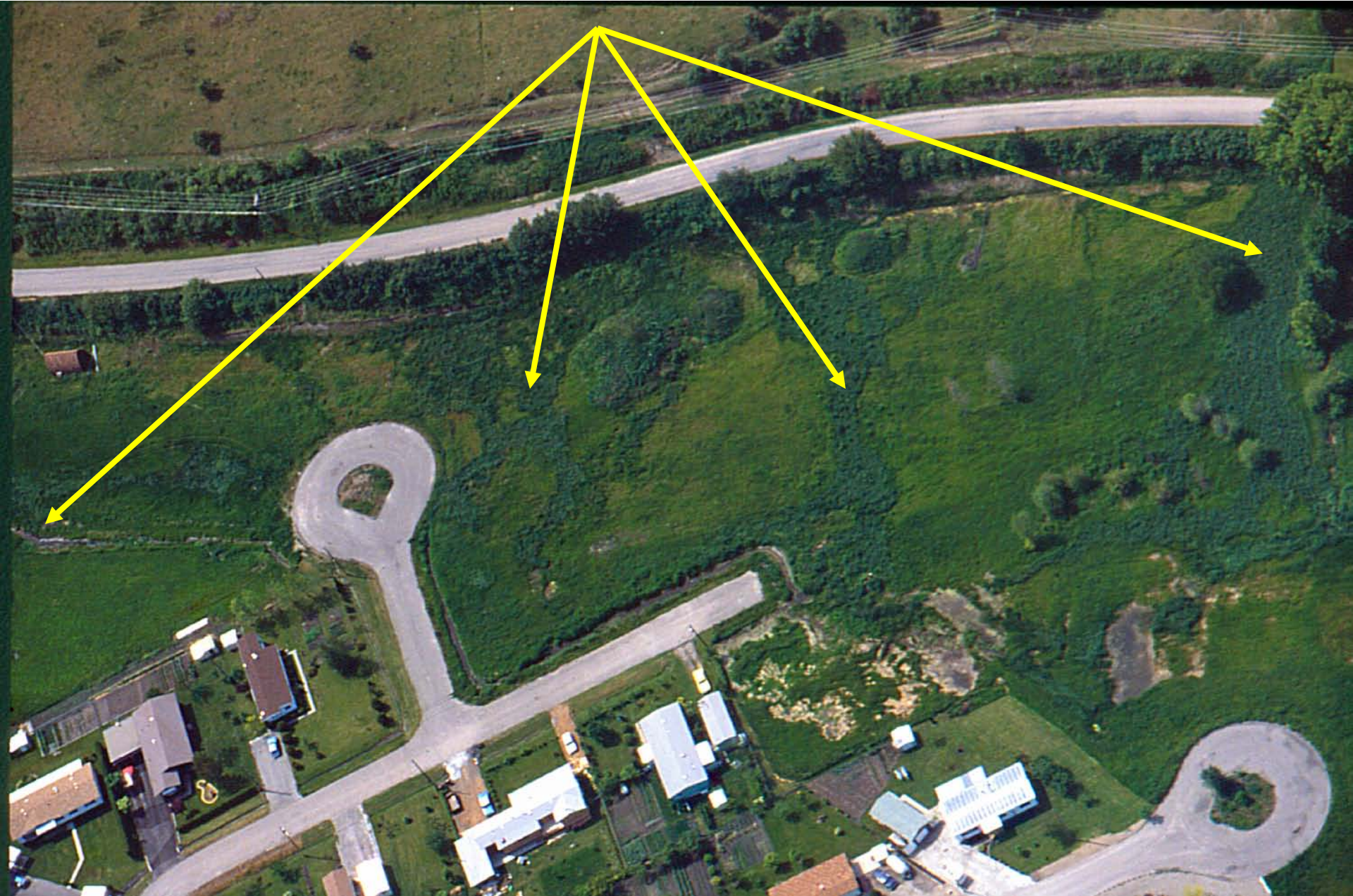


Today

Septage breakout below subdivision



Infiltrated Effluent Breakout



How do you develop a LWMP?

or, in this case

How do you Amend an Existing LWMP?



How do you develop a LWMP?

Ground Rules:

- Identify and solicit input from appropriate...
 - Government Agencies
 - Non Government Organizations (NGOs)
 - First Nations
 - Special Interest Groups (if any), and
 - The General Public in the plan area
- Answer all questions completely and openly
- Consider all ideas suggested
- Discard suggested options only for sound technically defensible reasons with clear explanations

How do you develop a LWMP?

Ground Rules: (Continued)

- RDOS Board makes decision on the “Preferred Solution” at the end of the combined Stage 1 / 2 **only** after carefully considering all information
 - This includes feedback from the Advisory Committee and from an **informed** public

How do you develop a LWMP?

Stage I: Data Gathering

- Background on current status
 - Environmental or Health issues
 - Status of the existing systems
- List and Outline of potential options suggested by
 - Members of the Advisory Committees
 - The public
 - First Nations
 - Government agencies
 - NGOs
 - Special interest groups
 - Staff, and
 - The Consultant

How do you develop a LWMP?

Stage II: Option Development, Cost Analysis & Option Selection

- Provide details for each identified option
 - Develop options in sufficient detail to permit comparison
 - Pros and cons of each option presented
 - Staging and phasing of upgrades shown
 - Cost Analysis developed to permit Order of Magnitude cost comparisons of options - including costs on a per household basis*
 - Environmental and health pros and cons outlined
- Provide clear and reasoned explanation for those options that are technically impractical
- Clearly show the consultation efforts for: the public, First Nations and Government Agencies

How do you develop a LWMP?

Stage II: Option Development, Cost Analysis & Option Selection

- Advisory Committee selects their “Preferred Solutions”
- “Preferred Solutions” are presented to the public at an advertised public information meeting
- “Preferred Solutions” are presented to the RDOS Board for consideration based upon the information developed throughout the LWMP process and – **most importantly** – input and feedback from the Wastewater Advisory Committee and from an **informed** public

How do you develop a LWMP?

Stage III: Executive Summary

- Provides details of the “Preferred Solutions”
- Outlines process followed
- Explains options not selected and why
- Outlines plan details
 - Level of treatment and effluent management
 - Schedule of stages and phases for treatment plant & collection system upgrades

Note: The above is not new information but is extracted and condensed from the Stage 2 report, PLUS

- Lists needed bylaws and identifies who is to prepare them
- Outlines Consultation efforts

How do you develop a LWMP?

The Ministry of Environment has advised that the process for amending the existing LWMP may utilize a combined Stage 1 / 2 process

How do you develop a LWMP?

Or, How would you Amend this LWMP?

- Identify all options
 - List identified options
 - Review with WAC – Any other options?
- Select the “Preferred Solution”
 - Develop options
 - WAC picks their “Preferred Solution(s)”
- Public Information meeting – Public Confirms WAC’s “Preferred Solution(s)”
- Finalize combined Stage 1 / 2 report
- Proceed with Stage 3

The Committee's

And their Roles in the LWMP



Steering Committee (SC)



What is the Role of the Steering Committee?

- All other committees report to the Steering Committee
- Responsible for ensuring that the RDOS Board is kept informed of progress
- Involved in a process guidance role to ensure that no option is summarily dismissed
- Tasked with ensuring that the necessary information is provided to the Public Advisory Committee so they may fully understand the options and the implications of each, to assist them to make an informed decision when selecting their Preferred Solution(s) for the Management of Wastewater within the plan area

What is the Role of the Steering Committee?

- Steering Committee Members
 - Regional District of Okanagan-Similkameen
 - Ministry of Environment, and
 - AECOM (The Consultant)

Any questions before we move on?

Technical Advisory Committee (TAC)



What is the Role of the Technical Advisory Committee?

- The TAC Acts in an advisory capacity to the Steering Committee
- Provides insight as to their agency mandate as it pertains to this LWMP
- Reviews information, and draft reports and provides comments, concerns, ideas, and potential opportunities for consideration in developing the LWMP with emphasis on their agency's mandate
- It is anticipated that many members of the committee, will not personally attend meetings, but will provide relevant comments relating to their agency's mandate

What is the Role of the Technical Advisory Committee?

- TAC Members (Typically Include)
 - Ministry of Environment
 - Ministry of Transportation and Highways
 - Interior Health
 - Ministry of Agriculture
 - Agricultural Land Commission
 - Okanagan Basin Water Board
 - Fisheries and Oceans Canada
 - INAC
 - First Nations Representative
 - Any other agency whose mandate may be affected, and
 - The Consultant

Any questions before we move on?

Public Advisory Committee (PAC)



What is the Role of the Public Advisory Committee?

- The PAC acts in an advisory capacity to the Steering Committee
- Provides insight as to community objectives for inclusion in the Plan
- Provides feedback that will help ensure that proposed programs and policies are in the best interests of all residents of the plan area and any other areas that may benefit from this LWMP
- Acts as liaison to larger stakeholder group(s), with the assistance of information summaries developed as part of the public consultation process

What is the Role of the Public Advisory Committee?

- Reviews information and provides comments, concerns, ideas, and potential opportunities for consideration in developing the LWMP
- Selects a “Preferred Solution” or mix of “Preferred Solutions” from the identified options
- Reviews and provides input on the public consultation process, broader communications, media relations, and the timing and location of consultation sessions with the community
- Assists with public meetings and open house events

What is the Role of the Public Advisory Committee?

- **PAC Members** (Typically Include)
 - Area residents (general public)
 - First Nations people
 - Business Community
 - Ratepayers Association
 - Special Interest Groups, and
 - The Consultant

Any questions before we move on?

Wastewater Advisory Committee (WAC)



What is the Role of the Wastewater Advisory Committee?

- The Wastewater Advisory Committee (WAC) is a combined committee, which includes all the members of the Technical Advisory Committee (TAC) and the Public Advisory Committee (PAC) combined into a single committee
- The benefits include
 - Cost savings as there are fewer committees and fewer meetings
 - Information more readily accessible to all members
 - Streamlined process in regards to schedule (fewer meetings)
 - Less chance of misunderstandings
 - Immediate response to most members questions, thereby speeding the process
- The downside is the potential for an unwieldy committee

What is the Role of the Wastewater Advisory Committee?

- The WAC acts in an advisory capacity to the Steering Committee
- Provides insight as to community objectives for inclusion in the Plan
- Provides feedback that will help ensure that proposed programs and policies are in the best interests of all residents of the plan area and any other areas that may benefit from this LWMP
- Acts as liaison to larger stakeholder group(s), with the assistance of information summaries developed as part of the public consultation process

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- Reviews and provides input on the public consultation process, broader communications, media relations, and the timing and location of consultation sessions with the community
- Assists with public meetings and open house events

What is the Role of the Wastewater Advisory Committee?

- Government agency members provide insight as to their agency mandate as it pertains to this LWMP
 - Review information, and draft reports and provides comments, concerns, ideas, and potential opportunities for consideration in developing the LWMP with emphasis on their agency's mandate
- It is anticipated that some of the government agency members of the committee, will not personally attend meetings, but will provide relevant written comments relating to their agency's mandate to the committee

Wastewater Advisory Committee (WAC) Members

Active
Members

ORGANIZATION	TITLE	FIRST_NAME	LAST_NAME
RDOS - Director Area C	Mr.	Allan	Patton
RDOS - Director Area D	Mr.	Bill	Schwarz
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RDOS	Ms.	Liisa	Bloomfield
RDOS	Ms.	Evelyn	Riechert
AECOM	Mr.	John	Van Andel
AECOM	Mr.	Tim	Forty
Interior Health	Mr.	John	Beaupre
Ministry of Environment	Mr.	Roger	Cavadini
Ministry of Transportation and Infrastructure	Mr.	Rob	Bitte
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Local Citizen	Mr.	David	Nason
Local Citizen	Ms.	Karen	Kari
Local Citizen - possible	Mr.	Ronald	Worth
Local Citizen	Mr.	Ray	Moon
Local Citizen	Mr.	Dale	Hyworon
Local Citizen	Mr.	Barry	Barisoff
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Local Citizen	Ms.	Arlene	Loverin
Local Citizen	Ms.	Dot	Ryrie
Local Citizen	Mr.	Bill	Morey
Local Citizen	Mr.	Hugh	Chown

Wastewater Advisory Committee (WAC) Members

Corresponding
Members

DECLINED TO BE ADVISORY COMMITTEE MEMBER - HOWEVER WOULD LIKE E-MAIL UPDATES DURING PROCESS			
Ministry of Agriculture and Lands	Mr.	Carl	Withler
Agricultural Land Commission	Mr.	Martin	Collins
Ministry of Community Development	Ms.	Catriona	Weidman
Ducks Unlimited	Mr.	Brad	Amer
Osoyoos Indian Band	Mr.	Chris	Scott
Local Citizen	Ms.	Sharon	Ewin
Local Citizen	Mr.	Tom	Lee
Local Citizen	Ms.	Wendy	Olinger
Local Citizen	Mr.	Wayne	Richards
Local Citizen	Mr.	Ray	Cyr
Local Citizen	Mr.	Dan	Atkinson

Any questions before we move on?

What is the LWMP coverage area?



What is the LWMP Coverage Area?

- East Vaseux Lake (Area D)
- South Vaseux Lake (Area C)
- Gallagher Lake (Area C)
- And the properties in between



What is the LWMP Coverage Area?

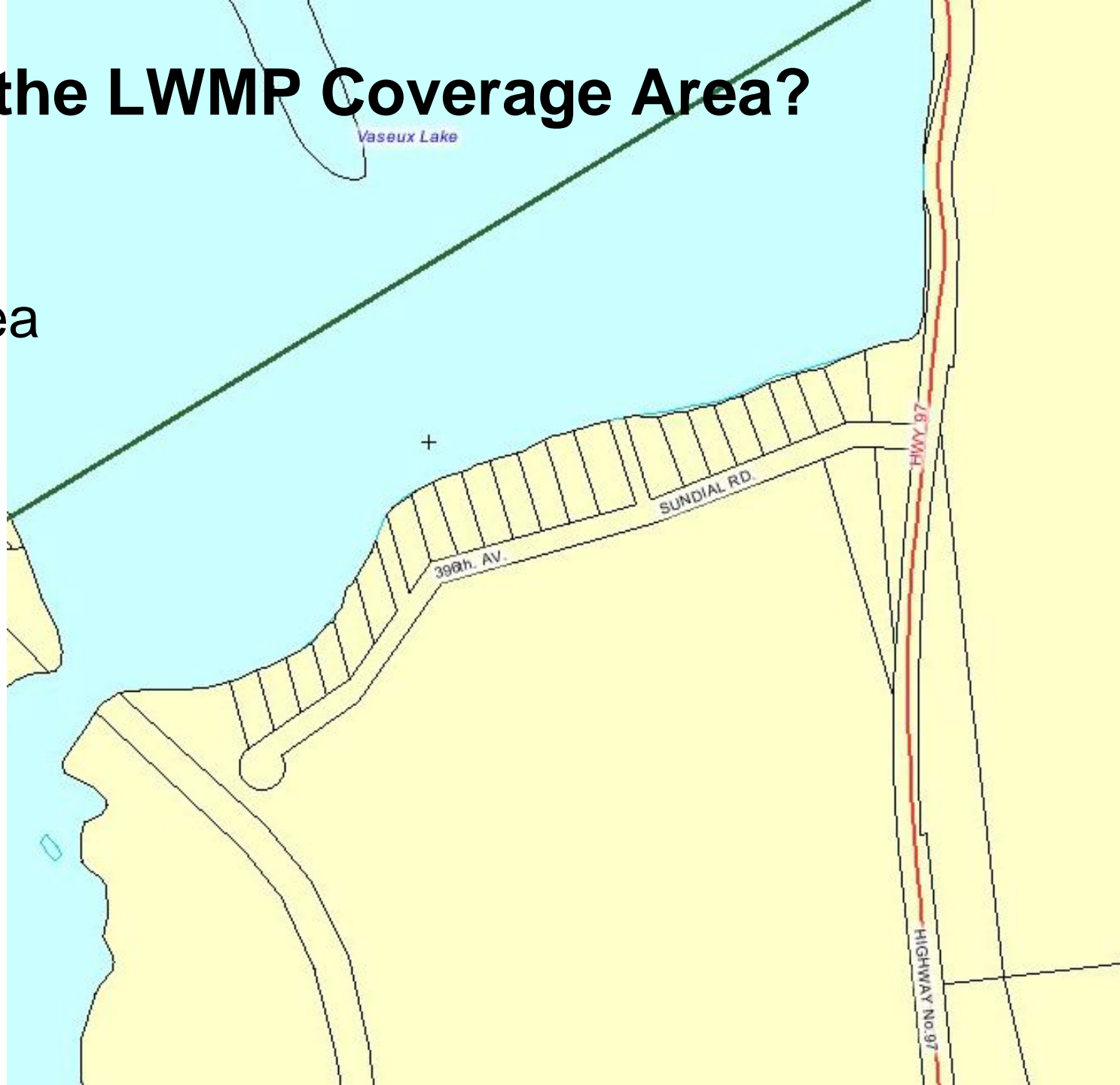
- Vaseux Lake Area (East)



What is the LWMP Coverage Area?

Vaseux Lake

- Vaseux Lake Area (South)



What is the LWMP Coverage Area?

- Vaseux Lake Area (South)



Vaseux Lake Area

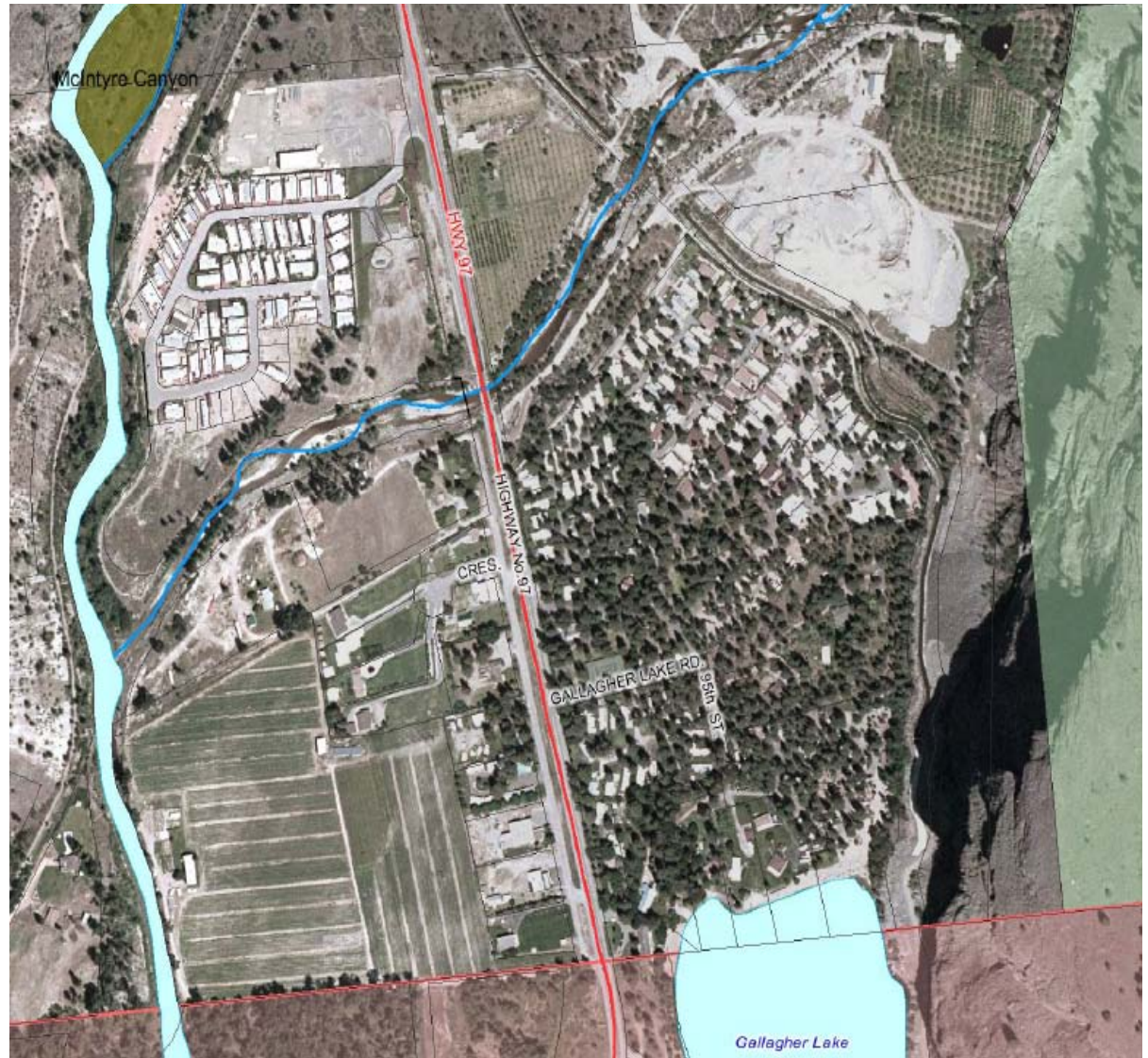


Gallagher Lake Area



What is the LWMP Coverage Area?

- Gallagher Lake Area



Any questions before we move on?

What are the Wastewater Issues?



What are the Wastewater Issues?

- Ageing on-site systems
 - Very costly replacement ~\$15,000 to \$50,000 each
- Impact on Gallagher & Vaseux Lakes
- Developers do not want to operate a WWTP
 - Deer Park MPH has expressed an interest in pumping their wastewater to a municipal WWTP (Waste Water Treatment Plant) and shutting down their existing small plant

Any questions before we move on?

What are the Options?

(For Managing Wastewater)

**Brainstorm
Ideas**



What are the Options? (For Wastewater Management)

- Do nothing, everything stays as it is
- Collect wastewater from the Gallagher Lake area and direct it to:
 - The proposed OIB WWTP near Vincor
 - The proposed RDOS AWWTP at OK Falls
 - The Town of Oliver's WWTP
- Collect wastewater from the Vaseux Lake area and direct it to:
 - The proposed OIB WWTP near Vincor
 - The proposed RDOS AWWTP at OK Falls
 - The Town of Oliver's WWTP
 - A new WWTP constructed near Vaseux Lake

Any questions before we move on?

Discussion of the Options?

Review Ideas

(For Managing Wastewater)



What are the Options? (For Wastewater Management)

Dicsussion. Are any impractical & why?

- Do nothing, everything stays as it is
- Collect wastewater from the Gallagher Lake area and direct it to:
 - The proposed OIB WWTP near Vincor
 - The proposed RDOS AWWTP at OK Falls
 - The Town of Oliver's WWTP
- Collect wastewater from the Vaseux Lake area and direct it to:
 - The proposed OIB WWTP near Vincor
 - The proposed RDOS AWWTP at OK Falls
 - The Town of Oliver's WWTP
 - A new WWTP constructed near Vaseux Lake

Any questions before we move on?

LWMP Overview Summary



LWMP Overview Summary

- A LWMP is a tool which allows the citizens of a community to understand the wastewater issues in their community, and assists them in selecting the best option for the management and resolution of those issues
- A LWMP belongs to the community which developed it
- The job of the consultant and Regional District staff is to **ASSIST** in the development of the LWMP, by providing clear, understandable, technical and cost information

Thank you!