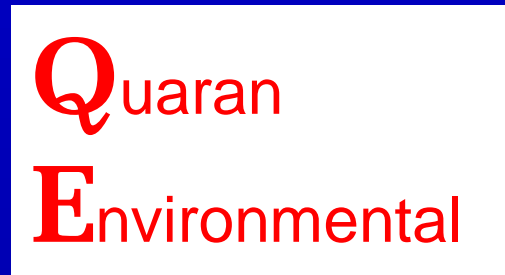


RDCO Area “East”
Liquid Waste Management Plan
Options
Advisory Committee Meeting April 3, 2007

Tim Forty, P.Eng., Quaran Environmental
Jan Enns, MA, Jan Enns Communications



Outline

- w How do you develop a LWMP? (Stage 1)
- w The Identified Options!
- w What Can I do?
- w What's Next? (Stages 2 and 3)
- w A Reminder!

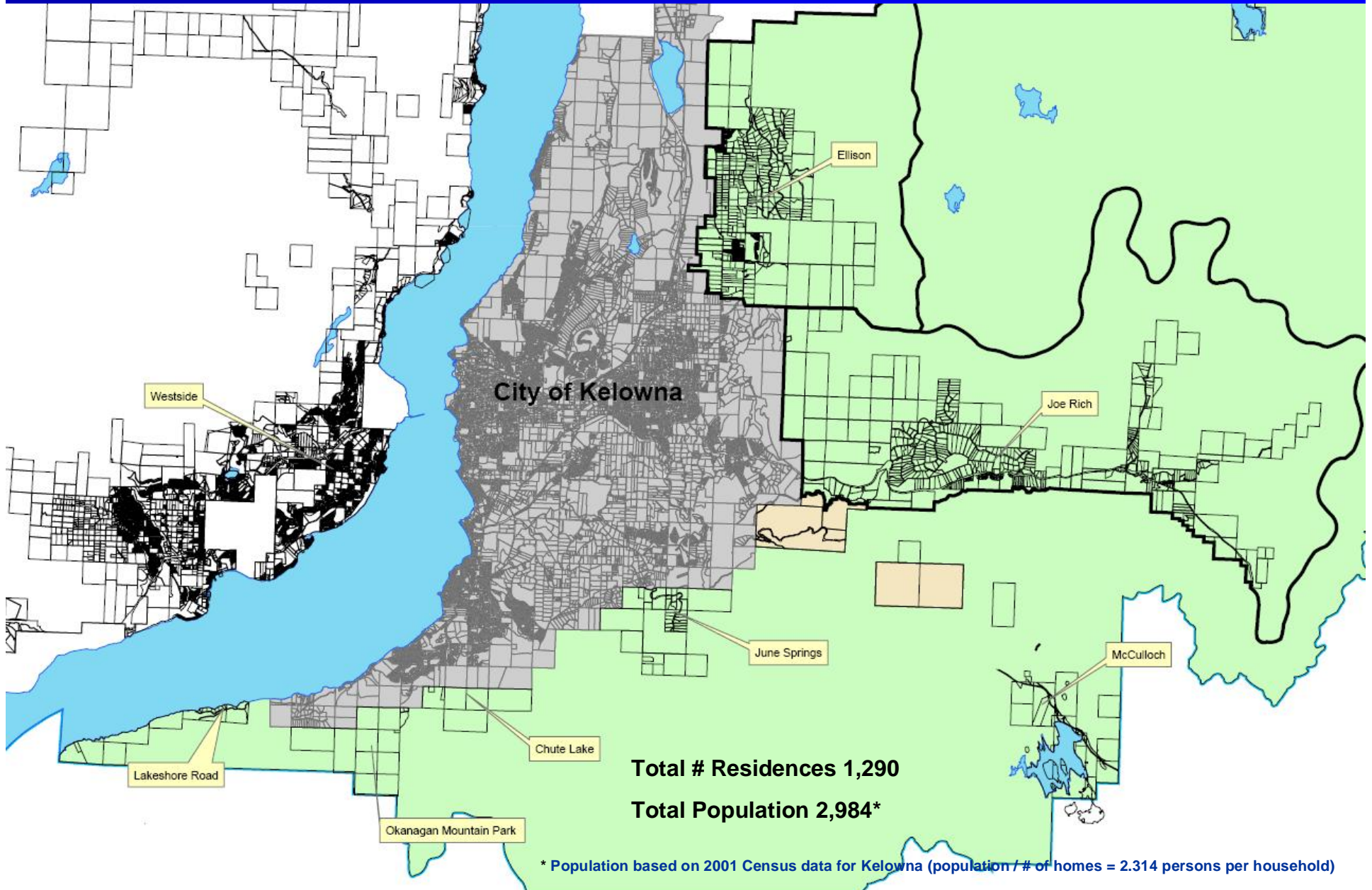
How do you develop a LWMP?

Stage I – Data Gathering and Option Identification

- w Background on current status*
 - w Environmental or Health comments and issues*
 - w Status of existing system(s) (if any)*
- w Outline of potential options* suggested by*
 - w Local citizens*
 - w NGOs*
 - w Government agencies*
 - w Special interest groups*
 - w Consultants*

The Identified Options!

LWMP Area



IMPORTANT CONTROLS

- w Official Community Plan (OCP)**
 - w Ellison area – Specifies zoning in accord with the community's expressed wishes in the Ellison area**
- w Rural Land Use Bylaw (RLUB)**
 - w Joe Rich Area – Specifies zoning in accord with the community's expressed wishes in the Joe Rich area**
- w Agricultural Land Reserve (ALC)**
 - w Agricultural Land Commission (ALC) is tasked with the preservation of farmland and has control over how farmland may be developed or used for non-farming activities**

City of Kelowna Sewer Servicing Policy for Non- City Areas

Policy in Short Form

If you want sewer
service you must
join the City



CITY OF KELOWNA

POLICY: 293
PAGE: 1 of 1

COUNCIL POLICY MANUAL

APPROVAL DATE: 2000/09/11
RESOLUTION #: R267/06/03/20
REPLACING #: R750/00/09/11
DATE OF LAST REVIEW: April 2008

SUBJECT: SEWER SERVICING - NON-CITY AREA

There are areas immediately outside the City limits that have been developed with an urban setting that require, or will require, adequate sewage disposal. These include existing neighborhoods that are experiencing septic field or treatment system failure or where an environmental or health need has been identified. There are also potential new developments that to avoid installing a private sewage collection, treatment, and disposal systems, should be connected to conventional sewer treatment facilities. It is generally recognized that when considering environmental, health, and cost benefits, that a central sewage treatment and disposal solution is the better alternative as compared to a number of small individual treatment facilities. The City of Kelowna will permit the connection of certain Regional District areas to the City sanitary sewer collection and treatment system with specific conditions. This policy identifies the criteria for determining which properties will be considered.

CRITERIA

- 1) A parcel or area wishing to connect to the City of Kelowna sewer system must support the process required to amalgamate the boundaries of the subject property into the boundaries of the City, and join the City.
- 2) Areas to be considered are only the abutting "Kelowna Fringe Area" within the Regional District where the Regional Directors representing the City of Kelowna have full voting rights. Areas that are remote and do not abut the City boundaries will need special consideration and each case will be brought before City Council and the Regional Board before servicing is permitted.
- 3) There must be no negative cost impact on existing City sewer utility customers or development within the City boundary either in the form of increased operating cost or increased Development Cost Charges.
- 4) Any proposal to amalgamate with the City and connect to City sanitary sewer must be reviewed with the appropriate City and Regional District staff and then be submitted to City Council for consideration.
- 5) The City sewer system intended to be utilized must have adequate capacity to serve all Lands in the City identified in the current OCP, and have additional capacity available for the Lands requesting the connection. If the proposed connection results in the need for improvements/expansion to the City sewer system, the benefiting property owner(s) or the Regional District will be required to finance the initial cost of improvements/expansion.

REASON FOR POLICY: To establish criteria to require properties within the Central Okanagan Regional District to join the City of Kelowna to allow connection to the City sanitary sewer system.

LEGISLATIVE AUTHORITY: Council Resolution.

PROCEDURE FOR IMPLEMENTATION: As outlined in policy.

Option 0: Everywhere in RDCO Area East

Status Quo, leave everything as it is

- w Everyone currently served by septic tanks, dry wells or collection and treatment systems continues on in the same fashion (O&M)**
- w New lots using on-site disposal must be 1 Ha or larger in area (Ministry of Community Services – MCS)**
- w New home construction would use septic tanks or existing systems if in serviced subdivision**

Ellison

ELLISON COMMUNITY

Population 673

Parcels 364

Residences 291

Residences at build-out N/A

SCOTTY CREEK

Population 798

Parcels 350

Residences 345

Residences at build-out 345

SUNSET RANCH

Population 305

Parcels 142

Residences 132

Residences at build-out 450

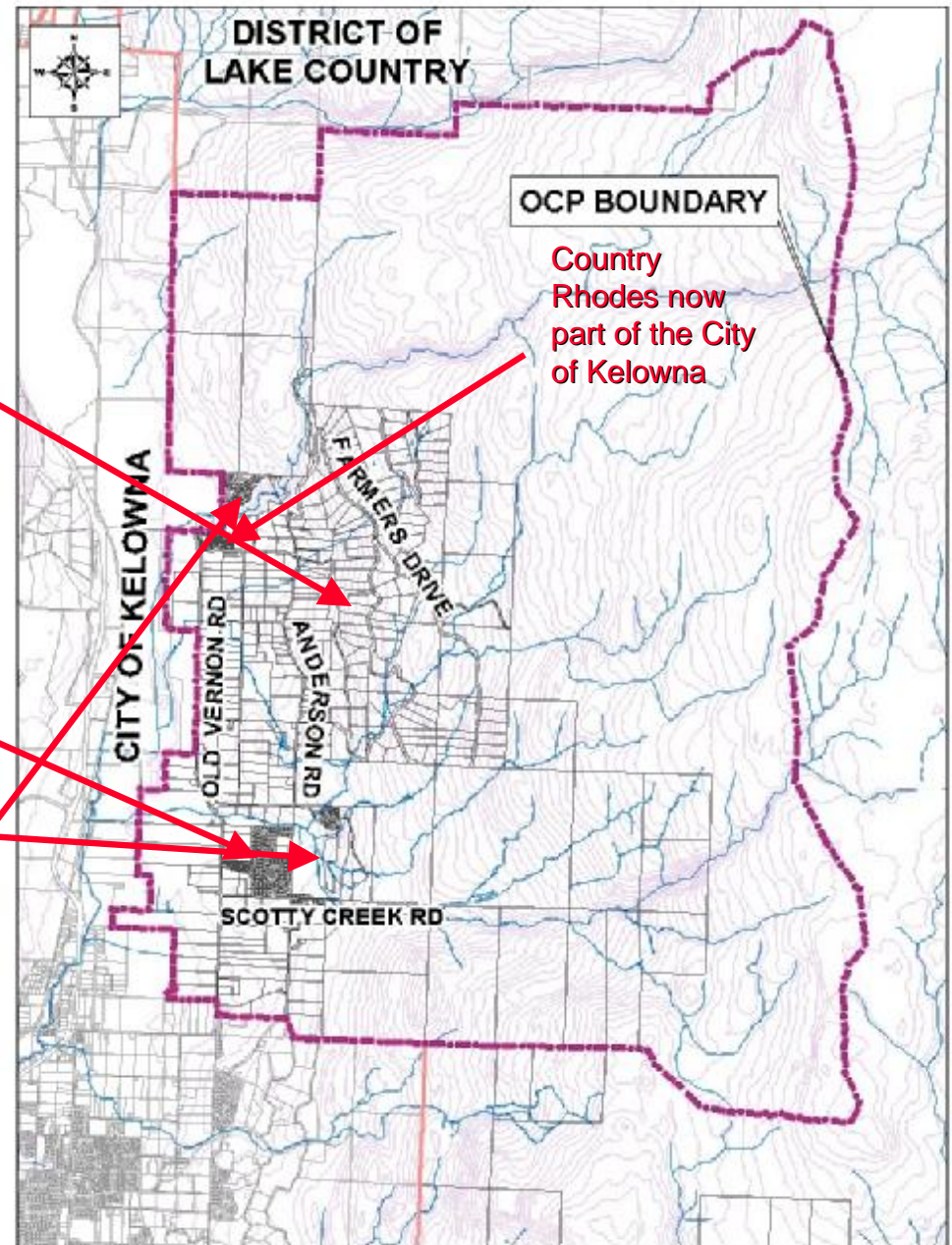
SPENCER ROAD (Country View)

Population 234

Parcels 101

Residences 101

Residences at build-out 101



Option 1: Ellison Community

Each residence continues to use an on-site septic tank tile field disposal system

- w No change
- w New home construction would use on-site sewage treatment and disposal systems with septic tank tile field systems being the most likely choice
- w There are 291 residences in the area today but the full build-out number is unknown

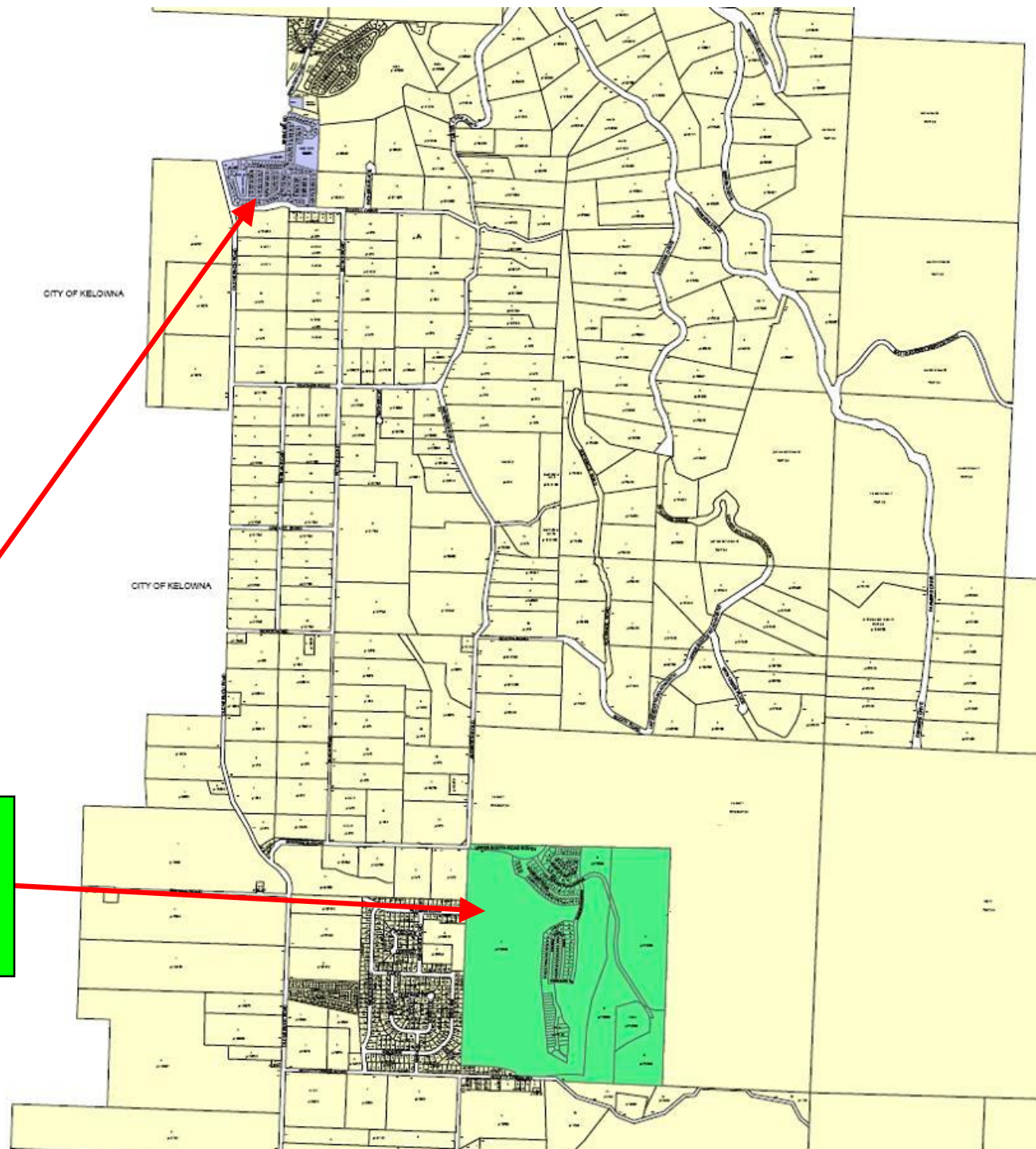
Ellison Existing Sewer Service

Sewer service:

Provided to Country Rhodes
by the City of Kelowna and
Country Rhodes is now part
of the City

Sewer service:

Provided to Sunset Ranch
by the City of Kelowna
under special agreement
(Area remains in RDCO)



Option 2: Sunset Ranch

Sunset Ranch area continues to be serviced by the City of Kelowna

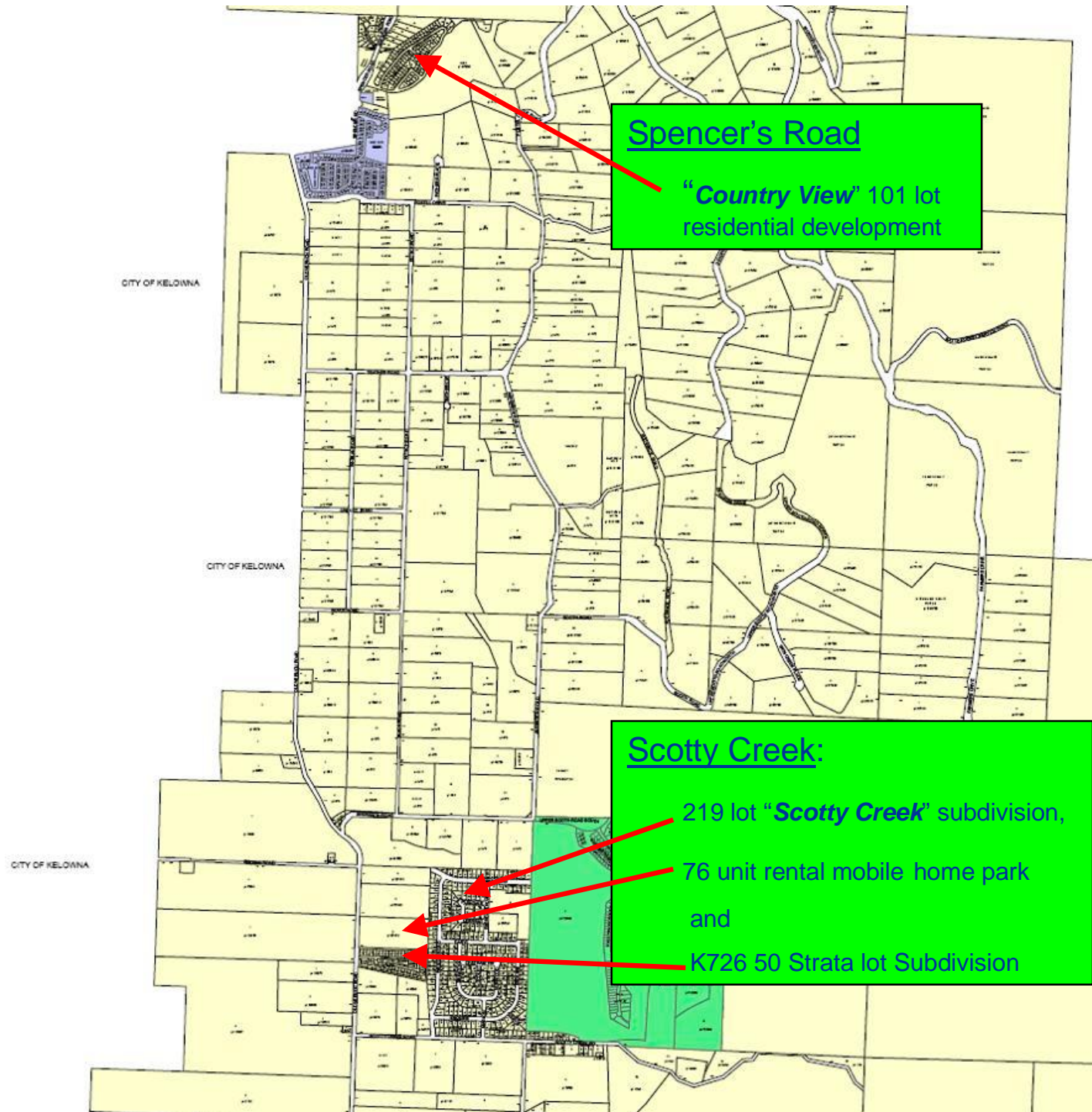
- w Status quo, nothing changes
- w This is a fixed area which currently has 132 residences and could have as many as 450 residences at full build-out

Option 3: Sunset Ranch

Sunset Ranch area sewer service could be provided by RDCO

- w RDCO would construct and operate a sewage treatment & effluent disposal system
- w This is a fixed area which currently has 132 residences and could have as many as 450 residences at full build-out

Ellison
Existing
High
Density But
NOT
Sewered
Areas



Option 4: Scotty Creek area

Scotty Creek area could petition for boundary expansion and ask to be serviced by the City of Kelowna

- w Scotty Creek area would become part of the City of Kelowna**
- w Scotty Creek has 345 residences and is currently at full build-out with no additional residences able to be constructed**

Option 5: Scotty Creek area

Scotty Creek area could petition the City of Kelowna and ask to be serviced by the City **BUT** remain in the RDCO

- w Scotty Creek area is adjacent to the Sunset Ranch and sewer service could be provided from there (capacity was designed in)
- w Scotty Creek has 345 residences and is currently at full build-out with no additional residences able to be constructed

Option 6: Scotty Creek area

Scotty Creek area sewer service could be provided by the RDCO

- w RDCO would construct and operate its own sewage treatment plant (STP)**
- w The STP could also service the adjacent Sunset Ranch and Country View areas**
- w Scotty Creek has 345 residences and is currently at full build-out with no additional residences able to be constructed**

Option 7: Spencer's Road "Country View"

Country View area could petition for boundary expansion and ask to be serviced by the City of Kelowna

- w Country View area would become part of the City of Kelowna (same as adjacent Country Rhodes subdivision)
- w This is a fixed area which currently has 101 residences and is currently at full build-out with no additional residences able to be constructed

Option 8: Spencer's Road "Country View"

Country View area sewer service could be provided by the RDCO

- w RDCO would construct and operate its own sewage treatment plant (STP)**
- w There are no other nearby areas which could share the costs**
- w Country View has 101 residences and is currently at full build-out with no additional residences able to be constructed**

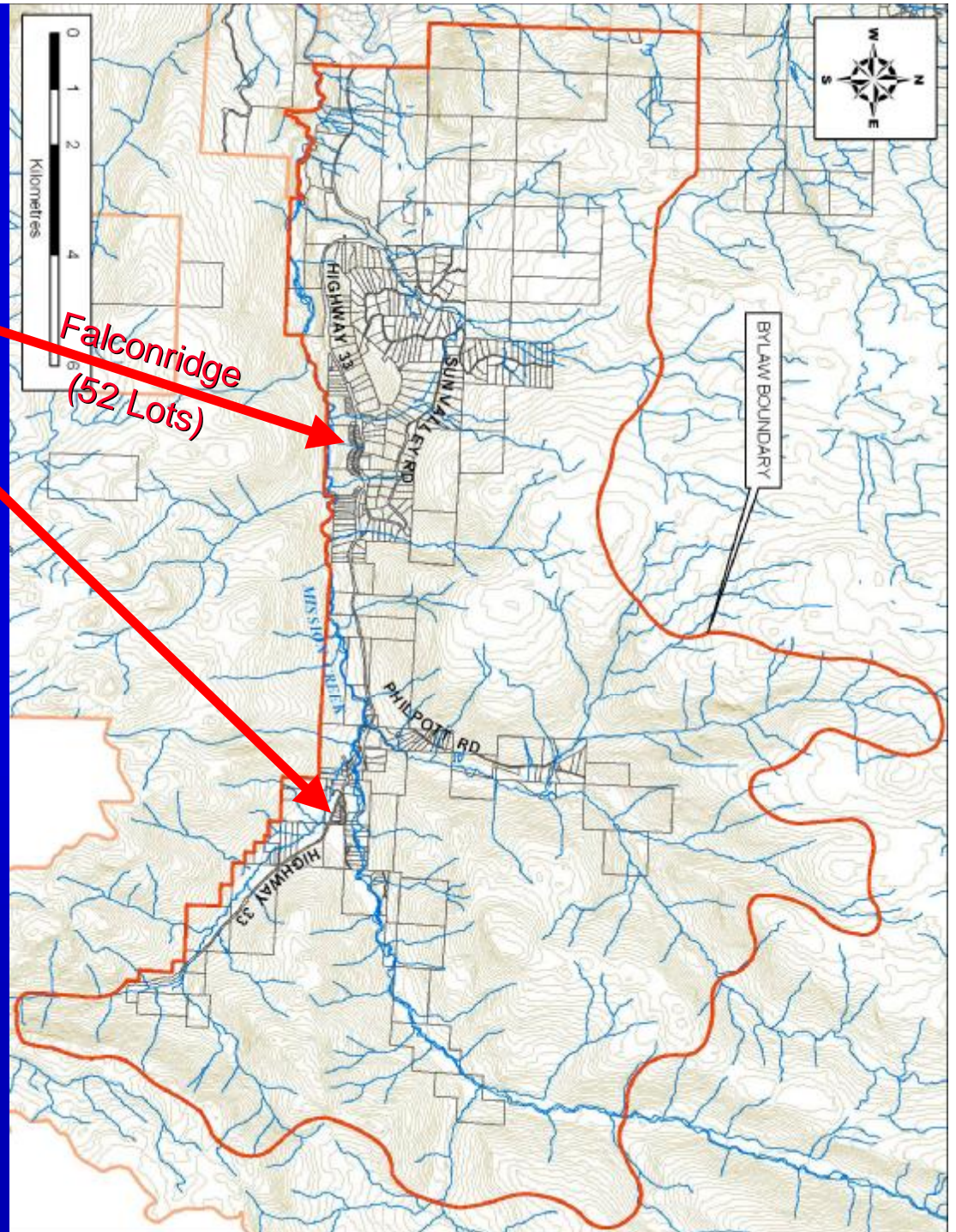
Joe Rich Existing High Density But NOT Sewered Areas

Population 863

Parcels 470

Residences 373

Residences at build-out N/A



Option 9: Joe Rich area

Each residence continues to use an on-site sewage treatment and disposal system

- w No change**
- w New home construction would use on-site sewage treatment and disposal systems with septic tank tile field systems being the most likely choice**
- w There are 373 residences in the area today but the full build-out number is unknown**

Option 10: Joe Rich area

Sewer service could be provided by the RDCO for the 2 high density areas

- w RDCO would construct and operate its own sewage treatment plant (STP) (septic system?)**
- w There are no other nearby areas which could share the costs**
- w There are only two small lot subdivision areas in Joe Rich and they are some distance apart**

End of Lakeshore Road

Population 21

Parcels 19

Residences 9

Residences at build-out 15



Option 11: End of Lakeshore Road

Each residence continues to use an on-site sewage treatment and disposal system

- w No change
- w New home construction would use on-site sewage treatment and disposal systems with septic tank tile field systems being the most likely choice
- w Recent media reports indicate the possibility of a new subdivision in the area**

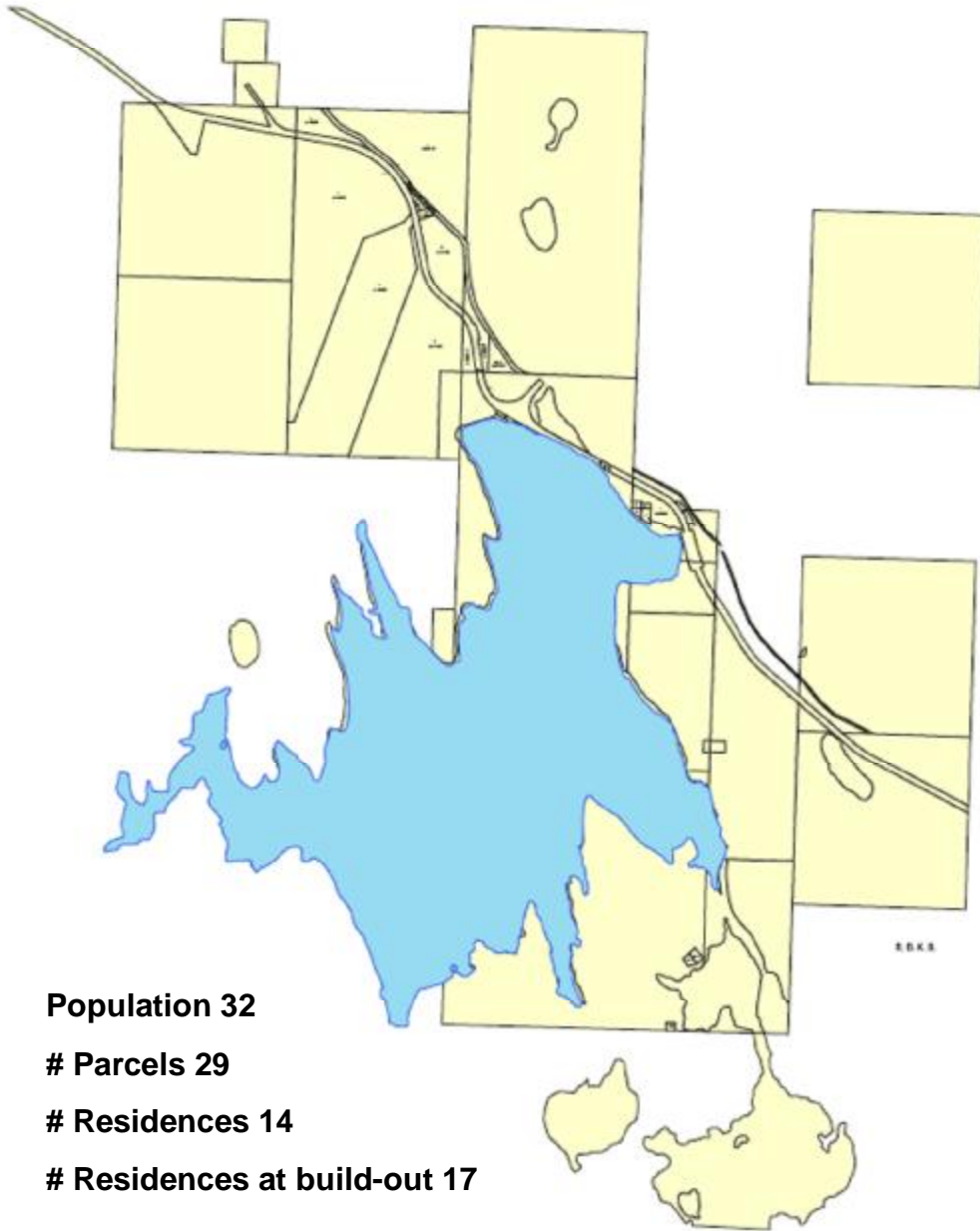
Option 12: End of Lakeshore Road area

End of Lakeshore Road area could petition for boundary expansion and ask to be serviced by the City of Kelowna

- w The End of Lakeshore Road area would become part of the City of Kelowna
- w This is a fixed area which currently has 15 residences and will have a maximum of 19 residences at full build-out

Note: City sewer is still some distance from the boundary

McCulloch



Population 32
Parcels 29
Residences 14
Residences at build-out 17

McCulloch & June Springs



June Springs

Population 51
Parcels 29
Residences 22
Residences at build-out 25

Option 13: McCulloch area

Each residence continues to use an on-site sewage treatment and disposal system

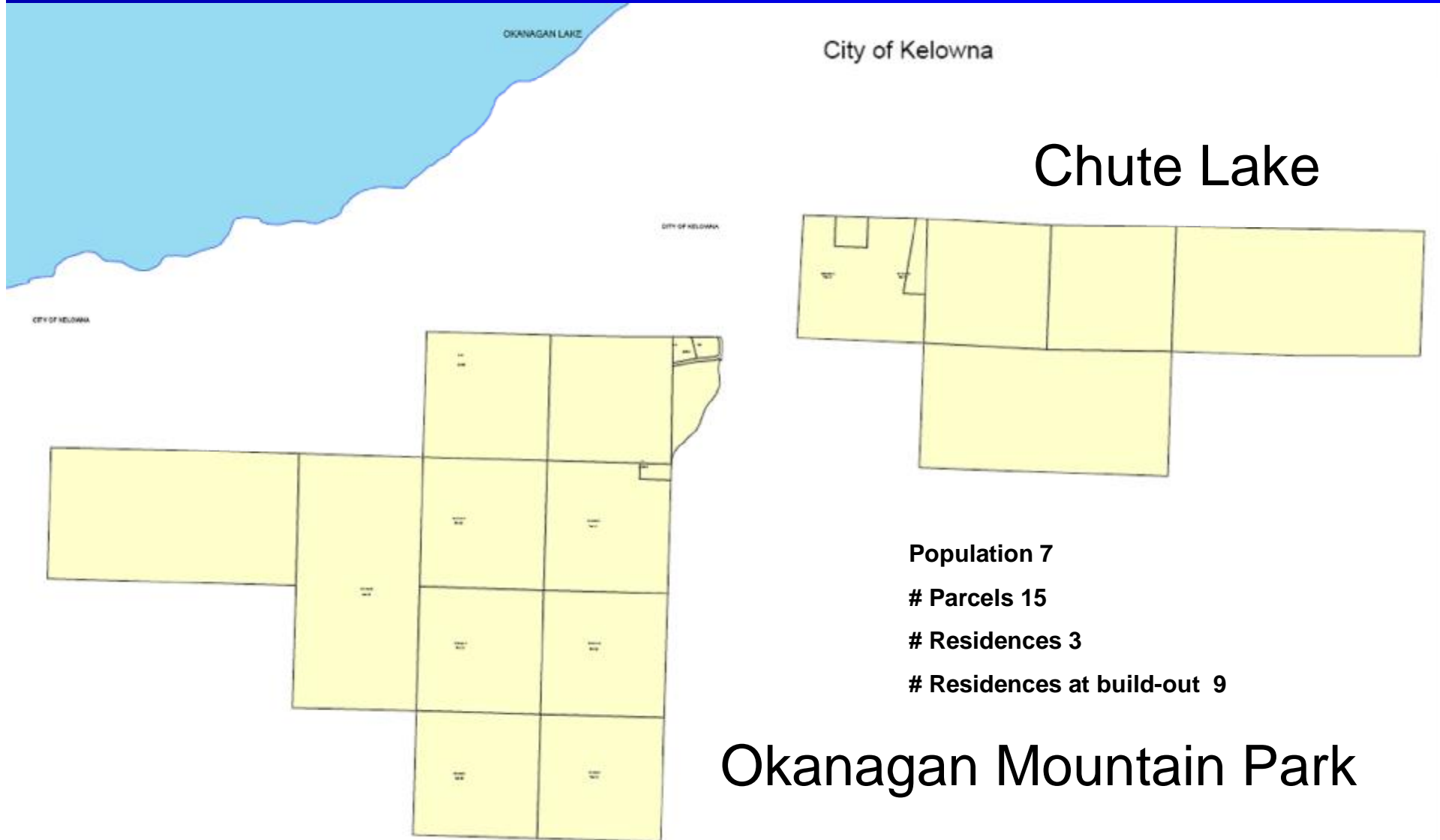
- w No change
- w New home construction would use on-site sewage treatment and disposal systems with septic tank tile field systems being the most likely choice
- w There are 15 residences in the area with a maximum of 19 at full build-out

Option 14: June Springs area

Each residence continues to use an on-site sewage treatment and disposal system

- w No change
- w New home construction would use on-site sewage treatment and disposal systems with septic tank tile field systems being the most likely choice
- w There are 22 residences in the area with a maximum of 25 at full build-out

Chute Lake & OK Mountain Park



Option 15: Chute Lake & OK Mountain Park area

Each residence continues to use an on-site sewage treatment and disposal system

- w No change**
- w New home construction would use on-site sewage treatment and disposal systems with septic tank tile field systems being the most likely choice**
- w There are 3 residences in the area with a maximum of 9 at full build-out**

Option 16: All Area East

Enhanced Status Quo

- w **Public education programs:**
 - w Optimal septic tank operation and maintenance
 - w Water conservation
 - w Source control program
- w **Pumpout program**
- w **Water conservation program**
- w **Source control bylaws**
- w **Environmental monitoring program**

Option 17: All small lot areas

Sewer service could be provided by private developers

- w A developer would construct and operate their own sewage treatment plant(s) (STPs)**
- w A single central STP could service the Sunset Ranch and Scotty Creek areas**
- w A small STP could service the Country View area**

Note: Grant monies would not be available and there is a large security deposit required under the MSR

Option 17: All new subdivisions

Sewer services could be constructed by the developers with plants turned over to RDCO upon startup

- w A developer would construct each of the systems to RDCO standards, using standard pumps and fittings to reduce RDCO inventory requirements and facilitate replacement of worn out or defective parts and equipment
- w RDCO would own and operate the systems

Option 18: Stormwater

Stormwater may present an issue in the LWMP area, however, due to limited resources it is not possible to include stormwater management in this LWMP

- w** It is recommended that a commitment be made to fund an engineering study in the LWMP area to determine if stormwater is an issue. The study is to be conducted over the next 5 years and will form the basis for the management of stormwater when next the LWMP is updated.

Option 19: Agricultural Wastewater

Specific procedures are in place to ensure that agricultural wastewater is properly managed and does not cause pollution

w Agricultural Wastewater Issue

- w Reported to Ministry of Agriculture (MA)
- w MA contacts a “Peer review committee” (PRC)
- w PRC reviews the issue and makes recommendations. They may require that a Best Agricultural Management Plan (BAMP) be developed and implemented
- w If unresolved and causing pollution MOE can take action

Area or Community	Current Number of Parcels	Number of Homes today	Number of homes at buildout	Number of Residents (2001 Census)
Ellison community	364	291	N/A	673
Scotty Creek	350	345	345	798
Sunset Ranch	142	132	450	305
Spencer Road	101	101	101	234
Joe-Rich Community	470	373	N/A	863
Southern Tip of Lakeshore Road	19	9	15	21
June Springs	29	22	25	51
McCulloch	29	14	17	32
Chute Lake combined with OK Mtn Park				
Okanagan Mountain Park	15	3	9	7
Total	1,519	1,290	N/A	2,984

Population based on 2001 Census data for Kelowna (population / # of homes = 2.314 persons per household)

The 2006 census data has just been released and this population data will be updated shortly

What Can I Do?

Feedback on Conceptual Options

Your suggestions and comments regarding these or additional options are requested and welcomed

What's Next?

What's Next?

- w The discussion paper will be updated to reflect your feedback and the feedback from others
 - w It will provide an overview of the current situation in the Plan area, and it will also include:
 - w Health Region comments
 - w Environment Ministry comments
 - w LWMP related issues
 - w All options for the future management of Wastewater in the Plan area that have been identified
 - w The revised discussion paper will be circulated to all AC members for review and comment/discussion at the next AC meeting
- w The next meeting will involve preparing for the Public Information Meeting (PIM)

What's Next?

Stages 2 Stage 3!

How do you develop a LWMP?

Stage II - Option Development, Cost Analysis & Option Selection

- w Details developed for each option to permit comparison and informed public feedback**
- w Recommended option(s) sent to RDCO Board**

Stage III Finalization & Executive Summary

- w Provides details of the selected option**
- w Submitted for Ministerial Approval**

Implementation follows Ministerial approval

A Reminder!

LWMP Overview Summary

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

Final Wrap-up

w Questions?

For Further Information

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