REPORT

Regional District of South Okanagan

Area "A" OCP Technical Studies

DECEMBER 2019

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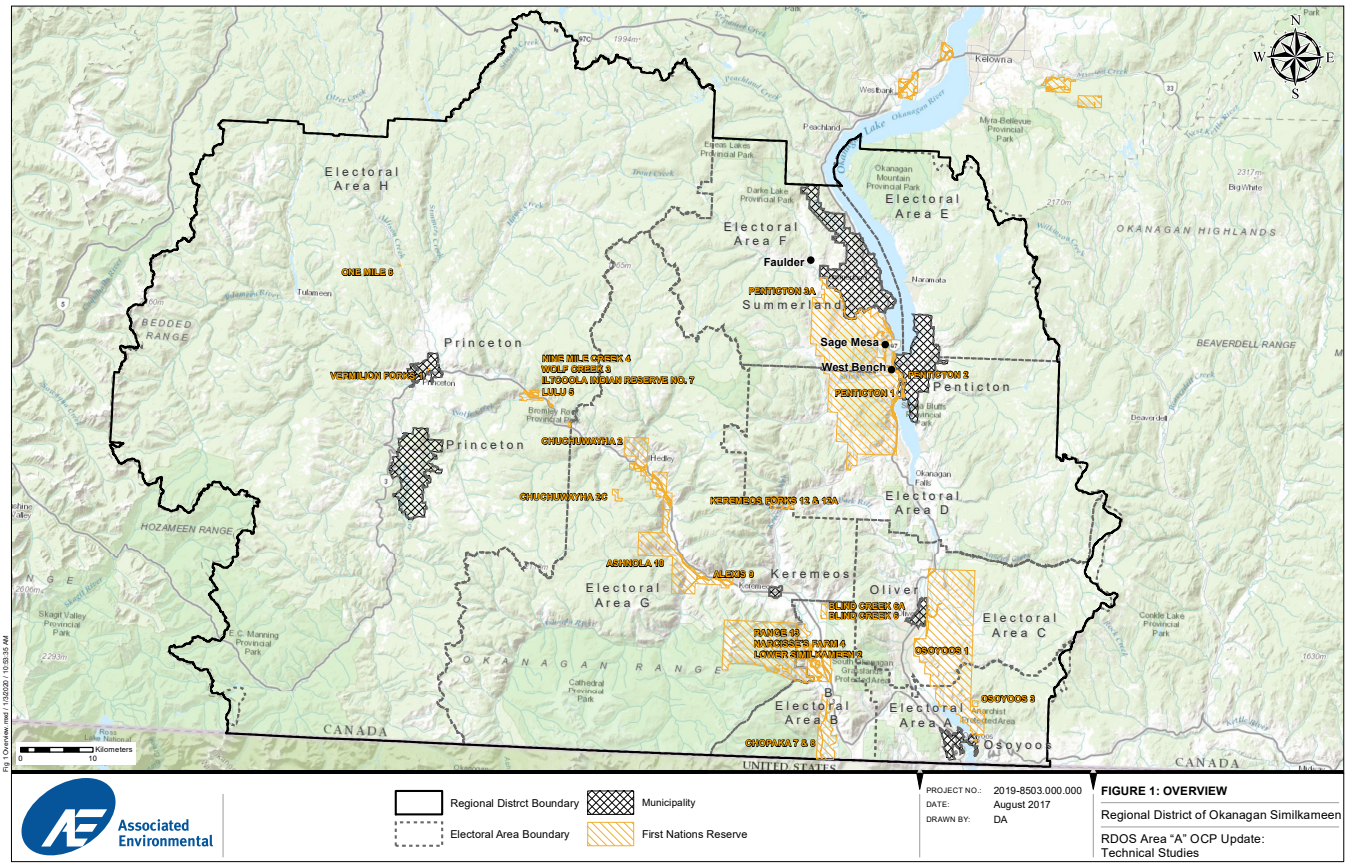
1 INTRODUCTION

The Regional District of Okanagan-Similkameen (RDOS) is in the process of reviewing and updating the Official Community Plan (OCP) for Electoral Area "A" (Area A) (Figure 1). The RDOS have retained EcoPlan International Inc. to complete the OCP update. As part of this initiative, two technical studies were untaken by Associated Environmental Consultants Inc. (Associated) to inform the updated OCP. The two technical studies included the following:

- Infrastructure Review
- Fire Risk Review

This report presents the findings from each of the technical studies. The subsequent sections present the findings from each of these technical studies.

Figure 1 - Overview



2 INFRASTUCTURE TECHNICAL STUDY

Within Area A there are a number of small community water systems, services provided by the Town of Osoyoos (the Town), and a landfill owned by the Town. The intention of the Infrastructure Study was to better understand each system, including current operations and usage, capacity for growth, and potential for expansion if required. This will give RDOS the technical background required to identify concerns in areas of projected growth and inform the OCP.

The following documents were available for the infrastructure review:

- *Town of Osoyoos Water System Master Plan: Part 3 – Irrigation Systems 8&9 Upgrading Plan*. True Consulting Group. August 2008.
- *2018 Town of Osoyoos Annual Water Report*. Town of Osoyoos. 2018.
- *Osoyoos Irrigation District Water Supply and Treatment Cost/Benefit Review*. Associated Engineering. August 2008.
- *Town of Osoyoos: Capacity Assessment: Sanitary Sewer Infrastructure.* Kerr Wood Leidal. May 2014.
- *2016 Town of Osoyoos: Wastewater Treatment and Reclaimed Water Irrigation Systems Annual Report*. True Consulting. March 2017.
- *RDOS: Solid Waste Management Plan.* AECOM. June 2011.
- *RDOS: 2018 Annual Landfill Report.* True Consulting. March 2019.

Additionally, the team personally corresponded with representatives from the Town of Osoyoos and the Osoyoos Irrigation District as part of the work.

2.1 Water Systems

Two major water systems exist within Area A, Osoyoos Rural Water Systems No. 8 and 9. Both systems are owned and operated by the Town of Osoyoos to service nearby residents.

A number of other water systems were identified within Area A, including:

- Osoyoos Irrigation District (OID)
- Osoyoos Lake Park Water System
- Burrowing Owl Estates Winery Water System
- Idle-O Apartments Water System
- Willow Beach Mobile Home Park Water System
- Brookvale Holiday Resort Water System
- Boundary Irrigation District

Water systems identified within the boundaries of the Town of Osoyoos, and therefore outside the scope of this report include:

- Town of Osoyoos Water System
- Cabana Beach Campground & RV Park Water System
- Tamri Motel & Campground Water System

All other areas are serviced through individual wells or water licenses.

This section presents a water system profile for each of the water systems identified within Area A, except for those identified to provide services within the Town of Osoyoos boundaries.

2.1.1 Osoyoos Rural Water Systems No. 8 and 9

The Town of Osoyoos operates two water systems within Electoral Area A; Osoyoos Rural Water Systems No. 8 and No. 9. Until 1990, these systems were owned and operated by the South Okanagan Lands Irrigation District (SOLID). In 1990 SOLID was dissolved and ownership of the systems was transferred to the Town. The Osoyoos Water District provides irrigation water to about 670 hectares (1,660 acres) of agricultural land and about 500 domestic connections.

During the irrigation season, agricultural irrigation water is provided by two separate water intakes, pulling water from Osoyoos Lake. The Osoyoos Rural Water System No. 8 provides water to properties along the west side of Osoyoos Lake from the Town boundary to Willow Beach; the intake is located south of the old BC Tree Fruits Packinghouse. The Osoyoos Rural Water System No. 9 provides water to properties along Osoyoos Lake south of the Town boundary to the border; the intake is located on Acadia Court. Currently, water from both intakes is disinfected with chlorine prior to distribution and used for both irrigation and domestic use. In 2008, the Town completed a Master Water Plan which looked at options to meet water quality regulations for the services within these areas. Based on that plan, the Town has begun the twinning program for Systems 8 and 9 to achieve 4-3-2-1-0 compliance for the domestic service connections in the area.

Figure 2 shows the distribution limits of both of the Town of Osoyoos rural water systems. All piping is asbestos cement or PVC, and ranges from 50mm to 600mm in diameter.

As part of a water system twinning project, domestic connections are supplied by the Town's municipal water system. All water for the irrigation system service areas is supplied by Well No. 6. A reservoir with a capacity of 482,000 L, located on the Osoyoos West Bench, is used to supply domestic water to the properties during the winter months.

2.1.1.1 Water Quality

The Town of Osoyoos provides water from six active groundwater wells. Water is not currently treated other than chlorine disinfection, which was begun only in fall of 2018. It has been reported that the manganese level from a number of Town wells, including Well 6, is above the new maximum acceptable concentration (MAC) for potable drinking water. A water treatment facility is required to comply with Interior Health's 4-3-2-1-0 objective. At current, the water system does not meet Interior Health's objectives for drinking water.

The Town is reportedly investigating the potential of switching to a surface water source from the existing groundwater source. A water quality sampling plan is planned for 2019 to determine if this is an option.

2.1.1.2 System Capacity

The capacity available in Systems 8 and 9 is based on the overall available capacity for the Town's system. The Town's 2018 Annual Water Report suggests that average system usage for the Town has ranged between 2,100 and 2,500 ML/d fairly constantly over the last 16 years, while the census population of the Town increased by 16%. In the winter months, Well 6 provided 84 ML to the domestic connections in Systems 8 and 9, or approximately 0.46 ML/d based on a period of 6 months (mid-October to mid-April). The 2008 Master Water Plan assumed that the overall domestic demand for Systems 8 and 9 would be 0.44 ML/d and 0.91 ML/d, respectively. An additional 0.02 ML/d can be attributed to the Reflection Point development since the time of the Master Plan writing, and an assumed demand of 0.09 ML/d can be expected to be required

for the proposed Willow Beach development. This suggests that that RDOS properties serviced by the Town of Osoyoos can be estimated at 1.46 ML/d when the twinning program is completed. Based on previous maximum days, it appears that Town will be able to provide capacity for future growth. However, if a treatment facility is constructed, the RDOS should be sure to provide input into potential growth and development to be serviced as the addition of treatment will restrict the total available flow from the wells to the capacity of the treatment system. Discussions with the Town of Osoyoos suggest that the twinning project has been designed only to accommodate current land use in the area; the Town did not take potential development into the design of the extension of the domestic water system into Systems 8 and 9.

Additionally, as the Town's source is groundwater, there may be questions as to the sustainability of the aquifer for the long-term growth of the system. No studies were available as part of this review however source availability should be considered when evaluating any future development.

With respect to irrigation water, in 2018, the water provided to Systems 8 and 9 decreased by over 10%. While this large decrease is likely due to a cooler, wetter year and reduced irrigation requirements, the overall trend for irrigation water appears to be decreasing. This suggests that there is capacity for additional irrigation and agricultural growth in the existing systems.

2.1.1.3 Fire Suppression

Construction of the twinned water supply system has provided fire suppression capacity to the areas that have been twinned, where areas without twinning are restricted to the capacity of the irrigation pumps. As the twinned areas are now connected to a reservoir, fire flow is available for these areas. The RDOS Subdivision Bylaw requires a fire flow of 60 L/s to be available for single and two-family residential developments, which comprise the majority of the area serviced by Systems 8 and 9. The twinned areas appear to include fire hydrants as part of the upgrades.

The fire flow available in Systems 8 and 9 is not known, but areas that do not meet the requirements for fire flow should be sprinklered to supplement the available flow.

2.1.2 Osoyoos Irrigation District

The existing Osoyoos Irrigation District (OID) is located on the east bench of Osoyoos Lake, east of the Town of Osoyoos. The system was constructed in 1967 and consists of approximately 150 domestic connections and 40 agricultural connections, supplied by a submerged lake intake in Osoyoos Lake and treated with chlorination. This system was used to service both domestic and irrigation demands until a groundwater well was drilled in an attempt to provide potable water to the area. The well is now used during the irrigation off season to supply water to the domestic connections in the area.

In 2008, the RDOS investigated options for bringing OID into line with the current IHA 4-3-2-1-0 Drinking Water Objectives. Based on a conversation with the Irrigation District's Treasurer, it has been confirmed that the systems do not yet meet these objectives. Reports suggest that the boil water notice is in place during both summer and winter operation. The boil water notice during the summer is due use of the surface water system with solely chlorination as treatment. The boil water notice during the winter is due to the use of the same distribution system as during the summer without disinfection prior to changeover and the need to use surface water to supplement the groundwater well during periods of winter usage. The OID notes that water quality from the well varies however no water quality data was available for this report.

The system is currently on a boil water notice due to positive total coliform lab results and being classified as untreated drinking water at risk of containing pathogens by the Interior Health Authority (IHA).

Figure 2 shows the distribution limits of the OID system.

Unless steps are taken to achieve compliance with the 4-3-2-1-0 objectives set by Interior Health, servicing of new developments with water form the OID is not recommended. OID notes that they are working on a plan to move forward with providing potable water to their service area and are currently reviewing available options.

Figure 2 shows the distribution limits of the OID system.

Unless steps are taken to achieve compliance with the 4-3-2-1-0 objectives set by Interior Health, servicing of new developments with water form the OID is not recommended.

2.1.2.1 Water Quality

Water for the OID is pulled directly from the lake and treated with chlorination. Therefore, the water does not currently meet the 4-3-2-1-0 objectives for drinking water as set by Interior Health.

Water quality for the well was not available for this study, however the ongoing boil water notice suggests that the water from the groundwater well also does not currently meet the 4-3-2-1-0 objectives for drinking water set by Interior Health.

Additional treatment capacity, a switch to an alternate water source, or a supply from a nearby potable water supplier would be required to meet the drinking water objectives and provide potable water to the area serviced by the OID system.

2.1.2.2 System Capacity

Water use data for the OID was unavailable for this report, and thereby the growth potential of the area serviced by this irrigation district cannot be commented on. The 2008 report suggested that domestic services in this area would require approximately 0.175 ML/d of potable water if twinned, which included a provision for future development. In 2008 the Town of Osoyoos did not have enough capacity to provide domestic water to the OID system.

2.1.3 Willow Beach Mobile Home Park Water System

This is a private groundwater well system servicing the Willow Beach Mobile Home Park. At the time of writing this report, the system was under a boil water notice for positive results for total coliform tests and being classified as untreated drinking water at risk of containing pathogens by IHA.

There is currently a proposal to develop the existing Willow Beach Mobile Home Park area into a single-family residential strata development with approximately 80 lots. The proposed development has referenced well supply as a water source. The capacity and quality of these wells is currently unknown.

2.1.4 Osoyoos Lake Park Water Supply

This system services the Osoyoos Lake Park and is owned by the RDOS. At the time of writing this report, no water quality advisories or boil water notices were in place for this system. It is not expected that this system would be used to accommodate growth in the RDOS.

2.1.5 Burrowing Owl Estates Winery Water System

This is a private water system servicing the Burrowing Owl Estates Winery. At the time of writing this report, no water quality advisories or boil water notices were in place for this system. It is not expected that this system would be used to accommodate growth in the RDOS.

2.1.6 Idle-O Apartments Water System

This is a private water system servicing the Idle-O Apartments. At the time of writing this report, no water quality advisories or boil water notices were in place for this system. It is not expected that this system would be used to accommodate growth in the RDOS.

2.1.7 Brookvale Holiday Resort Water System

This is a private water system servicing the Brookvale Holiday Resort. At the time of writing this report, the system was under a water quality advisory due to source water deterioration or contamination. It is not expected that this system would be used to accommodate growth in the RDOS.

2.1.8 Boundary Irrigation District

No information was available regarding the Boundary Irrigation District, outside of a boil water notice listed on the IHA website due to water treatment equipment failure.

2.1.9 Communities without a Community Water Supply

There are a few larger communities/developments within Area A which have no formal water system. These include:

- The development on Anarchist Mountain, Osoyoos Mountain Estates;
- The development on Old Richter Passage Road, near Spotted Lake; and
- The development near Kilpoola Lake, Kilpoola Estates.

These communities are currently serviced by individual wells.

2.2 Wastewater Management

This section provides a summary of wastewater management within Area A. The Town of Osoyoos' Northwest Sector Sanitary Sewer system services 137 properties (as of 2014) located along Osoyoos Lake, north of the Town's boundary and up to Willow Beach. The remaining properties in the RDOS are serviced with on site septic. Liquid waste from users within the RDOS is not accepted at the Town of Osoyoos' treatment facility, and is instead landfilled at the Osoyoos landfill, also located within Area A.

2.2.1 North West Sanitary Sewer

The Town of Osoyoos currently operates a sanitary collection and treatment system to service the Town and some surrounding areas, including the Osoyoos Indian Band and a portion of the RDOS west of Osoyoos Lake between the town boundary and Willow Beach.

The North West Sector sanitary system collects sewage from properties located along Osoyoos Lake, north of the Town's boundary and up to Willow Beach. Sewage collected in this area enters a 200/375mm diameter trunk sewer which runs from 87th Street at 92nd Avenue to the Smith & Loveless Lift Station, owned and operated by the Town of Osoyoos. The Smith &

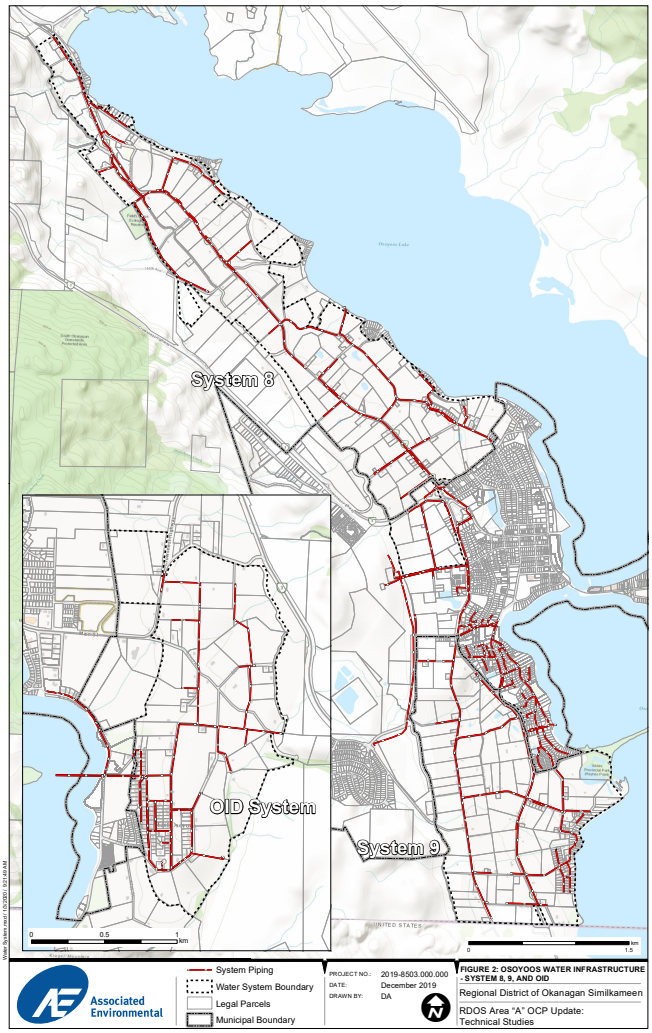
Loveless Lift Station was upgraded in 2013, and pumps sewage through a 200mm forcemain which eventually leads to the community lagoons. Pumps in the lift station are capable of 45 L/s with one pump operating.

2.2.1.1 System Capacity

The 2014 capacity assessment assumed a total growth of 768 people in Area A to be connected to the Town's sanitary sewer. This includes the current plan for the Willow Beach area, which includes 80 residential units, and up to 400 people in the East Bench area who would like to be serviced by the Town's sanitary sewer system.

The report found that the Town will require upgrades to move sewage within the Town boundaries (pump station and trunk main upgrades). The report also noted that based on the population projections used, upon meeting the service need for the 20-year growth within the Town the sanitary sewer system would still be capable of accommodating additional development from its outside boundary users (assuming that required upgrades have been completed to service the Town's growth). This suggests that growth in the area can be accommodated by the system, assuming that the upgrades required to service the Town are completed ahead of development.

Figure 2 – Water Systems Electoral Area "A"



2.2.2 Wastewater Treatment

The Osoyoos wastewater treatment plant (WWTP) is an aerated sewage lagoon system located to the south-west of the town. The current collection and treatment infrastructure includes two lift stations, three aerated cells, two winter effluent storage basins, an effluent pump station, chlorine disinfection equipment and a chlorine contact basin. Lagoon discharge is disinfected and sent to the chlorine contact basin. Upon leaving the basin, it is sent to the effluent storage basins where it is stored until it is needed for irrigation during the summer months.

The 2014 capacity assessment noted that additional effluent storage and disinfection is currently planned to accommodate future growth. However, if additional land for irrigation cannot be found to use the effluent, a tertiary treatment plant may need to be constructed to allow for surface water discharge of treated wastewater. This would come at significant cost to the Town and would thereby impact all users of the sanitary system. The 2014 report did not suggest that this upgrade would be likely, but it should be considered when planning for future growth as it could have a significant effect on the costs of connecting to the sanitary collection system.

Any wastewater from the RDOS, outside of that collected by the Town's collection system, is not treated at the Town lagoons, but instead hauled away. If significant upgrades are required at the plant to deal with additional effluent, the RDOS may wish to start discussions with the Town for cost sharing to be able to stop hauling liquid waste out of the area.

2.3 Solid Waste Management

The RDOS Solid Waste Management Plan (SWMP) was completed in 2011. The plan provides a long-term vision for solid waste management for the entire regional district and is focussed on increasing waste diversion from the existing system to extend the life of the existing infrastructure.

The Osoyoos Landfill is located within Area 'A', approximately 5km north west of Osoyoos on the Osoyoos West Bench. The landfill is owned and operated by the Town of Osoyoos and has a water service from Osoyoos Irrigation System No. 8 to allow for composting on site. Groundwater monitoring wells have been installed for ongoing testing and reporting. The landfill also contains hauled liquid waste pits for collection of sanitary wastes from private systems.

The 2011 SWMP estimated that the landfill services over 5000 people and has over 20 years of service life remaining. The 2018 annual report suggests that since composting was started in 2016, waste volume has decreased significantly, which suggests that the landfill has an estimated usable life between 23 and 30 years, dependent on the waste generation rate.

The capacity of the landfill for liquid waste was not available as part of this report.

2.4 Discussion

The Regional Growth Strategy was completed in 2004 to manage growth in the South Okanagan in manner that is consistent with long-term social, environmental and economic objectives. The plan focuses growth in Area A on the Town of Osoyoos as the primary growth area, and on Willow Beach and Osoyoos Mountain Estates as rural growth areas.

2.4.1 Identified Concerns

- System 8 and 9 users not yet connected to the twinned water system do not yet have access to year-round drinking water which meets the objectives set by Interior Health

- The drinking water provided by the Town of Osoyoos does not currently meet the Interior Health drinking water quality objectives
  - Customers report aesthetic concerns around manganese precipitation and "chlorine smell" as the water recently started being chlorinated
  - Water from some of the wells has manganese about the Maximum Acceptable Concentration noted in the Canadian Drinking Water Quality Guidelines
- The water provided by the Osoyoos Irrigation District does not currently meet the Interior Health drinking water quality objectives
- Many of the small water purveyors in the area provide water which does not meet the Interior Health drinking water quality objectives
- Much rural development is serviced by individual groundwater wells but the available capacity from the aquifers in the area is unknown
- Fire protection is generally not provided due to a lack of water storage in the area and the limitations of existing supply pumps
- There is not currently a location in the area to store liquid waste generated from septic tanks which are outside of the Town of Osoyoos boundaries;
- Significant future upgrades to be required at the Town's WWTP which may require significant investment for those connected to the system but may also provide an opportunity for septage receiving for RDOS properties.

2.5 Objectives and Policy Recommendations

Based on the concerns identified in the previous sections, it is recommended that the OCP be updated to include policies such as:

- The requirement for new and re-development within Area 'A' to adhere to local, regional, and provincial regulatory requirements and objectives, including the BC Sewerage System Regulation.
- The requirement for new and re-development within Area 'A' to have access to an adequate and sustainable water supply from a new or existing system;
- The requirement for development to provide water that meets all current applicable water quality guidelines and objectives.

2.6 Recommendations

To assist with achieving the policy recommendations noted above, it is recommended that the RDOS consider the following:

- Reconnect with the Osoyoos Irrigation District and re-examine the potential for a potable water supply in this area. A potable water supply could provide capacity for future growth on the east side of the lake, which is not currently serviced by the Town of Osoyoos.
- Review fire protection and fire suppression provisions throughout Area A, and work with service providers to ensure an adequate level of fire protection is provided for new and existing developments.
- Only approve development when the water source will meet Interior Health drinking water objectives
- Ensure that all groundwater users within the Area apply for a water licence prior to using the source for development.
- Work with the Town of Osoyoos to determine a long-term treatment plan for domestic water should treatment be required at Well 6.
- Investigate options for septage receiving that the Town of Osoyoos' WWTP should upgrades be considered.

3 FIRE RISK REVIEW

3.1 Introduction

The OCP for Area A includes policy elements related to wildfire interface management but since the current OCP was implemented, new information has been developed that warrants the updating of the plan. The most influential study carried out was the most recent Community Wildfire Protection Plan (CWPP) (Valhalla et.al, 2011) that supplanted the document produced in 2007 (Swanson, 2007).

The purpose of this wildfire hazard section is to review the following:

1. Review documentation related to wildfire management in Area A.
2. Review OCP and CWPP's for other communities in similar ecosystems and wildfire hazards in BC to identify strategies of interest for Area A.
3. Propose new policies and objectives re: wildfire hazard, to minimize risk.

3.2 Documents Reviewed

Table 6-1 notes all the wildfire related documentation that was reviewed that was pertinent to Area A. The RDOS has taken progressive steps in developing a comprehensive wildfire interface program that is consistent with the wildfire hazards in the area.

Table 3-1 Wildfire documents related to RDOS Area A

Publication	1. Contents
Newell (2013)	Administrative report to RDOS Board of Directors in support of operational funding for the development of Fuel Management Prescriptions for Bankir TEE PEE, Banikeir Palley Trout, and St Andrews projects
Swanson (2007)	Community Wildfire Protection Plan and fire hazard assessment for RDOS
RDOS (2010)	Newsletter posted in July /August 2010 outlining the Community Wildfire Protection program.
Valhalla (2011)	PowerPoint presentation developed by Valhalla in 2011 outlining the CWPP and steps that have been taken or underway to address the hazard areas
Valhalla et al. (2011)	Most recent comprehensive CWPP for the RDOS
Woods (2007)	Motion put forth to the RDOS Board that they approve the Regional District Okanagan-Similkameen Community Wildfire Protection Plan and; that the RDOS Board request staff to apply for further funding to undertake operational treatments within the Community Wildfire Protection Plan.
RDOS(undated)	Map of RDOS noting interface fire hazard areas based on a scale of low to extreme
RDOS(2016b)	RFP issued for a Fire Master Plan that largely focused on urban fire protection for the Seven Regional District Fire Services
Canadian Wildland Fire Strategy (2005)	Canadian Wildland Fire Strategy: A Vision for an Innovative and Integrated Approach to Managing the Risks. Report prepared that outlines the need for resilient interface communities.
Partners in Protection (2003)	FireSmart: Protecting your Community from Wildfire is a report that focused the wildfire interface planning in the province. Chapter 7 focusses on land use planning

A variety of other OCP's were reviewed for jurisdictions with similar ecosystems and wildfire hazards to Area A and they include

- Official Community Plan Bylaw No. 2252, 2008 for RDOS Electoral Area "C".
- Official Community Plan Bylaw No. 2683, 2016 for RDOS Electoral Area "D-1".
- Official Community Plan Bylaw No. 2603, 2013 for RDOS Electoral Area "D-2".
- Official Community Plan Bylaw No. 2790, 2018 for RDOS Electoral Area "F".
- Official Community Plan Bylaw No. 2497, 2012 for RDOS Electoral Area "H".
- Official Community Plan Bylaw No. 2683, 2016 for RDOS Electoral Area "I".
- Official Community Plan Bylaw 2002-20 for the City of Penticton.
- Official Community Plan Bylaw 2014-002 for the District of Summerland.
- Official Community Plan Bylaw 2011-0100 for District of West Kelowna.
- Official Community Plan Bylaw 2010-1274 for Rural Westside RDCO.
- Official Community Plan Bylaw 1370, 2017 for the Town of Oliver.
- Official Community Plan Bylaw 2130, 2007 for the Town of Osoyoos.

The most relevant document that will drive the changes the OCP is the CWPP carried out in 2011. This comprehensive document has developed a spatially defined fire risk rating that will assist in defining what areas would be potential candidate areas to carry out fuel management efforts as well as defining what properties could require additional assessments prior to future development.

3.3 Fire Risk Review

Area A straddles the southern Okanagan Valley and has predominantly both east and west facing slopes. The vegetation types within the area reflects some of the driest environments in British Columbia. The population base currently is clustered primarily around the community of Osoyoos and along highway corridors of Hwy 97 (running north/south) and Highway 3 which radiates east and Northwest out of Osoyoos. The land base currently doesn't have significant backcountry industrial activity given its smaller size and limited natural resources in the area. Road and trail access throughout the area is fairly significant providing easy access to the rural areas of Area A. The 2011 CWPP goes into detail outlining five landscape level components that help define the wildfire risk in the area (Figure 3). Generally, the wildfire risk ratings in Area A are not as high as the other east facing areas in the RDOS but improvements can still be made to the OCP to ensure the RDOS properly addresses the risk of wildfire and the devastating consequences it can have on communities.

The RDOS identified two primary areas of moderate to high fire interface hazard within Area A.

Kruger Mountain Road/ Old Richter Passage Road

- Forested area south of the roadways is identified as a moderate hazard;
- North and east facing slopes;
- Primarily zoned as SH2 (Small Holdings 2) and surrounded by RA (Resource Area) and PR (Parks Recreation and Trails);
- Area is primarily occupied with an open forest vegetation type.

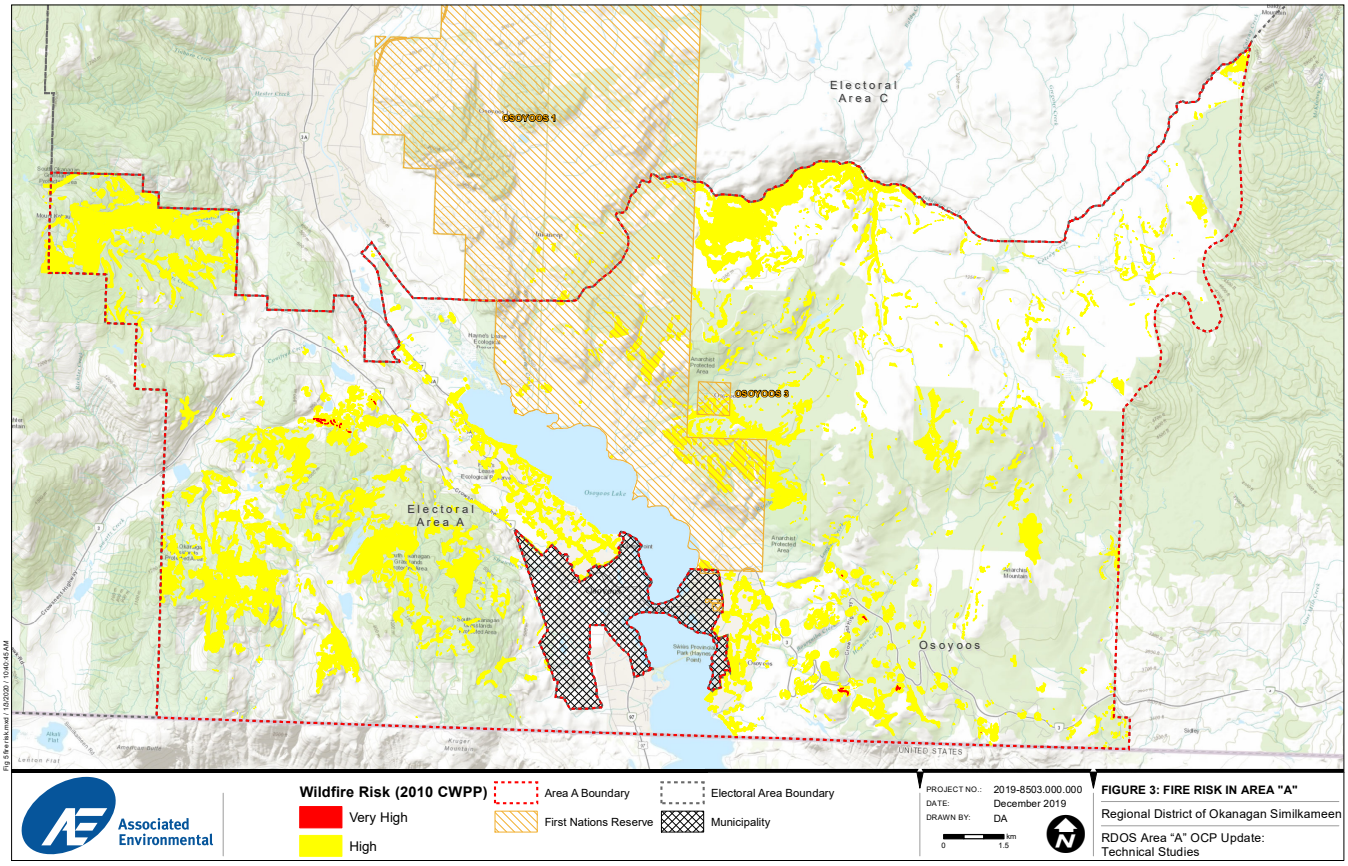
Anarchist Mountain Area

- Predominantly west facing slopes that straddle Hwy #3 as it exists the valley;
- Noted as being a high hazard;
- Zoned as SH3 (Small Holdings 3) and surrounded by AG (Agricultural) land;
- Area is primarily occupied with an open forest vegetation type.

Though these were identified as specific areas of concern for fire interface risk, no efforts have been made to date to mitigate the risk in these two noted areas or any other areas in Area A (Davies 2019).

The variability in aspect and open vegetation types presents fire conditions generally higher than in other areas of the RDOS. Development is progressing throughout Area A particularly along the highway corridors primarily with SH zoned areas.

Figure 3 – Fire Risk Electoral Area "A"



3.4 OCP Policy and Objectives Recommendation

Governing Jurisdiction	OCP Bylaw	Requirement for Fire Hazard Assessment Based on Fire Risk?	Incorporate FireSmart principles for development and landscaping ?	Wildfire hazard incorporated within definition of Hazard land?	Incorporate elements or refer to a completed CWPP?	Have mapped wildfire hazard areas?	Actively creates wildfire awareness through public engagement?	Supports pursuing funding and resources to undertake wildfire risk reduction?	Wildfire Interface Development Permit (DP)?	Recognises wildfire protection approaches need to be updated based on changing environment and community needs
RDOS Electoral Area "A"	2450, 2008	Partial	Partial	YES	No	No	No	No	No	No
RDOS Electoral Area "C"	2452, 2008	Partial	Partial	YES	No	No	No	No	No	No
Existing RDOS Electoral Area "F"	2790, 2018	Partial	YES	YES	YES	YES	YES	YES	No	YES
RDOS Electoral Area "D"	2603, 2013	Partial	YES	YES	YES	YES	YES	No	No	YES
RDOS Electoral Area "I"	2683, 2016	Partial	YES	YES	YES	YES	YES	YES	No	YES
RDOS Electoral Area H	2497, 2012	Partial	YES	YES	YES	YES	No	No	No	No
City of Penticton	2019-08	Partial	YES	No	YES	No	No	No	No	No
District of Summerland	2014-002	YES	YES	No	YES	YES	No	No	No	No
District of West Kelowna	2011-0100	YES	No	YES	YES	YES	YES	YES	YES	No
RDCO Rural Westside	2010-1274	YES	YES	YES	YES	YES	No	No	YES	No
District of Peachland	OCP 2220, 2018	YES	YES	YES	YES	YES	No	No	YES	No
Town of Osoyoos	2130, 2007	YES	YES	No	No	Partial	No	No	YES	No
Town of Oliver	1370, 2017	No	YES	YES	No	YES	YES	YES	No	YES

The following policies are recommended to be included in the updated OCP:

1. The OCP currently includes wildfire in their definition of Hazard Lands but now that a CWPP exists with defined wildfire risk ratings, the OCP should include mapped areas of high and very high wildfire risk rating as part of their definition of Hazard Lands.

2. Apart from the site-specific wildfire risk Hazard Lands delineation there is value in defining any priority wildfire interface areas on a larger scale. By defining these lands, it helps define those areas not specific to a development or zoning applications that could identify the following;
    a. Help define areas where proactive efforts can be made to mitigate the fire hazard in the areas.
    b. Help identify large wildfire interface areas where potential wildfire issues could limit the development of specific areas.

3. The current language around when a wildfire hazard assessment may be requested is poorly defined. Now that there exists a mapped wildfire hazard of Area A (Hazard Lands), it is easier for the Reviewing Authority to define when a development or rezoning application will require such an assessment.

4. Identifying that the Wildfire Hazard Assessment needs to be completed by a Qualified Professional will ensure an appropriate standard of care relying of professional accountability that removes the requirement of the RDOS Approving Authority to question the technical components of the document.

5. The content requirements of a Wildfire Hazard Assessment are currently not identified. Specify the content of an assessment to include components identified in the FireSmart guide. Examples of the content requirements may include those the following requirements outlined in the RDOS Area "D-1" OCP
    a. incorporating fuel breaks adjacent to or on the residential subdivisions;
    b. establishing zones around potential structures and homes which are clear of debris, highly combustible material or trees;
    c. utilizing fireproofing techniques and fireproof materials in building design;
    d. designing roads that provide evacuation routes and facilitate movement of firefighting equipment;
    e. ensuring all roads are named and signed;
    f. ensuring availability of water supply facilities adequate for fire suppression;
    g. ensuring the provision of access to local water sources, lakes and watercourses as part of access requirements; and
    h. implementing setbacks, interface fire protection standards, and building material standards pursuant to Provincial guidelines, or their equivalent.

6. Clearly identify the FireSmart guide as a principal guidance document that developers and landowners are to follow to mitigate wildfire risk associated with development and landscape activities.

7. The CWPP that the Regional District carried out in 2011 is a cornerstone document to build upon to identify and mitigate wildfire risk in the area. The CWPP should be a document identified in the OCP that should guide future efforts related to wildfire mitigation.

8. Creating wildfire awareness in rural communities is a critical component in sharing wildfire mitigation responsibility. The RDOS should be committed to creating awareness workshops and demonstrations for residents to ensure mitigating wildfire risk extends beyond regulatory related triggers.

9. Wildfire risk will change over time as community priorities, ecosystems and climate change influences impact the land base. The RDOS should recognise that land base information and wildfire management priorities and approaches will need to be updated over time to account for these changes.

10. Funding wildfire management initiatives (fuel management) can often be a financial challenge for many local governments. Cost sharing programs are often available through UBCM and the Provincial Government. The Regional District should commit to pursuing funding opportunities to assist in achieving their long-term wildfire management objectives. The RDOS does conduct fuel management work.

11. Living in a large rural environment extends the range of firefighting resources beyond that serviced by fire hydrants. The RDOS should carry out an inventory of accessible water sources that could be enhanced to support water extraction by firefighting equipment.

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