



Regional Board Report

Request for Decision

Approved for Board Consideration

A handwritten signature in black ink that reads "Brian Reardon".

Brian Reardon, CAO

To: Regional Board

From: Todd Cashin, Director of Community Services

Date: June 27, 2022

Subject: Floodplain Exemption Application (FEX-22-01), Development Variance Permit Application (VP-22-03), and Development Permit Application (DP-22-06)
Douglas & Eileen Sprout (Owners)
7 Nerie Road (Central Okanagan West Electoral Area)

Voting Entitlement: *Custom Vote – Electoral Area West Unfringed Area – Electoral Area Directors only*

Purpose: To consider a development proposal for a wildfire impacted property adjacent to Okanagan Lake and Nerie Road requesting approval of a floodplain exemption, development variance permit, and development permit.

Executive Summary:

The owners of 7 Nerie Road have submitted a development proposal that includes a floodplain setback exemption request, a variance application to reduce the front setback, and a development permit application for the construction of a dwelling and associated servicing. The subject property is located adjacent to Okanagan Lake and is bisected by Nerie Road.

The property was recently impacted by the White Rock Lake Wildfire in 2021 and was one of seventy-five homes that were lost within the RDCO's jurisdiction, concentrated mainly within the Killiney Beach and Estamont areas along Westside Road.

While the Regional Board's Strategic Priorities and Rural Westside OCP typically does not support new development activities within the floodplain of Okanagan Lake, technical reports have been prepared by qualified professionals in support of the development and the applicant has received the appropriate permits from Provincial agencies. Flooding is a serious concern for the Central Okanagan and its developed areas and with the effects of climate change, more flooding and wildfires are to be expected.

No concerns have been identified from agencies, RDCO staff, or the public regarding the applications.

Recommendation #1:

THAT the Regional Board approves Floodplain Exemption application FEX-22-01 Lot 1, District Lot 3329, ODYD, Plan 20209 located at 7 Nerie Road to exempt the subject property from Section 3.28.2.1.1

Floodplain Regulations of Zoning Bylaw No. 871 by allowing a reduction of the minimum setback from Okanagan Lake from 15.0 m to 10.32 m.

Recommendation #2:

THAT the Regional Board approves Development Variance Permit application VP-22-03 for Lot 1, District Lot 3329, ODYD, Plan 20209 located at 7 Nerie Road to vary the following provisions of Zoning Bylaw No. 871:

- Section 7.1.4 by allowing a reduction of the minimum front setback from 4.5 m to 0.61 m.

Recommendation #3:

THAT the Regional Board approves Development Permit application DP-22-06 for Lot 1, District Lot 3329, ODYD, Plan 20209 located at 7 Nerie Road, subject to the conditions specified in 'Schedule A' attached to the Report of the Director of Community Services dated June 27, 2022.

Respectfully Submitted:



Todd Cashin, Director of Community Services

Prepared by: Brittany Nichols, Manager of Development Services

Attachment(s):

- DP-22-06 Schedule 'A'
- Subject Property & Orthophoto Maps
- March 8, 2022 Site Plan
- April 19, 2022 Watershed Engineering Ltd. Report
- December 21, 2021 Interior Testing Services Ltd. Report
- April 14, 2022 Sage Environmental Consulting Ltd. Report
- April 1, 2022 Franklin Engineering Ltd. Report
- November 5, 2021 Clarke Geoscience Property Inspection Report
- Presentation Slides

Strategic Plan Alignment:

Priorities: Sustainable Communities

Values: Resiliency

Background:

The subject property is located in the community of Estamont adjacent to Okanagan Lake. The area consists of rural residential lots with limited community services and infrastructure. The subject property is bisected by Nerie Road with approximately 0.23 acres of the property above Nerie Road being quite steep. The remaining approximate 0.17 acres is adjacent to Okanagan Lake and is sloped and narrow.

The parcel is affected by Sensitive Aquatic, Sensitive Terrestrial, Hillside, and Wildfire Interface Development Permit Areas under the Rural Westside OCP.

The subdivision plan for the area was approved by the Ministry of Transportation and Infrastructure in 1970. The lakeside portion of the subject property was historically developed with the construction of a single detached house in 1976, a boathouse in 1989, and two home improvement renovations permitted in 2006 and 2010. The buildings were constructed in conformance with the bylaws and regulations in place at time of development.

The property was recently impacted by the White Rock Lake Wildfire in 2021 and was one of seventy-five homes that were lost within the RDCO's jurisdiction, concentrated mainly within the Killiney Beach and Estamont areas along Westside Road. All structures on the property were lost.

Proposal:

The owner intends to reconstruct a 1,222 ft² (113.5 m²) single detached house adjacent to the lake as well as a septic field on the western portion of the property across Nerie Road. The total dwelling footprint will not exceed 1,706 ft² (158.5 m²). The owners intend to reuse a portion of the existing paved driveway as well as an existing small patio and garden beds.

According to Section 532(1) of the *Local Government Act*, if a building or other structure, the use of which does not conform to the provisions of a land use regulation bylaw, is damaged or destroyed to the extent of 75% or more of its value above its foundations, the structure must not be repaired or reconstructed except in conformance with the bylaw. As such, the property owners have submitted applications for a floodplain exemption request, development variance permit, and development permit requesting:

- 1) To exempt the subject property from Section 3.28.2.1.1 Floodplain Regulations of Zoning Bylaw No. 871 by allowing a reduction of the minimum setback from Okanagan Lake from 15.0 metres (49.2 ft.) to 10.32 metres (33.85 ft.).
- 2) To vary Section 7.1.4 of Zoning Bylaw No. 871 by allowing a reduction of the minimum front setback from 4.5 m (14.8 ft.) to 0.61 m (2.0 ft.).
- 3) To obtain a Development Permit for works associated with the construction of a single detached house and septic field as well as associated restoration and enhancement work.

Technical Considerations:

In accord with the Development Applications Procedures Bylaw No. 944, the applicant submitted technical reports in accordance with the OCP Development Permit Guidelines as well as the RDCO Terms of Reference for Professional Reports.

Flood Hazard Assessment

A Flood Hazard Assessment was completed by Watershed Engineering Ltd. that provides comment on the suitability of the proposed building site with respect to the Okanagan Lake flood hazard and provides recommendations to minimize or mitigate flood hazards.

The report indicates that the property is located near the toe of the slope that continues up to Westside Road to the west and appears to partially consist of fill to create the building area which the previous structure was located on. A retaining wall and stairs that lead to the Okanagan Lake shoreline are all that remains of the previous structure. The buildable area is significantly confined by the steep slopes (70%) to the west and the natural boundary of Okanagan Lake. The property rises from the high-water mark at a 30% gradient to the upper bench where the proposed house will be constructed.

Based on the proposed development and a reduced floodplain setback, there is no requirement to vary the current legislated Flood Construction Level (FCL) at 343.66m as the underside of the floor system for the proposed residence will exceed the FCL at 345.16m. The report states that the proposed building footprint is outside the shoreline flood construction zone therefore the floodplain setback can be reduced from 15 m to 10.32 m on the subject property.

The report concludes that although flood risk is present, the property can be safely developed for its intended use provided the recommendations of the report are implemented.

Geotechnical Hazard Assessment

A Geotechnical Hazard Assessment was conducted by Interior Testing Services Ltd. that identifies geotechnical considerations that may impact the proposed development, provides recommendations for construction, and considers the Hillside Development Permit guidelines of the OCP.

The report indicates that the western portion of the site consists of a natural slope rising towards the west at roughly 20 degrees. Given the narrow width of the lot, the sloping conditions, and the requirement of the septic field to be located within this portion of the lot, construction of the upper portion would be challenging and would require significant retaining walls and excavation to achieve which may result in slope instability. The lower, eastern portion of the site adjacent to Okanagan Lake presents no geotechnical challenges and the engineer recommends hydroseeding, landscaping, or similar to reduce the potential for surface erosion. The report concludes that no evidence of previous geotechnical hazards was observed on the site, and based on the existing conditions, construction of the proposed residence appears feasible.

In addition, the RDCO's Post-Wildfire Environmental / Hazardous Conditions Assessment conducted by Clarke Geoscience noted that the subject property is rated as having moderate hazard levels, however, the overall risk levels are low and recommend being prepared for higher than usual runoff and potential soil erosion.

Environmental Impact Assessment

An Environmental Inventory and Impact Assessment (EIA) was conducted by Sage Environmental Consulting Ltd. (Sage) that summarizes the environmental challenges of the site and considers the Sensitive Aquatic and Sensitive Terrestrial Development Permit guidelines of the OCP.

The EIA notes that the entire site was damaged by the recent wildfire, destroying all structures and removing any ground cover, trees, and shrubs. The shoreline adjacent to the subject property is classified as having moderate to high potential for juvenile fish rearing habitat. While development is proposed adjacent to Okanagan Lake, Sage advises that it is generally contained within a previously disturbed area and a restoration plan has been prepared to offset disturbance and assist with regrowth.

The report further notes that the western portion of the property is very steep and provides moderate connectivity value terrestrial and wildlife habitat. This area was hydroseeded in the spring of 2022 to control erosion and facilitate regeneration. This area will be monitored over time to determine if regeneration will be sufficient or if further restoration planting is necessary.

It is Sage's professional opinion that the resultant riparian habitat value will be improved from pre-fire condition provided that the report recommendations and proposed restoration plan is implemented. Habitat value will be present, but restoration of the site is not likely to achieve the complete characteristics of a native ecosystem due to the high level of disturbance, surrounding land uses, and the large invasive plant seed bank that is likely present in the soils.

In association with the Development Permit, monitoring and security bonding is required as set out in Procedures Bylaw No. 944. Sage has estimated the costs associated with the current DP application for environmental monitoring and mitigation plantings in the amount of \$9,981.75.

Policy Considerations:

Regional Board Strategic Priorities 2019-2022

The Regional Board has identified and prioritized sustainable communities and protection of the environment through various regional plans and actions, including:

- Prioritizing a reduction in new construction in higher risk floodplain areas;
- Supporting efforts to reduce our environmental footprint and adapt to climate change; and,
- Advocating to the Province to review Okanagan Lake levels to reduce the risk of flooding.

Regional Growth Strategy (RGS) Bylaw No. 1336

The following policies of the RGS are applicable to the proposal:

- Policy No. 3.2.3.1 “Consider water resources in land use planning decisions”;
- Policy No. 3.2.3.3 “Work with local governments, provincial agencies to assess and mitigate the risks in floodplains”;
- Policy No. 3.2.7.8 “Encourage land use and transportation infrastructure that improves the ability to withstand climate change impacts and natural hazard risks”; and,
- Policy No. 3.2.8.3 “Manage growth to minimize disturbance to habitat, watershed and natural drainage areas and systems”.

Rural Westside Official Community Plan Bylaw No. 1274:

Various objectives and policies on the OCP address a core principle for this unique area which is to retain, protect, and enhance the current rural character. The following policies and guidelines of the OCP are applicable to the proposal:

Chapter 3 Natural Environment

- Policy No. 3.2.1.2 “Provide and protect vegetated leave areas to water courses, control soil erosion and sediment in run-off water, control the rates of run-off to minimize impacts on the lake, and prevent the discharge of deleterious substances into the lake”.

Chapter 13 – Development Permit Areas

- Policy No. 13.1.1 “Development within designated Development Permit Areas will be reviewed by the Regional District in consideration of the objectives and guidelines identified in this Section. Conditions or restrictions may be imposed on the development accordingly”.

Appendix 2 – Aquatic Ecosystem Development Permit Objectives and Design Guidelines

- A leavestrip for the protection and restoration of the riparian ecosystem is to remain undisturbed near watercourses. The intention is that the leavestrip will be untouched by development and left in its natural condition, or, if damaged by previous use or construction, the ecosystem restored or enhanced. Active floodplains require leavestrips that start at the outer edge of the feature.

Appendix 3 – Terrestrial Ecosystem Development Permit Objectives and Design Guidelines

- Control invasive species and restore native vegetation where it has been disturbed. Wildfire hazard mitigation can happen in an environmentally sensitive way that restores ecosystems to

the natural condition that would be expected if the normal cycle of fire was permitted to affect the environment.

Appendix 4 – Hillside Development Permit Objectives and Design Guidelines

- The pattern of development should be responsive to the varied topography, pre-development drainage conditions, and natural landscape. Changes to existing terrain should be kept to a minimum.

Appendix 5 – Wildfire Interface Construction Development Permit Objectives and Design Guidelines

- A Wildfire DP is not required where plans for construction are submitted for a building permit that show compliance with the DP guidelines and a restrictive covenant is registered on the title of the property in order to ensure that future property owners are aware of and obligated to the wildfire hazard reduction measures.

Zoning Bylaw No. 871 – Floodplain Regulations:

On May 9, 2005, the Regional Board adopted an amendment to Zoning Bylaw No. 871, which increased the floodplain setback from 7.5 metres to 15.0 metres from the natural boundary of Okanagan Lake in accordance with Provincial floodplain regulations. Floodplain regulations have been established for the safety of people and property; the Zoning Bylaw outlines floodplain regulations to address required flood construction levels and floodplain setbacks for lakes, creeks, and other watercourses. For Okanagan Lake, the floodplain setback is a minimum of 15.0 m (49.2 ft) from the natural boundary of the Lake.

Occasionally, there are circumstances where a property owner determines that a building cannot be sited on a property in conformance with the floodplain regulations. An exemption application allows for the consideration of granting an exemption that would change those specific regulations for a given property. The Regional District may exempt types of development from the requirements if the Regional District considers it advisable and that the exemption is consistent with Provincial guidelines or has received a report from a certified person that the land may be used safely for the use intended. If an exemption is granted, a covenant stating the conditions for the exemption is placed on the title of the affected property.

Environmental Considerations:

Okanagan Climate Projections Report:

The Regional Districts of the Okanagan Valley partnered with the Pacific Climate Impacts Consortium to develop a Climate Projections report for the Okanagan. This report provides the scientific foundation to make informed decisions that support community action and to better prepare for climate variations over the next 30 and 60 years. Wildfire, flooding, and drought have already tested local infrastructure, caused economic losses, and posed health risks to communities.

Based on these changes, there is a need to plan for a greater likelihood of more intense and hotter fires, increasing water shortages, and spring flooding. Findings indicate that the Okanagan can expect significant changes including:

- Warmer temperatures year-round;
- Summers will be considerably hotter;
- Increased duration of growing season;
- Warmer winter temperatures;
- Increased precipitation; and,
- Summer is expected to remain the driest season, and become drier.

The report indicates precipitation increases can be expected across all seasons, except summer. The largest increases in precipitation will take place during the spring and autumn months. This can lead to more frequent flooding and stress to ecosystems and infrastructure.

Regional Floodplain Management Plan:

Flooding is a serious concern for the Central Okanagan and its developed areas and will only become more with the effects of climate change. In response to this risk, the three-phase Regional Floodplain Management Plan has been initiated with the purpose of reducing flood risk, improving emergency response, and increasing resiliency to climate change.

Okanagan communities are at increasing risks of damaging floods to properties and infrastructure along the lakeshores and river channels. Following the flood events of 2017 and 2018, these experiences demonstrate that the Central Okanagan is especially vulnerable to flood damage because of the density of population near flood prone creeks and lakeshores.

Additional Information:

Owner/Applicant:	Douglas and Eileen Sprout
Legal Description:	Lot 1, District Lot 3329, ODYD, Plan 20209
Civic Address:	7 Nerie Road
Lot Size:	+/- 0.39 acres
Zoning:	R1 – Single Detached Housing
OCP Designation:	Residential – Low Density
Sewage Disposal:	Septic System
Water Supply:	Private Water Source / Okanagan Lake
Existing Use:	Vacant
Surrounding Uses:	North: Nerie Road South: Residential East: Okanagan Lake West: Nerie Road
Fire Protection:	North Westside Fire Protection Area

RDCO Technical Comments:

Inspection Services staff advise that a demolition permit has been issued and finalized for the debris cleanup of the site following the White Rock Lake wildfire (Permit No. 2500/21). In addition, should the Development applications receive approval from the Regional Board, a Building Permit application is required.

Advisory Planning Commission (APC) recommends support for the application as presented.

Agency Referral Comments:

Ministry of Transportation and Infrastructure has issued a Provincial Public Highway Setback Permit (Permit No. 2022-01733) for the front setback variance. MOTI staff further indicated that the Floodplain Exemption and Development Permit applications do not fall under the jurisdiction of the Ministry.

Interior Health Authority staff reviewed this application and have no objections from the viewpoint of IHA policies and BC regulations. When a system is located less than 30m from a source of drinking water, IHA usually require a report from a hydrogeologist to support that the system will not cause a health hazard. While it appears to be a challenging system due to the location across Nerie Road, this system

is located greater than 30m from Okanagan Lake and the Authorized Person has designed it in accordance with standard practice.

Ministry of Forests, Lands, Natural Resource Operations, and Rural Development staff advise that should the applicant wish to repair or replace the existing dock, a Water Sustainability Notification application is required. The dock was previously declared to be General Permission and that no other moorage structure is permitted under the *Land Act*. This means the boathouse and boat ramp cannot be rebuilt on the Crown Land foreshore.

Shaw Cable recommend the owner/applicant contact Shaw to ensure design and structure placement are completed to Shaw standards and requirements.

Unaffected Agencies include the Ministry of Environment, City of West Kelowna, City of Kelowna, District of Lake Country, District of Peachland, Fortis B.C., B.C. Hydro, and Telus.

Unaffected RDCO Departments include Fire Services, Environmental Services, and Parks Services.

Considerations:

External: In accordance with the *Local Government Act* and the Development Applications Procedures Bylaw No. 944, a Notice of Application sign was posted on the property and written notices were mailed to all registered property owners of land situated within 100 metres of the subject property. A total of 27 letters were mailed to neighbouring property owners.

Further to the notification process, at time of writing this report, no letters of support or opposition have been received regarding this application.

Legal/Statutory Authority: The following sections of the *Local Government Act* apply to this proposal:

- Part 14, Section 524 (7) (Requirements in relation to flood plain areas) provides the legislative authority for local governments to exempt a person from a flood plain bylaw provided the local government considers it advisable, the exemption is consistent with Provincial guidelines, and has received a report from a certified person that the land may be used safely for the use intended.
- Part 14, Section 498 (Development variance permits) on application by an owner of land, a local government may, by resolution, issue a development variance permit that varies, in respect of the land covered in the permit, the provisions of a bylaw. A development variance permit must not vary the use or density of land from that specified in the bylaw and a local government may not delegate the issuance of a permit.

- Part 14, Section 488 (Designation of development permit areas) provides the legislative authority for an OCP to designate development permit areas for the protection of the natural environment, its ecosystems and biological diversity, and protection of development from hazardous conditions. The OCP provides the direction and guidelines to be adhered to when considering a development permit.

The *Riparian Areas Protection Regulation* (RAPR) calls on local governments to protect riparian areas during residential, commercial, and industrial development by ensuring that a Qualified Environmental Professional (QEP) conducts a science-based assessment of proposed activities. The purpose of the regulation is to protect the many and varied features, functions, and conditions that are vital for maintaining stream health and productivity.

Under Section 10 of the RAPR, a proposed development meets the riparian protection standard if the development:

- 1) will not occur in the streamside protection and enhancement area (SPEA), and
- 2) in the case of a detailed assessment, will not result in any harmful alteration, disruption or destruction of natural features, functions, and conditions in the streamside protection and enhancement area that support the life processes of protected fish.

The proposal meets Section 10 of the riparian protection standard.

Considerations not applicable:

- Organizational
 - Financial
 - Alternate Recommendation
-