

ADMINISTRATIVE REPORT



TO: Planning & Development Committee

FROM: B. Newell, Chief Administrative Officer

DATE: September 17, 2015

RE: Update of Environmentally Sensitive Development Permit Areas
Okanagan Electoral Area Official Community Plan (OCP) Bylaws

Administrative Recommendation:

THAT the Board of Directors resolves to direct staff to undertake the following consultation in relation to proposed amendments to the Okanagan Electoral Area Official Community Plan (OCP) Bylaws:

- referral to the Electoral Area “A”, “C”, “D”, “E” & “F” Advisory Planning Commissions (APCs);
 - Public Information Meetings occur in Summerland, Naramata, Okanagan Falls, Oliver and Osoyoos;
 - referral to external agencies such as Interior Health, Agricultural Land Commission, Ministry of Transportation and Infrastructure, Ministry of Environment, School Boards, etc.; and
 - confer with the Penticton Indian Band (PIB) and Osoyoos Indian Band (OIB).
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Purpose:

The purpose of this report is to provide an overview of proposed textual and mapping amendments to the Environmentally Sensitive Development Permit (ESDP) Area designation in the Okanagan Electoral Area Official Community Plan (OCP) Bylaws and to seek direction from the Regional District Board regarding public consultation.

Background:

At its meeting of September 5, 2013, the Planning and Development (P&D) Committee resolved to “accept *Keeping Nature in our Future: A Biodiversity Conservation Strategy for the South Okanagan-Similkameen* as a guiding document for the Regional District of Okanagan-Similkameen and the amendment of Official Community Plans.”

The environmental mapping associated with *Keeping Nature in our Future*, which was prepared by the South Okanagan-Similkameen Conservation Program (SOSCP) represents the first major update to ESDP Areas in over 15 years. In support of this update, Administration has also undertaken:

- a review of OCP policies which support the designation of ESDP Areas;
- a review of the ESDP Area Guidelines;
- the creation of a Rapid Environmental Assessment option for residential development; and
- a review of the Terms of Reference (ToR) for Professional Reports.

At its meeting of October 16, 2014, the Planning and Development (P&D) Committee of the Board considered an initial [overview](#) of proposed changes to ESDP Areas, including the creation of an

alternate “Important Ecosystem Areas” layer (as opposed to formal development permit designation) to be applied to Crown land and Agricultural Land Reserve (ALR) lands zoned for agriculture.

At this meeting, the P&D Committee resolved “that the matter of Environmentally Sensitive Development Permit Areas Okanagan Electoral Area Official Community Plan Bylaws be referred back to Administration for further research.”

A subsequent workshop was conducted with Okanagan Electoral Area Director’s following the Board’s Planning Orientation on February 12, 2015. At this workshop, an overview of development permits, including the limitations associated with environmental DPs (i.e. enforcement, inability to restrict use or density, professional reliance model, jurisdiction, etc.) was presented.

Analysis:

The following is an overview of the proposed changes to the Okanagan Electoral Area OCP Bylaws related to the ESDP Area Update:

Mapping

Administration is recommending that Crown land and agriculturally zoned land in the Agricultural Land Reserve (ALR) not be formally designated as a development permit area under the proposed new ESDP Area mapping provided through *Keeping Nature in our Future*. Instead, it is recommended that these lands be incorporated within a new “Important Ecosystem Areas” layer.

This approach recognises the limited ability of the Regional District to apply development permits to these lands (i.e. *B.C. Interpretation Act* and *Right to Farm Act*) yet maintains the ability for the Regional District to “flag” an area that is environmentally sensitive for the purpose of informing agency referrals or rezoning applications.

Administration is further proposing that lands zoned as low, medium and high density residential development *generally* be included in the “Important Ecosystem Areas” layer on the basis that the built form of these zones (i.e. small parcel sizes largely disturbed by residential use and development) limits the effectiveness of the designation.

OCP Policies & Objectives

Administration is recommending that the OCP policies and objectives related to the natural environment be updated to reflect the new mapping associated with *Keeping Nature in our Future* including the introduction of the alternate “Important Ecosystem Areas” layer. In addition, it is also proposed that the policies and objectives reflect current practices and legislative requirements.

In support of this, it is proposed that standardised wording related to the natural environmental values of the Okanagan be introduced into each of the Electoral Area OCP Bylaws, which will take the form of two standardised sections titled “Parks, Recreation & Trails” as well as “Natural Environment & Conservation” (which will be augmented by existing policies and objectives specific to each Electoral Area). Examples of these Draft OCP Sections are included at Attachment Nos. 3 & 4.

ESDP Area Guidelines

Administration is recommending that a number of new provisions be added to the ESDP Area guidelines, including provisions intended to ensure high quality reports continue to be submitted in support of development proposals.

This includes a requirement assessments prepared by a qualified environmental professional (QEP) be completed by a Registered Professional Biologist (RPBio) or a team that includes an RPBio. In addition, it is also proposed that the Regional District be able to require a third party review of a QEPs assessment (the cost of which would be shared equally between the Regional District and the applicant).

On parcels where additional development permit area designations related to the protection of the natural environment exist (i.e. WDPs), it is being proposed that a combined assessment of all values found on the site be completed and that the Regional District consider through the issuance of a single permit.

Finally, the option of a “Rapid Environmental Assessment” (REA) for residential buildings and structures is being proposed (in relation to proposed changes to Exemptions that will be discussed below), which is intended to provide a cost-effective alternative to traditional “Environmental Impact Assessments” (EIA).

The REA is premised on the completion of a checklist (see Attachment No. 5) by a QEP and is primarily concerned with the identification of “environmentally valuable resources” (EVRs) within 100 metres of a residential development.

If no EVRs are identified by a QEP, the Regional District would issue an ESDP in much the same way it issues “Expedited WDPs” for development in riparian areas which meets certain criteria. If a QEP identifies EVRs and is unable to mitigate the impact of the proposed residential development, an EIA would be required prior to the issuance of an ESDP.

Exemptions

Administration is also proposing a number of changes to the list of exemptions that are currently applied to ESDP Areas.

The first of these is the removal of the broad exemption currently afforded to all types of residential development as this is generally seen to be inconsistent with the intent of the designation.

In its place, it is being proposed to introduce a new, one-time exemption of 50 m² for an alteration or addition to an existing residential building or structure provided a completed Building Permit application has been accepted by the Regional District. The requirement for a Building Permit is seen to address a current shortcoming of the Guidelines in that works maybe undertaken in sensitive areas on the basis of a possible residential development, which *may* then never eventuate.

As discussed above, the removal of the existing residential exemption is also proposed to be offset by the introduction of the “Rapid Environmental Assessment” option for residential development, which is intended to provide a cost-effective alternative to a traditional EIA requirement.

Administration is also proposing to amend the current exemption for subdivisions, which applies to parcels greater than 20 ha, or where only two (2) parcels are to be created. Instead, it is being proposed to replace this with an exemption for consolidations and lot line adjustments where no new parcels are being created.

Terms of Reference (ToR) for Professional Reports

The purpose of the ToR is to describe the requirements for technical and professional reports submitted, in this instance, in support of a development permit application (NOTE: the ToR is structured to allow for the inclusion of additional report requirements in future, such as geotechnical or wildfire hazard assessments).

The Regional District's current [ToR](#) has not been reviewed since its adoption in 2008 and, as part of this process, has been reassessed based upon a template created by SOSCP (with input also provided by SOSCP).

While Administration considers the majority of the proposed changes to the ToR to relate to formatting and numbering, more detailed information is also being provided for the benefit of QEPs. In addition, the ToR has been updated to support the proposed "Rapid Environmental Assessment" Checklist to be used by QEPs (see Section of the Draft ToR).

Public Consultation

Administration is proposing that, prior to formal consideration by the Board of any amendment bylaws related to the ESDP Area Update, "early and on-going" consultation with the community, local first nations and provincial agencies be conducted throughout the remainder of 2015. This will include:

- referral to the Electoral Area "A", "C", "D", "E" & "F" Advisory Planning Commissions (APCs);
- agency referrals (i.e. MoTI, ALC, IHA, MoE, etc.);
- discussion with local First Nations (i.e. OIB & PIB);
- Public Information Meetings in each Electoral Area; and
- promotion on the RDOS web-site and other suitable forums.


The responses received from this consultation process will then be brought to a future meeting of the P&D Committee for review and discussion. Administration is also in the process of preparing a version of the amendments for legal review, which may result in some changes.

Respectfully submitted:



C. Garrish, Planning Supervisor

Endorsed by:



D. Butler, Development Services Manager

Attachments: No. 1 – [Draft ESDP Area Guidelines](#)

No. 2 – Draft ESDP Mapping

No. 3 – [Draft OCP Bylaw Objectives and Policies: Parks, Recreation & Trails](#)

No. 4 – [Draft OCP Bylaw Objectives and Policies: Natural Environment & Conservation](#)

No. 5 – [Draft Rapid Environmental Assessment Checklist](#)

No. 6 – [Draft Terms of Reference \(ToR\) for Professional Reports](#)

17.2 Environmentally Sensitive Development Permit (ESDP) Area

.1 Category

The Environmentally Sensitive Development Permit (ESDP) Area is designated under Section 919.1(1)(a) of the *Local Government Act* for the protection of the natural environment, its ecosystems and biological diversity.

.2 Area

The lands shown as ESDP Area on Schedule 'X' are designated as an "Environmentally Sensitive Development Permit Area".

.3 Justification

To regulate development activities within environmentally sensitive areas in order to protect habitat for endangered species of native, rare vegetation or wildlife, and provide wildlife corridors and secondary habitat.

.4 Background

The natural environment provides essential habitat and corridors for plants, fish, birds and other organisms. It also acts as a natural water storage, drainage and purifying system, which can help to protect private property from flooding or land loss due to watercourse erosion. Furthermore, as concerns over climate change grow, it should be recognized that functioning ecosystems are more efficient at consuming carbon dioxide as well as carbon storage. Vegetation adjacent to watercourses needs to remain in a largely undisturbed state in order to maintain a healthy environment and clean water.

The south Okanagan-Similkameen area is considered one of the most ecologically diverse in British Columbia and Canada, and includes sensitive ecosystems which support a number of provincially Red and Blue-listed species (extirpated, endangered, threatened, and vulnerable) and federally listed Species at Risk. This Development Permit Area is intended to protect habitat for endangered species of native, rare vegetation or wildlife, and provide wildlife corridors and secondary habitat within the Plan Area.

The ESDP Area is comprised of important habitat areas for wildlife habitat and plant communities. Sensitive ecosystems in the area include grasslands, riparian areas, forest, wetlands, shallow soiled rock outcrops and ridges. Specifically, XXXX. It is the close proximity of these diverse habitats that contribute to a wide variety of species, both common and rare, that are found in this Electoral Area.

.5 Development requiring a permit

- .1 A development permit is required, except where specified under Section 17.2.9 (Exemptions), for development on lands within the ESDP area. Where not exempted, development requiring a development permit includes:
 - a) subdivision;
 - b) the construction of, addition to or alteration of a building or other structure; and
 - c) alteration of the land, including grading, removal of vegetation, deposit or moving of soil, paving, installation of drainage or underground services.

.6 Guidelines

- .1 A Development Permit is required for development within an ESDP Area, and shall be in accordance with the following guidelines:
 - a) An Environmental Assessment (EA), prepared in accordance with the Regional District's Terms of Reference for Professional Reports, must be submitted to the Regional District in respect of the proposed development by a qualified environmental professional (QEP) or team that shall include a Registered Professional Biologist (RPBio) under contract to the development applicant, and shall include:
 - .1 An Ecological Assessment Phase including:
 - .1 background information;
 - .2 an ecological assessment;
 - .3 listing of rare and endangered species;
 - .4 consideration of Riparian Areas Regulations (RAR);
 - .5 stratification and rating of Environmentally Sensitive Areas (ESAs); and
 - .6 ecological assessment results.
 - .2 An Impact Assessment and Mitigation Phase including:
 - .1 description of proposed development;
 - .2 short and long term impacts;
 - .3 cumulative and residual impacts;
 - .4 avoidance of ESAs;
 - .5 mitigation and compensation;
 - .6 security requirements;
 - .7 monitoring reports;
 - .8 accountability; and
 - .9 monitoring plan.

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- b) Development should be planned away from native trees and trees containing active nest sites or cavities. If removal of native trees cannot be avoided, mitigation should include restoration and replanting with equivalent native trees.
 - c) Habitat connectivity and the retention of connectivity corridors between sensitive ecosystems should be preserved. Wildlife crossings should be designed to protect continuity of wildlife corridors where these are interrupted by roadways.
 - d) Monitoring reports may be required to be submitted to the Regional District following the completion of a development in order to confirm the conditions of a development permit have been met.
 - e) Despite sub-section 17.2.7(a), the Regional District may issue a development permit on the basis of a Rapid Environmental Assessment (REA) Report prepared in respect of the construction, alteration, addition, repair, demolition and maintenance of a residential building or structure.
 - f) An REA, prepared in accordance with the Regional District's Terms of Reference for Professional Reports, must be submitted to the Regional District in respect of the proposed development by a qualified environmental professional (QEP) or team that includes a Registered Professional Biologist (RPBio) under contract to the development applicant, and shall include:
 - i) a site plan documenting, if applicable, the location and extent of Environmentally Valuable Resources (EVRs) occurring within 100 metres of the proposed footprint of the development.
 - ii) a completed Rapid Environmental Assessment Checklist signed and sealed by the responsible QEP indicating:
 - .1 There is no known occurrence of an EVR on or within 100 metres of the proposed footprint of the development; or
 - .2 Known EVR occurrence(s) have been identified and:
 - a) measures have been prescribed to avoid impacts; or
 - b) acceptable restoration/mitigation have been prescribed.
 - g) If a QEP cannot certify the absence of EVRs or that impacts have been avoided or acceptably mitigated through a REA, an EA as outlined under sub-section 17.2.7(a) will be required.
- .2 The Regional District reserves the right to seek a third party review of a submitted assessment. If necessary, the third party reviewer will be a mutually acceptable QEP and the cost of the review shared equally among the applicant and the Regional District.
 - .3 If an area of land is subject to additional Development Permit Area designations under Section 919.1(1)(a) of the *Local Government Act*, the Regional District requires that a single development permit application that combines the requirements of

each Development Permit Area be submitted. The application will be assessed in accordance with the individual development permit guidelines for each applicable Development Permit Area under this bylaw and, if approved, issued under a combined development permit.

.7 Exemptions

A development permit is not required for development within land in the ESDP area for:

- .1 the repair or maintenance of existing buildings and structures provided there are no additions or increases to the footprint of a building or structure;
- .2 an alteration or addition to an existing residential building or structure where the proposed footprint of the alteration or addition does not exceed 50 m², and a completed Building Permit application has been accepted by the Regional District.
- .3 works conducted in accordance with the Provincial *FireSmart Manual*, provided that all landscaping is conducted within 10.0 metres of an existing structure or building (existing on-site native plants which meet the *FireSmart Manual* guidelines are encouraged to be maintained as part of the landscaping plan);
- .4 the construction, alteration, addition, repair, demolition and maintenance of buildings and structures to be used in relation to a farm use on a parcel in the ALR or on a parcel classified as “farm” under the *Assessment Act*;
- .5 any farm use as defined in the *Agriculture Land Commission Act* on land located in the ALR, provided farming practices are in accordance with Provincial and Federal policies and environmental guidelines;
- .6 community utility services where they meet provincial and federal regulations;
- .7 the repair of existing fences;
- .8 subdivisions that propose to:
 - i) consolidate existing parcels, including the consolidation of parts of a closed road to an existing parcel; or
 - ii) alter parcel lines between two or more parcels where no additional parcels are created upon completion of the alteration.
- .9 any type of development, provided that a QEP has submitted confirmation to the Regional District of the absence of sensitive ecosystems or federally or provincially listed species and their habitats on the property.

12.1 Background

Parks are generally publicly owned areas that provide an opportunity for individuals to pursue leisure and recreation activities. In the Plan Area, parkland includes Crown land, land owned by the Regional District, land zoned for park purposes and land designated as park on a subdivision plan. Parkland also includes land or general areas that the Regional District may have an interest in for park in the future.

The types of park and recreation facilities under the Parks/Recreation (PR) designation in the Plan Area include:

- **Regional Parks:** There are XX regional parks, XX operated and maintained by the Regional District.
- **Kettle Valley Railway (KVR) Trail:** The sections of the KVR Trail that are publically owned and maintained by the Regional District are designated Park.
- **Provincial Recreation Areas:** XXX is a provincially designated Recreation Area.
- **Other Recreation Areas:** There are XX, which are designated Park. There is also another privately owned Park area, which was designated as a park and recreation area in the original development proposal for the community.

The Plan Area also provides diverse recreation opportunities for a range of trail users. Local residents use the trail system for activities ranging from an evening stroll along the KVR to commuting to work from one community to another, to active motorized and non-motorized trail-based recreation. Visitors also frequent the Plan Area's trails to participate in a wide range of activities from walking and backcountry hiking to cycle touring and off-road vehicle recreation.

Together, parks and trails provide a valued amenity for Plan Area residents and visitors and provide important environmental benefits. Due to the high biodiversity values found in the South Okanagan, the Regional District is mindful of managing environmentally sensitive lands occurring within regional parks and trails.

While the Plan Area includes XXXX, the need for additional community parks is moderated both by the area's small population and the extensive opportunities available on Crown land, area lakes, and in provincial protected areas. It is also a challenge to provide community park services to areas with small, dispersed populations.

Provincial legislation authorizes the provision of land to the Regional District as parkland — equivalent in size to 5% of the parcel being subdivided. It is anticipated that acquisition of new land will be focused upon completion of the Kettle Valley Railroad (KVR) trail and XXXX, although the Regional District will consider acquiring new parkland as opportunities arise.

In 2012, the Regional District adopted a *Regional Trails Master Plan* that defines future direction, policies, priorities, standards and actions for the Regional District and its partners with respect to existing and potential future linear parks and trails and support of a regional trail network. The plan provides the basic framework to define and guide regional trail

development and management through to 2021.

The Parks designation applies to XX.

See [Schedule 'X' Parks, Recreation and Trails](#) for a map of designated parks and trails in the Plan Area.

12.2 Objectives

- .1 Provide a level of parks and recreational opportunities that can meet the needs of local residents, within their ability and resources to pay for such facilities.
- .2 Promote recreational opportunities that meet local needs, conserve the natural environment and complement existing resources.
- .3 Improve and maintain public access to park and recreation resources.
- .4 Promote the development of an integrated trail and park system.
- .5 Identify and work to acquire parks and recreation sites to meet the present and future needs of residents.

12.3 Policies

The Regional Board:

- .1 Encourages that all new trail projects are designed and constructed using provincial best management practices, in order to minimize the impact on the natural environment.
- .2 Seeks to mitigate existing and future conflicts between trail users, agricultural operators and rural landowners.
- .3 Encourages trails proposed on agricultural lands, including those located within the ALR, to be developed using Ministry of Agriculture guidelines.
- .4 Encourages tenure holders to preserve, steward and maintain trails to maintain the integrity of the larger trail system and the natural environments they traverse.
- .5 Encourages the Province to undertake a backcountry recreation planning process.
- .6 Encourages relevant provincial agencies and tenure holders to manage public access to the backcountry.
- .7 Work with regional partners and local environmental organizations to support wildlife education programs to minimize wildlife/human conflicts on trails.
- .8 Work with regional partners to ensure that trails within Plan Area boundaries include adequate parking, bear-proof garbage and recycling receptacles, and signage where feasible and appropriate.
- .9 Support trail use guidelines that promote "leave no trace" trail use.

12.4 Parkland Dedication Policies:

- .1 For the purposes of Section 941(2) of the *Local Government Act*, designates the entirety of the Electoral Area covered by this OCP as having future park potential.

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- .2 Recognises that the Plan Area is generally rural in nature, and that when land is acquired it should be focused upon lake accesses, greenways, and trails.
 - .3 Will determine, in accordance with Section 941 of the *Local Government Act*, at the time of a subdivision to which Section 941 applies, whether the owner of land being subdivided must:
 - a) provide without compensation, park land in an amount equivalent to 5% of the land being proposed for subdivision and in a location acceptable to the Regional District; or
 - b) pay to the Regional District an amount that equals the market value of the land that may be required for park land purposes.
 - .4 Will consider, when determining a potential park land dedication under Section 941 of the *Local Government Act*, the following policies:
 - a) proximity to settlement areas, other parks & trails, and bodies of water;
 - b) distance from environmental hazard areas;
 - c) average slope should be 10% or less;
 - d) adequate accessibility:
 - i) vehicular ingress and egress should meet or exceed Ministry of Transportation standards;
 - ii) in the case of trails and pedestrian-access only parks, there should be various linkages to and from the trail or park, with at least one linkage wide enough to allow for maintenance vehicle access;
 - e) cultural or natural features of significance;
 - f) potential for additional dedication of parkland from subdivision applications of surrounding parcels; and
 - g) potential for recreation (active park), conservation (passive park) or enhancement of public access.
 - .5 Considers that park land proposals must provide a benefit for the community and those lands with no benefit to the community should not be accepted.
 - .6 Strongly prefers that land being considered for parkland be maintained in its natural state and should not be cleared. Cleared and disturbed lands should only be accepted where the proposed parkland is to be used for recreational uses which require cleared lands, or can be reclaimed for park purposes.
 - .7 Encourages developers to dedicate greater than 5% park land in areas where parkland is desired.
 - .8 If cash in-lieu is chosen at the time of subdivision for park acquisition and development in the Plan Area, the preference is that the benefits accrue to those communities from which the funds are received.

13.1 Background

The South Okanagan-Similkameen is recognized as a region that combines a wide range of natural habitat areas with a large number of unique species, many of which are not found elsewhere in the province or in Canada. The area is also home to the largest number of endangered and threatened species of plants and animals in BC and Canada.

The variety of life (also called biodiversity) is very high in the South Okanagan-Similkameen, because of the region's milder climates and diversity of landscapes. Species at risk are linked to human settlement areas and land use. As the Plan Area contains significant developed areas and a variety of land uses including recreation, agriculture, forestry areas and the like, it also contains a high number of species at risk.

The Plan Area itself is home to many unique environmental features, including XXXX among others.

Under the *Local Government Act*, the Regional District has the authority to establish Development Permit (DP) Areas in order to protect the natural environment, its ecosystems and biological diversity.

In order to protect important habitat areas for wildlife, including plant communities, the Regional District has also implemented an Environmentally Sensitive Development Permit (ESDP) Area. These areas generally comprise privately held lands not in the Agricultural Land Reserve (ALR) that possess "high" and "very high" ecologically sensitive classifications as identified by the *Keeping Nature in our Future: A Biodiversity Conservation Strategy for the South Okanagan-Similkameen* (2013) prepared by South Okanagan Similkameen Conservation Program (SOSCP), and as described further in Section XX.X of this Plan.

Other ecologically sensitive lands found on Crown land or privately held land in the ALR have not been formally designated as an ESDP Area but are equally sensitive and have been comprised within an alternate "Important Ecosystem Area" layer described in Section XX.X of this Plan.

As a local government listed under Section 3 of the *Riparian Area Regulation*, the Regional District has implemented a Watercourse Development Permit (WDP) Area designation in order to protect riparian areas; being lakes, watercourses and wetlands along with lands and vegetation within a 30 metre buffer, and as described further at Section 23.3 of this bylaw.

For maps of sensitive foreshore areas, watercourses, and habitat areas in the Plan Area see Schedule 'X' *Environmentally Sensitive Development Permit Areas* and Schedule 'X' *Watercourse Development Permit Areas*.

13.1.1 Objectives - General

- .1 Maintain and sustain a healthy environment by encouraging the enhancement of ecological systems and by protecting biodiversity.

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- .2 Integrate measures to sustain environmental quality and consider impacts on the environment in future land use decisions.
 - .3 Work with property owners and agents to inform and guide the design of development in a way that is sensitive to important landscape features such as watercourses, hillsides, and sensitive ecosystems of the Okanagan.
 - .4 Support efforts to protect source water quality and quality today and for future generations.

13.1.2 Policies - General

The Regional Board:

- .1 Recognizes the importance of containing and controlling noxious weeds through the continued endorsement of weed prevention and control initiatives.
- .2 Recognizes and encourages the educational and eco-tourism contribution toward protection of the community's natural environment made by environmental organizations, and supports accommodating these uses with the necessary changes to the land use designations so long as the general intent of policies in this Plan are met.
- .3 Requires that, where a proposed development affects land subject to an Environmentally Sensitive Development Permit Area, an Environmental Impact Assessment (EIA) be prepared by a Qualified Environmental Professional (QEP) in accordance with the policies outlined at Section XX.X as well as relevant federal and provincial best management guidelines.
- .4 Requires that EIA reports prepared by QEPs be undertaken in accordance with the Regional District's approved terms of reference for professional reports.
- .5 Supports the incorporation of traditional ecological knowledge in the stewardship of important foreshore, riparian, and terrestrial ecosystems, and will work with the Penticton Indian Band, Osoyoos Indian Band, Upper Similkameen Indian Band and Lower Similkameen Indian Band to incorporate it where feasible, practical and appropriate.

13.4 Riparian and Foreshore Areas

Riparian areas are places under the influence of water. They surround and contain wetlands, ponds, permanent and intermittent creeks, springs, wet meadows, etc. The foreshore is specifically defined as the areas surrounding lakes, including land within 30 metres of the high water mark and areas in shallow shoal areas beneath the water. The Plan Area includes one large lake, XXXX Lake, and several smaller lakes including XXXX Lakes.

The Plan Area is generally dry and riparian areas tend to be unusually productive and support a disproportionately high number of species. In addition, riparian and foreshores areas tend to have significant land use and development impacts. Most wetlands that once occurred in the Okanagan have been lost to infilling, development, roads, agriculture etc. Thus, the areas that

remain are very important to retain. Many species and species at risk require riparian habitats for some part of their life cycle.

Activities in riparian areas have potential to impact water quality, affect erosion, damage fish habitat and impact habitat for species at risk.

Trees like Black Cottonwood that once were common in these areas have been removed and replaced with non-native trees or invasive trees like Russian Olive and Siberian Elm. Some limited areas of willow, birch, red osier dogwood and other shrubs remain in foreshore areas, but much of the developed area has been replaced by lawns and landscaped yards. Road construction near, or within riparian areas is also common. Agriculture impacts are significant and range from infilling to cultivation and livestock use.

Because riparian and foreshore areas are so strongly connected to both habitats for species at risk and water quality through groundwater/surface water, it is vital that land use practices protect riparian areas by retaining and restoring native species, and ecosystems. Natural riparian areas provide significant ecosystems benefits that costly water treatment and recovery planning for species at risk cannot replace.

Generally land above the high water mark (natural boundary) is privately held and land below the high water mark belongs to the Crown and forms part of the water resource in the province. Land within 30 metres of the high water mark is identified as being within a Watercourse Development Permit Area and any development within this area may require a Development Permit (see [Section XX](#)). Other foreshore activities that are subject to regulation include dock construction and modification, mooring buoy installation, and shoreline modifications (including sand, soil, vegetation removal, disturbance, and addition).

13.4.1 Objectives

- .1 Foster community awareness of the importance and sensitivity of the riparian and foreshore environments in the Plan Area.
- .2 Protect aquatic habitat areas and associated environmentally sensitive areas from negative impacts of development as identified in Schedule 'X' *Environmentally Sensitive Development Permit Areas* and Schedule 'X' *Watercourse Development Permit Areas*.
- .3 Improve and better manage waterfront public access along the [XXXX Lake shoreline in XXXX](#), while limiting the overall number of public access points.
- .4 Minimize and avoid development in high hazard soil instability areas on the [XXXX Lake foreshore](#) (see [Schedule 'X' Hazard Lands – Soil](#) and [Schedule 'X' Hazard Lands – Steep Slopes](#)).
- .5 Encourage high quality lakeshore development that maintains the natural character of all lakes and sustains the sensitive foreshore ecosystems.
- .6 Conserve, protect and enhance surface, ground and aquifer water sources in cooperation with provincial ministries, local water purveyors and landowners.

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- .7 Identify, manage and protect significant watercourses to maintain their natural habitat and environmental quality.

13.4.2 Policies

The Regional Board:

- .1 Recognises riparian values and, in accordance with the provincial *Riparian Area Regulation*, has designated watercourses as development permit areas. Watercourses designated as environmentally sensitive shall be developed according to the guidelines outlined in Section XX.X (Watercourse Development Permit Area) of this Plan. WDP Areas are identified in Schedule X.
- .2 Encourages provincial and federal water and resource managers to protect and enhance water quality, base flows, natural drainage patterns, and continuous riparian corridors of sufficient width to accommodate the dynamic nature of the hydrologic system, to avoid and reduce flood damage, to avoid the need for channel stabilization, to avoid underground drainage systems, to avoid groundwater interruption, and to protect and sustain aquatic biota, important fish populations and habitats.
- .3 Supports efforts that maintain appropriate riparian buffers, determined by qualified professionals that take into account processes of natural erosion, deposition and movement of natural stream boundaries, floodplain provisions and sensitive terrestrial habitats
- .4 Continues to work with the Okanagan Basin Water Board (OBWB) to promote the shared water interests of Okanagan communities.
- .5 Encourages and supports the analysis of ground water hydrology in areas with identified aquifers, and require environmental assessments in advance of considering zoning amendments for uses such as heavy industrial, mining, fuel storage and/or sewage containment.
- .6 Discourages development that will have a negative environmental impact on lake foreshore areas.
- .7 Encourages the subdivision approving officer to ensure that public access to lakes is provided pursuant to Section 75 of the *Land Title Act*.
- .8 Supports the use of Section 86 of the *Land Title Act* and Section 56 of the *Community Charter* to regulate development in a floodplain and provide for the safe use of the land for the intended purpose.

13.5 Terrestrial Areas

Terrestrial areas are simply described as the areas upland or beyond water. They include areas with grassland and shrub-steppe, sparsely vegetated, broadleaf woodlands, coniferous

woodlands and old forest ecosystems. Many at risk species are found in terrestrial ecosystems in the Plan Area.

Like foreshore and riparian areas, terrestrial areas also contain areas sensitive to development and land use. Of the various ecosystem types, the grassland and shrub-steppe ecosystems are particularly sensitive to disturbance and subject to habitat loss through development, agriculture conversion, impacts from invasive plants, and habitat loss resulting from recreation use.

Significant proportions of sensitive terrestrial habitat have been provincially recognized and protected in the Plan Area and include: XXXX. The Nature Trust of BC and other conservation organizations have also purchased properties for habitat and terrestrial ecosystem conservation purposes.

13.5.1 Objectives

- .1 Encourage the protection, enhancement and management of critical habitat for species at risk in the Plan Area through the use of development permit area designations, and encourage provincial and federal governments, private organizations and private landowners to similarly protect these values.
- .2 Protect and steward sensitive and important terrestrial ecosystem areas as identified in Schedule 'X' *Environmentally Sensitive Development Permit Areas*.
- .3 Work cooperatively with regional partners and support rehabilitation, restoration and enhancement of wildlife habitats and environmentally sensitive areas that have been subject to negative impacts in the past.
- .4 Encourage and facilitate linkages of protected habitat areas.

13.5.2 Policies

The Regional Board:

- .1 Recognizes the values of environmentally sensitive lands and has designated these lands on Schedule 'X' as:
 - a) development permit areas under Section 920 of the *Local Government Act*; or
 - b) "Important Ecosystem Areas".
- .2 Requires that land formally designated as environmentally sensitive shall be retained in a natural state and not developed prior to the issuance of an Environmentally Sensitive Development Permit (ESDP) in accordance with the guidelines outlined at Section XX of this Plan.
- .3 Considers that land listed as comprising "Important Ecosystem Areas" should generally be retained in a natural state and, if a re-designation of land under the OCP or Zoning

bylaws is proposed, that these lands be considered for inclusion as formal development permit areas in Schedule 'X'.

- .4 Encourages the parcel sizes of areas designated as “environmentally sensitive” or as “important ecosystem areas” on Schedule 'X' to remain as large as possible to protect these habitat areas.
- .5 Will not support the re-designation of land under the OCP or Zoning bylaws where it is determined that the proposed development is contrary to the ESDP Area Guidelines of this Plan and the impact cannot be mitigated to a level acceptable to the Regional Board.
- .6 Will strive for development that avoids impacting important native species, habitats, ecosystems or sensitive areas and to retain important ecosystem features and functions. Responsiveness to this policy will be a very important consideration in the approval of an application.
- .7 Encourage the protection, preservation, enhancement and management of sensitive ecosystems or land contiguous to sensitive ecosystems of private lands through the following methods:
 - a) donation of areas to the Regional District or provincial government;
 - b) donation of areas to a land trust or conservation organization;
 - c) introduction of conservation area designation and zoning;
 - d) creation of conservation covenants in favour of municipal, provincial government, private conservation organizations;
 - e) establishment of statutory right of ways under the *Land Title Act* for affected areas;
 - f) establishment of long-term leases for sensitive areas;
 - g) land stewardship and participation in conservation initiatives by the private landowner; or
 - h) consideration of alternative development standards.
- .8 Supports conserving, enhancing and promoting the protection of wildlife corridors and ecosystem connectivity with interfacing Crown lands.
- .9 Encourages the use of native vegetation to restore disturbed sites.

13.6 Conservation Areas

For the purpose of protecting environmentally sensitive areas (ESAs), the Regional District may designate lands as Conservation Area (CA). The Conservation Area designation is applied to land that is preserved and protected for its unique natural value, land left in a natural or semi-natural state for the purpose of conserving plant life and providing habitat for wildlife or fish.

Conservation Area lands may include Crown land designated as an Ecological Reserve or Provincial Protected Areas. It can also include private lands that have been acquired or donated for conservation purposes and which are held by an individual or an organisation, such as The Nature Trust of British Columbia or the Nature Conservancy of Canada. In the Plan Area, the CA designation applies to XXXX.

For a map of Conservation Areas in the Plan Area see Schedule 'X' *Official Community Plan Map*.

13.6.1 Objectives

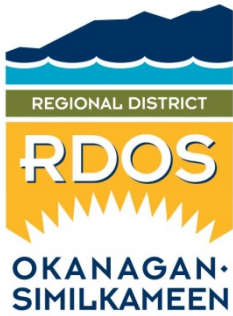
- .1 Protect and steward designated Conservation Areas in their natural or semi-natural state for the purpose of conserving plant life and providing habitat for wildlife or fish.
- .2 Work with agencies and partners, including local First Nations to enhance, protect and interpret ecological systems and biodiversity in Conservation Areas.
- .3 Work with property owners and agents to inform and guide the design of development in a way that is sensitive to adjacent or abutting Conservation Areas.

13.6.2 Policies

The Regional Board:

- .1 Recognizes and encourages the educational and eco-tourism contributions toward protection of Conservation Areas made by environmental organizations, and supports accommodating these uses where they do not conflict with Conservation Area objectives.
- .2 Supports the incorporation of traditional ecological knowledge in the stewardship of Conservation Areas, and will work with local First Nations to incorporate it where feasible, practical and appropriate.

Attachment No. 5 – Draft Rapid Environmental Assessment Checklist



Regional District of Okanagan-Similkameen

101 Martin Street, Penticton, B.C., V2A 5J9

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Project No.:
Folio No:
Received:

Rapid Environmental Assessment Checklist
 Environmentally Sensitive Development Permit (ESDP) Areas

A Rapid Environmental Assessment is intended to provide a cost-effective alternative to the preparation of a more comprehensive Environmental Assessment (EA) for residential buildings and structures within ESDP Areas. Please note that beyond the requirements of this assessment, property owners and their professionals are required to comply with all relevant legislation related to the protection and avoidance of Environmentally Valuable Resources (e.g. Species at Risk and Critical Habitat).

PROPERTY DESCRIPTION:

Civic address:

Legal Description

Lot: Plan: Block: District Lot: Section: Township:

Current land use:

A site plan indicating proposed footprint of development and 100 metre radius must be included

CHECKLIST:

Environmentally Valuable Resources	Yes	No	Comments (attach as a separate sheet, as required)*
Sensitive Ecosystems: (SEI: Vernon to Osoyoos)	<input type="checkbox"/>	<input type="checkbox"/>	
• Wetland (includes vernal or ephemeral)	<input type="checkbox"/>	<input type="checkbox"/>	
• Riparian	<input type="checkbox"/>	<input type="checkbox"/>	
• Old Forest	<input type="checkbox"/>	<input type="checkbox"/>	
• Grasslands (including disturbed)	<input type="checkbox"/>	<input type="checkbox"/>	
• Shrub-steppe (includes antelope-brush, sage-brush)	<input type="checkbox"/>	<input type="checkbox"/>	
• Broadleaf Woodland	<input type="checkbox"/>	<input type="checkbox"/>	
• Coniferous Woodland	<input type="checkbox"/>	<input type="checkbox"/>	
• Sparsely vegetated areas and rocky outcrops	<input type="checkbox"/>	<input type="checkbox"/>	
• Other Sensitive Ecosystems	<input type="checkbox"/>	<input type="checkbox"/>	

CHECKLIST:

Environmentally Valuable Resources	Yes	No	Comments (attach as a separate sheet, as required)*
Ecological Communities on BC CDC red or blue lists	<input type="checkbox"/>	<input type="checkbox"/>	
Known occurrence of listed species (federal or provincial)	<input type="checkbox"/>	<input type="checkbox"/>	
Critical Habitat as identified under SARA (source: Species at Risk Act Public Registry)	<input type="checkbox"/>	<input type="checkbox"/>	
Habitat Features with high potential for important life requisites of listed species:	<input type="checkbox"/>	<input type="checkbox"/>	
• Wildlife Trees	<input type="checkbox"/>	<input type="checkbox"/>	
• Hibernacula/Roosts	<input type="checkbox"/>	<input type="checkbox"/>	
• Active nest sites or areas known for nesting	<input type="checkbox"/>	<input type="checkbox"/>	
• Dens and burrows	<input type="checkbox"/>	<input type="checkbox"/>	
• Wildlife corridor considerations	<input type="checkbox"/>	<input type="checkbox"/>	
• Other landscape features of environmental significance	<input type="checkbox"/>	<input type="checkbox"/>	

* Include information on EVR locations, strategies to achieve avoidance, and/or recommendations for restoration / protection /mitigation measures; sufficient detail is required and a summary report is recommended where restoration, protection or mitigation measures are prescribed.

PROFESSIONAL OPINION:

I, the undersigned, hereby certify that I am a qualified environmental professional and, in my professional opinion, that:

- There are no known occurrences of an Environmentally Valuable Resource (EVR) on or within 100 metres of the proposed development site; or
- Known EVR occurrence(s) have been identified and:
- measures have been prescribed to avoid impacts; or
- acceptable restoration/mitigation has been prescribed.

Signature of qualified environmental professional

Date

Print name of qualified environmental professional

(AFFIX PROFESSIONAL STAMP)

TERMS OF REFERENCE



Regional District of Okanagan-Similkameen

PROFESSIONAL REPORTS



**Regional District of Okanagan-Similkameen
Terms of Reference for Professional Reports**

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1.0 TITLE AND SCOPE

1.1 Title

This document may be cited for all purposes as the “Regional District of Okanagan-Similkameen’s Terms of Reference for Professional Reports”.

1.2 Scope

The purpose of this document is to describe the requirements for technical and professional reports submitted to meet requirements of land and development bylaws of the Regional District of Okanagan-Similkameen (RDOS). The referenced reports are typically requested at time of property rezoning, or subdivision to ensure that the property is suitable for the proposed use.

Professional Reports may also be required for Development Permits to demonstrate how environmental and design objectives will be met or if the owner is seeking a design that does not coincide with earlier professional recommendations.

It is expected that layout designs, plans and applications will reflect the results and recommendations of the professional reports and still provide a reasonable building and living envelope.

Applicants are encouraged to discuss the requirements below with RDOS Planning Services staff, and to coordinate these requirements with those of other departments and agencies. The requirements below are minimum standards, and allow staff to process an application for development without delay. They are intended as a reference to property development proponents in determining the scope of work required by qualified registered professionals. In all cases, qualified registered professionals need to prepare their reports through an integrative process whereby recommendations concerning one aspect of development (e.g. storm water management) are integrated with other aspects (e.g. fish habitat protection).

2.0 ENVIRONMENTAL ASSESSMENTS (EA)

2.1 Introduction

The purpose of this section is to describe the requirements for an Environmental Assessment (EA) report submitted in relation to applications pertaining to a land use amendment bylaw or Environmentally Sensitive Development Permit (ESDP) Area.

The Regional District considers an EA to be critical to the planning phase of any development in order to ensure significant environmental values are identified and protected prior to any preparatory site disturbances.

An EA Report should document plant communities, aquatic and wildlife habitat values, aquatic and wildlife species presence, species and ecosystems at risk, adjacent land use and threats, general factors affecting lot layout (i.e. flood and site stability) and, where appropriate, potential habitat enhancement/protection opportunities.

Development plans submitted in support of a development permit or amendment bylaw application must reflect the results and recommendations of the EA and provide a reasonable building, servicing and living envelope.

EAs are broken down into the following two phases that can be completed and reported together or separately:

- .1 Ecological Assessment Phase; and
- .2 Impact Assessment and Mitigation Phase.

The following sub-sections are intended as a reference to guide property owners/developers in determining the scope of work required by qualified registered professionals. The qualified professional must be a Registered Professional Biologist (RPBio) who has experience with the ecosystems and wildlife species of the Okanagan region, with standard development practices, and with published Best Management Practices (BMPs). Other qualified professionals may be required to augment the findings of the RPBio and satisfy the requirements of the EA report.

2.2 Data Deliverables

An EA Report must be prepared, signed and sealed by an RPBio and adhere to all regional bylaws, federal and provincial legislation, regulation and standards and include the following:

1. **Ecological Assessment and Impact Assessment & Mitigation Phases:** to be prepared in accordance with the requirements of sub-Sections 2.3 and 2.4 below.
2. **Site Description:** including the legal description (e.g. lot number, district lot, plan number, etc.), OCP designation, zoning category, and Agricultural Land Reserve (ALR) status, which should be shown on the location map or stated in the report.
3. **Location Map:** prepared at appropriate scale (minimum 1:10,000 and maximum 1:50,000) indicating the regional setting. This information should be overlaid on the most current orthographic photo.

-
4. **Site Maps:** prepared at an appropriate scale (minimum 1:500 and maximum 1:5,000) and indicating the layout of project components and activities, including:
- a) topographic survey, where available, when development is occurring on or near slopes that are greater than 20%, showing natural slope contours (at appropriate contour intervals of 1 to 5 meters);
 - b) topographic survey of post development contours, if available;
 - c) survey data collection points and transects, if applicable;
 - d) all exposed soil surfaces (trails, roads, talus, etc.);
 - e) results from ecological assessment (see Section 2.4);
 - f) “top of bank”, and/or distance from the “natural boundary”, for steep slopes and aquatic features that would be affected by setbacks and buffers; and
 - g) riparian (i.e. RAR) setbacks (if applicable).

This information should be overlaid on the most current cadastral map with an orthographic photograph background outlining all surrounding property boundaries and uses. Map legends must show clear descriptions of all symbols used as per provincial standards. In addition, and when available, digital copies of supporting information should be provided

5. **Sketches / Colour Photographs:** indicating project location, site features and activities identified in relation to easily identifiable landmarks such as those found on accompanying maps (if available).
6. **Appropriate Referencing:** clearly indicate sources of all image and data, as well as the date this information was developed to certify that the most up-to-date information available was used in completing the relevant assessments.

2.3 EA Report — Ecological Assessment Phase

The intention of the Ecological Assessment Phase is to assess both the biological conditions and physical conditions of a site and must be carried out in advance of any preliminary layout plan and prior to any preparatory site disturbances.

The Ecological Assessment Phase determines a development footprint respectful of sensitive ecosystems and helps streamline the development approval process, and must include the following:

1. **Background information** for the site collected by government agencies or in published literature will be gathered, assessed, presented and referenced. Information gaps may also be filled from local information sought from other interested parties including local experts, current and past owners, neighbors, and other local groups to make up for the typical short time-frame and limited fieldwork undertaken to complete EAs.
2. **Ecological assessment** will include the use of background information, to formulate an overview of all habitats and features within the subject property. This overview will then guide the design of species specific inventories to be performed at the best time of year for that species and habitat use.

The ecological assessment and site maps (1:500 – 5,000) will be prepared to include:

- a) vegetation - an overview of the various plant species and plant communities;
 - b) terrestrial/aquatic wildlife – list of species found including fish distribution, methods of assessment and expected/potential terrestrial/aquatic wildlife use;
 - c) sensitive ecosystems (using a standard method such as Sensitive Ecosystem Inventory, Terrestrial Ecosystem Mapping or Biogeoclimatic Ecosystem Classification (BEC) to the site series) based on the most recent products available and ground truthing;
 - d) adjacent lands including protected areas, agricultural status(ALR) and local government zoning if appropriate;
 - e) observations and/or records of federally listed (endangered, threatened, or special concern), provincially ranked (Red or Blue), or regionally significant plant communities and species (for all life stages) or their habitats (including Critical Habitat for Species at Risk Act listed species);
 - f) other existing environmentally valuable resources, including corridors, wildlife trees, and hibernacula, etc.;
 - g) landforms, site stability, geological and topographical features and contours – this may be highlighted for further assessment by a geotechnical professional;
 - h) detailed contour maps and cross sections are required, if available, for sites with slopes greater than 20%;
 - i) surface and ground water features including swales, wetlands, draws, spring discharge or recharge areas, floodplains, top of bank, high water mark; and
 - j) land use history including existing structures, paved and unpaved roads, soil disturbance, logging, and land clearing (this does not include an archaeological assessment).
3. **Rare and endangered species** records, within and adjacent to the subject property, will be determined using all available data including, but not limited to: Conservation Data Centre's (CDC) online Ecosystem Explorer, Ministry of Environment's Conservation Framework, BC Government IMPABC, Species at Risk Act Public Registry and local expert knowledge. If rare and endangered species are suspected to potentially utilize the site, a species specific inventory must be conducted, in the appropriate seasons.
 4. **Riparian Areas Regulation** generally applies, if the proposed development project involves disturbance of land within 30.0 metres of a watercourse; 30.0 metres of the top of bank of a ravine less than 60.0 metres wide; or 10.0 metres of the top of bank of a ravine more than 60.0 metres wide. A RAR assessment must be appended to the EA and the Streamside Protection and Enhancement Area (SPEA) setback must be shown on the site map.
 5. **Environmentally Sensitive Area (ESA)** stratification of ecosystems and identification of environmentally valuable resources occurring within the study area based on their environmental sensitivity. The designation of ESAs is a key element in the planning

process as it identifies area constraints and opportunities (avoidance/conservation, mitigation, and restoration) thus encouraging a more integrated and sustainable development plan. The following four-class rating system shall be applied to all ESA evaluations.

- a) **ESA-1 (High):** Occurrence-based Critical Habitat, locally and provincially significant ecosystems, extremely rare and/or of critical importance to rare wildlife species. These areas may also represent a diverse range of habitats and contribute significantly to the overall connectivity of the habitat and ecosystems. Avoidance and conservation of ESA-1 designations is the primary objective.
 - b) **ESA-2 (Moderate):** Attribute-based Critical Habitat, locally or provincially significant ecosystems, uncommon and important to rare wildlife species. ESA-2 should be avoided, but if development is pursued, portions of the habitat must be retained and integrated to maintain the contiguous nature of the landscape. Some loss to these ESAs can be offset by habitat improvements to the remaining natural areas found on the property.
 - c) **ESA-3 (Low):** Ecosystems that may have low to moderate conservation values because of importance to wildlife (e.g. disturbed or fragmented ecosystems or habitat features). These areas may contribute to the diversity to the landscape, although based on the condition and adjacency of each habitat the significant function within the landscape is limited. If development is pursued in these areas the impacts should be offset by habitat improvements in other more sensitive natural areas found on property.
 - d) **ESA-4 (Not Sensitive):** Little or no inherent ecological value or importance as wildlife habitat. The majority of development should occur within ESA-4 areas.
6. **ESA criteria/rating system:** to be developed and used in the evaluation of ESAs and must be included in the EA report. Principle components will be required in evaluating the sensitivity of ecosystems and environmentally valuable resources, and delineating buffers around these areas. ESAs differ in their biological value within the study area and within the surrounding region and their biological value at the time of assessment can be thought of as falling somewhere along a continuum from very high to low biological value depending on a number of factors.

The primary components to be considered during the ranking and mapping of ESAs include the following (not all will be relevant at each site and other factors than these may require consideration as well):

- a) ecosystem mapping refined to 1:5,000 or less, including structural stage and seral association or condition. (Note: BEC site series is the base unit for TEM, but designed for forested ecosystems);
 - b) rarity in the region, province, country, including historical loss;
 - c) landscape context including contiguity to other ESAs (buffering function) and whether the area is vital to health of ecosystems beyond its boundaries (water catchment, storage/recharge zone);
 - d) habitat suitability for provincially ranked and/or federally listed or significant species;
-

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- e) presence of important environmentally valuable resources (e.g. breeding/spawning areas, hibernacula, migration stop over, connectivity corridors, reported sightings of uncommon species, ungulate winter range);
 - f) species diversity/habitat complexity;
 - g) ecosystems at risk in the Okanagan including riparian (including subsurface flow and recharge areas), wetlands, grasslands, rock outcrops, talus and cliffs, old growth, and low elevation forests;
 - h) vulnerability to anthropogenic disturbance (e.g. soil disturbance, road conflicts, pets, invasive plants);
 - i) current condition (biological integrity) function, structure, stability and probability of restoration to a functional level or ecological capability; and,
 - j) cumulative impacts from surrounding land uses.

Currently, stratifying ESAs are to be completed from a primarily objective approach relying on all existing information and a professional understanding of the functional requisites of the existing ecosystems, including the potential for provincially ranked and/or federally listed or significant species.

Where ESA evaluations require a more subjective approach, a clearly articulated discussion/rationale will be provided in the report. It is recognized that environmental consultants use a variety of methods to weight the various relevant factors. However, it must be clear in the report of the consultant which factors were considered in determining the biological value of a site.

7. **Ecological assessment results:** to be used to guide project design and planning for the development. Applicable BMPs will be recommended regarding alternative development standards and design that incorporate the ESAs and environmentally valuable resources identified within the lot area (e.g. covenants and buffers).

2.4 EA Report — Impact Assessment & Mitigation Phase

The Impact Assessment & Mitigation Phase is generally carried out after the preliminary layout plan has been prepared and outlines the impact (if any), of the development footprint on sensitive ecosystems and recommends mitigation measures to minimize or cause no impact.

The following is a list of requirements that must be completed as part of a report prepared in relation to the Impact Assessment & Mitigation Phase:

1. **Proposed Development Description** incorporates the information from the ecological assessment and examines it in the context of the proposed development including:
 - a) description of existing site conditions, development proposal, reasons for work and alternatives, phasing, and timing and required development applications;
 - b) current site plan, if available, superimposed, if appropriate, on the most current cadastral map with an orthographic photograph background of the subject property;
 - c) summary of current and proposed provincial legislation, local government bylaws, policies and permitted uses affecting the subject property; and

-
- d) other relevant provincial, Regional District and agency policies, existing studies and issues (e.g. servicing, stormwater management, open space dedication) related to the sensitive ecosystems, and provide an opinion as to the conformity of the proposal to these policies and guidelines.

Impacts

- 2. **Assessment:** of the potential impacts of the development proposal on ESAs and environmentally valuable resources before, during, and after construction. Evaluate and describe the significance of all potential impacts by considering:
 - a) Magnitude,
 - b) Geographic extent,
 - c) Timing,
 - d) Duration,
 - e) Frequency,
 - f) Reversibility; and,
 - g) Likelihood of occurrence.
- 3. **Short/long term impacts:** as well as direct and secondary impacts will be identified;
- 4. **Consider cumulative impacts:** including previous, current and possible future disturbance on the site and in surrounding lands, watercourses and subsurface drainage. This means both the effects of the surroundings on the proposed development and vice versa. This includes consideration of wildlife travel corridors to surrounding habitats; and
- 5. **Residual impacts:** that cannot be mitigated need a plan developed for compensation and restoration. Provide recommendations for future assessments.

Mitigation and Development Guidelines

- 6. **Avoidance:** must be the priority action before mitigation and compensation options are considered. The EA will be used as a tool for the design phase by using BMPs5 to avoid identified ESAs and environmentally valuable resources. Recommended avoidance approaches could include:
 - a) delineate 'no-disturbance areas' or 'buffers,' around ESAs to be in accordance with the Ministry of Environment's most current Best Management Practices (BMPs), and amendments thereto. Permanent fencing may be necessary along some buffers where development and/or related-activity are anticipated;
 - b) permanent disturbances such as roads and structures must not be located on non-disturbance areas as identified by the QEP;
 - c) avoid disturbance to sites where provincially ranked and/or federally listed or significant plant species or communities occur, and maintain Critical Habitat attributes and wildlife habitat structures such as old trees, snags, trees with cavities, and natural grasslands;
 - d) integrate existing native vegetation with new landscaping within the developed areas;

-
- e) prevent disturbance of nesting sites and breeding areas;
 - f) conserve trees in communities (groups of trees along with their associated under-story) rather than isolating individual specimens;
 - g) retain connectivity between habitats to create interconnectedness, especially for wildlife travel routes (e.g. conservation area, park, trail and wildlife and fish corridors);
 - h) use alternative development standards such as Land Title Act covenants, cluster development, or retention of attractive habitat features (e.g. rocky outcrops, wildlife trees); and
 - i) voluntary stewardship measures such as agreements/contracts, leases or eco-gifts to protect the feature or area.

7. Mitigation and compensation: will be considered if identified impacts cannot be avoided. All mitigation, restoration, and compensative prescriptions will include clearly articulated performance standards that are based on the best available science and that reflect the structural and functional objectives of projects. Refer to provincial BMPs when determining site specific mitigation measures. Describe all feasible mitigation measures and their anticipated effectiveness in maintaining the health, form and function of natural ecosystems and features by reducing or eliminating potential impacts from development. Outline the design and prescriptions to best protect ESAs and environmentally valuable resources and/or to compensate for permanent loss or degradation associated with (within or adjacent to) the proposed development. Recommended mitigation measures include:

- a) manage erosion and sediment impacts during and after construction according to measures prescribed in the most current provincial BMPs, amendments thereto, or other standards or guidelines adopted or approved by the Regional District;
- b) control invasive plant species using site and species appropriate methods (e.g. hand pulling, digging, cutting, and mowing);
- c) schedule construction ONLY during recommended timing windows for species;
- d) design linear corridors such as roads, driveways, or trails to be as narrow as possible, create as little disturbance as possible and configure them to allow for wildlife crossings;
- e) wherever possible, use permeable surfaces or other means to minimize impact and maintain the characteristics of the non-disturbance areas;
- f) manage access to “non-disturbance areas”, especially for vehicles and livestock;
- g) where there are extenuating circumstances preventing the protection of important ESAs, the recommendations of Provincial and/or Federal governments, and/or staff, and/or council in the context of the EA report will be considered. Options may include development modifications, enhancement opportunities, or dedicating or restoring comparable habitat area elsewhere on the property; and

-
- h) as a final option, compensation for any environmental losses from development could be administered by offsetting measures at a 3:1 ratio on the “no net loss principle”. This could include rehabilitation, restoration and enhancement of habitat areas or features that have been subject in the past to debilitation and other negative impacts.
- 8. Security deposits or bonding:** may be required by the Regional District in accordance with section 925 of the *Local Government Act*. If development conditions include mitigation, compensation, maintenance or monitoring plans, the applicant shall post a security deposit in an amount determined by the QEP and deemed acceptable by the Regional District. The security shall be sufficient to guarantee that all required mitigation measures will be completed, monitored and furthermore continue to function properly as prescribed.
- 9. Monitoring Reports:** a QEP may be required by the Regional District to monitor that the required measures of the permit have been implemented as designed. Monitoring will be conducted to avoid the following situations:
- a) condition in a permit respecting landscaping has not been satisfied;
 - b) an unsafe condition has resulted as a consequence of contravention of a condition in a permit; or
 - c) damage to the natural environment has resulted as a consequence of a contravention of a condition in a permit.
- 10. Accountability:** a QEP will identify who (e.g., agencies, departments, developers and/or personnel) will be:
- a) responsible for monitoring potential impacts, and propose a monitoring schedule including who will perform the monitoring;
 - b) accountable for potential impacts that might occur, and
 - c) responsible for unintended but foreseeable impacts.
- 11. Monitoring Plan:** in most cases the developer will be responsible for hiring a monitor. Recommend a monitoring plan for prevention, mitigation and compensation activities for the period before, during, and after construction, where appropriate. The monitoring plan will include, but is not limited to:
- a) the installation of temporary fencing to clearly delineate ‘no disturbance areas’ around ESAs and other areas designated for protection;
 - b) pre-construction meeting onsite between QEP and contractors to insure all site workers are aware of non-disturbance areas;
 - c) monitors or the District must be given the authorization to stop work if they believe that on-site conditions are in contravention of the conditions of the permit; and
 - d) regular monitoring reports sent to the District and regulatory agencies involved and a final ‘substantial completion’ report at the end of the project.

2.5 Rapid Environmental Assessments

A Rapid Environmental Assessment (REA) Report must be prepared, signed and sealed by an RPBio and adhere to all regional bylaws, federal and provincial legislation, regulation and standards and include the following:

1. **Environmentally Valuable Resources (EVR) assessment** will include an indication of the following values within 100 metres of a proposed development site for residential buildings and structures:
 - a) Site Plan indicating proposed footprint of development;
 - b) Sensitive Ecosystems (SEI: Vernon to Osoyoos):
 - i) Wetland (includes vernal or ephemeral);
 - ii) Riparian;
 - iii) Old Forest;
 - iv) Grasslands (including disturbed);
 - v) Shrub-steppe (includes antelope- brush, sage-brush);
 - vi) Broadleaf Woodland;
 - vii) Coniferous Woodland;
 - viii) Sparsely vegetated areas and rocky outcrops; and
 - ix) Other Sensitive Ecosystems.
 - c) Ecological Communities on BC CDC red or blue lists;
 - d) Known occurrence of listed species (federal or provincial);
 - e) Critical Habitat as identified under SARA (source: Species at Risk Act Public Registry); and
 - f) Habitat Features with high potential for important life requisites of listed species:
 - i) Wildlife Trees
 - ii) Hibernacula/Roosts
 - iii) Active nest sites or areas known for nesting
 - iv) Dens and burrows
 - v) Wildlife corridor considerations
 - vi) Other landscape features of environmental significance
2. **Mitigation:** information on EVR locations, strategies to achieve avoidance, and/or recommendations for restoration, protection and mitigation measures shall be provided in the form of a summary report where restoration, protection or mitigation measures are prescribed.