

PROPOSED AMENDMENTS TO THE CITY OF CAMPBELL RIVER OFFICIAL COMMUNITY PLAN (OCP) DEVELOPMENT PERMIT AREA GUIDELINES FOR GREAT BLUE HERON NEST TREES AND STEEP SLOPES

This document consolidates the proposed amendments to the Development Permit Area Guidelines in the OCP for public feedback, autumn 2021. The text that is ~~stricken out~~ is existing content to be deleted.

*The text in **gray shading** is the new content. In the steep slope section the gray shading also represents new content that is specific to reducing landslide risk and improving human safety. In the steep slope section the **green shading** represents new content that is specific to improving environmental outcomes.*

DEFINITIONS

Qualified Environmental Professional (QEP):

Means **an individual who is** an applied scientist or technologist, acting alone or together with another qualified environmental professional, if:

- 1) the individual is registered and in good standing in British Columbia with an appropriate professional organization constituted under an Act, acting under the association's code of ethics and subject to disciplinary action by that association;
- 2) the individual is acting within that individual's area of expertise; and
- 3) the individual is acceptable to the City of Campbell River.

With respect to item 2), above:

- a) For Streamside Development Permit Areas: the individual's area of expertise is recognized in the *Riparian Areas Protection Regulation* **Technical Assessment Manual** ~~assessment methods~~ as one that is acceptable for the purpose of providing all or part of an assessment report in respect of that development proposal;
- b) For Campbell River Estuary and Foreshore Development Permit Areas, coastal and shoreline erosion aspects: a coastal geomorphologist, or a marine or met-ocean engineer with experience in coastal zone engineering; other professionals with experience in coastal processes and soft shore restorations may be considered on a case by case basis.
- c) For Hazard Lands Assessments: a **qualified professional engineer** meeting the professional registration, education, training and **experience** outlined in Section 6 of EGBC's Guidelines for Legislated Landslide Assessments for Proposed Residential Developments in BC, ~~in geotechnical and slope stability engineering~~, or in flood protection design as the project may warrant.
- d) For Bald Eagle Nest Tree Development Permit Areas: a professional with experience in raptor assessments.

GENERAL ENVIRONMENTAL DEVELOPMENT PERMIT AREA

This section provides general justification, general areas and exemptions, general objectives, and general guidelines that apply to Development Permit Areas for Bald Eagle Nest Trees, Streamside, Campbell River Estuary, Foreshore, Sensitive Ecosystems Inventory sites, Watershed, and Hazard Conditions. Read this section in conjunction with the named Development Permit Areas.

General Exemptions

The following activities occurring in an Environmental Development Permit Area shall be exempt from the development permit application process:

- 1) **Emergency management:** Procedures to prevent, control or reduce flooding, erosion or other immediate threats to life, public or private property, are temporarily exempted from the requirement to obtain a City of Campbell River development permit. Following completion of emergency procedures, submission of a Development Permit ~~is~~ may be required depending on the degree of the works and based the discretion of City staff. Emergencies eligible for an exemption include:
 - a) works to prevent damage to, repair or replace public utilities;
 - b) clearing of an obstruction, e.g. from a bridge, culvert or drainage flow;
 - c) repairs to bridges or safety fences;
 - d) actions required to remove a hazard, including a tree or an unstable steep slope, that presents an imminent danger to the safety of persons or are likely to damage public or private property, as determined by a Qualified Environmental Professional.
 - e) hazard tree condition assessments must specify assessment targets and must reference the Wildlife Tree Committee of British Columbia Wildlife/Danger Tree – Parks Recreations Sites module

NOTE: All actions used to resolve emergency situations must be reported to the City and the appropriate Federal/Provincial authorities immediately prior to removal or disturbance of the subject property.

- 2) **Public works and services:** the construction, repair and maintenance of works by the City or its authorized agents and contractors are exempt from the formal development approval process, but the works must be completed in accordance with the assessments and recommendation of a qualified environmental professional (QEP) in accordance with the *Riparian Areas Protection Regulation* Assessment methodology and other applicable environmental regulations and best management practices.
- 3) **Environmental restoration:** restoration of environmentally sensitive areas by planting native vegetation and/or removing non-native invasive vegetation and/or removing garbage without the use of machinery following a plan that considers disposal, safety, planting, and erosion and sediment control to the satisfaction of the City.
- 4) **Geotechnical investigations:** boreholes and test pits are often needed to gather information for the development permit process. If these works fall within an environmentally sensitive area, they may be subject to restrictions and environmental timing windows as identified by a Qualified Environmental Professional. Prior to geotechnical investigations within an environmentally sensitive Development Permit Area, an environmental management plan to the satisfaction of the City, must be in place.

BALD EAGLE AND GREAT BLUE HERON NEST TREE DEVELOPMENT PERMIT AREA

Read this section in conjunction with the general development guidelines ~~which guidelines~~, which also apply in this Development Permit Area.

Area Designation

The Bald Eagle and Great Blue Heron Nest Tree Development Permit Area is designated ~~In accordance with the provisions of~~ pursuant to s. ~~Sections 488 (1) (a) of the~~ *Local Government Act*, for the purpose of protection of the natural environment, its ecosystems and biological diversity.

The Bald Eagle and Great Blue Heron Nest Tree Development Permit Area consists of:

- a) Within the Urban Containment Boundary all land within 60 metres of a ~~an identified~~ Bald Eagle nest tree or a Great Blue Heron nest tree; and
- b) Within the Comprehensive Development Permit Area, all land within 60 metres of a Bald Eagle nest tree and within 200 metres of a Great Blue Heron nest tree.

Bald Eagle and Great Blue Heron nest trees include trees that have a nest whether it is active or not, a nest remnant (any remaining sticks are still visible), a nest tree previously identified by a Qualified Environmental Professional where the nest is currently down, and includes a tree where a nest is under construction.

Distances are measured as a radius from the base of the nest tree or if multiple trees exist in a colony, distance is measured from the outer trees' bases. ~~In addition to the known Bald Eagle nest~~

Nest locations that have been identified are shown on Map 9. The locations of the Bald Eagle and Great Blue Heron nest trees identified on Map 9 are intended to provide an approximate location only. Ground-truthing by professionals is required to accurately determine the location of the tree or trees to determine if development falls within the development permit area. ~~development permits may apply to new sites occupied by eagles in both the Comprehensive Development Permit Area and within the Urban Containment Boundary as identified through biological inventory. Reference is encouraged to Wildlife Tree Stewardship (WITS) Atlas at <http://cmnmaps.ca/wits/>.~~

For clarity, the development permit area applies to land within the stated proximity of a nest tree whether or not the nest tree has previously been identified or mapped.

Justification

Section 34 of the *Wildlife Act* provides for the protection of Bald Eagles, Great Blue Herons and several other at risk bird species, their eggs and young while the nest is occupied, and the nest at all times. ~~Both eagles and herons~~ Bald Eagles are most susceptible to disturbance when human activity patterns near their nest are changed and disturbances are particularly disruptive to nesting birds early in the breeding season. ~~and each pair is unique.~~

Bald Eagles are large raptors that build large, heavy nests. This requires large, old trees with an open branch structure. Preventing the loss of nesting and perching trees is a key component in assuring the long term viability in the eagle population.

Great Blue Herons are Blue-Listed (vulnerable) provincially, and federally they are a species of Special Concern due to their small populations and productivity declines. This species is susceptible to eagle predation, human disturbance and development related habitat loss.

Buffer areas adjacent to these sites are critical to protect nesting trees and to assure the long term viability of the local breeding population. Habitat and nest tree loss since the 1990's prompted the formation of the Wildlife Tree

Stewardship Program (WiTS) comprised of government and non-government partners. The program documents nest tree locations, nest site and territory activity and encourages habitat protection strategies based on a breeding territory perspective over the outdated tree by tree approach.

Exemptions

Refer to The General Environment Development Permit Exemptions that also apply also to the Bald Eagle and Great Blue Heron Nest Tree Development Permit Area is section.

A development permit is not required if a QEP certifies in writing that the structure of a Bald Eagle or Great Blue Heron nest tree has deteriorated to the point that the tree can no longer support a nest structure.

Bald Eagle and Great Blue Heron Nest Tree Development Permit Guidelines

In addition to the *General Environmental Development Permit Guidelines*, the following specific guidelines shall be addressed for Bald Eagle and Great Blue Heron Nest Tree Development Permit Areas:

- 1) Maintain the full Development Permit Area as a naturally vegetated buffer of 60 metres, measured as a radius from the base of the nest tree (includes trees that have a nest active or not and includes a tree with a nest remnant and includes a tree where a nest is under construction) or otherwise as determined by a Qualified Environmental Professional. The 60 metre buffer also applies to identified Bald Eagle nest trees where the nest is no longer present until five breeding seasons have passed with no signs of nesting activity. This period may be shortened if a Qualified Environmental Professional determines that the tree no longer has sufficient nest support structure. If the breeding pair still uses the historic nest tree or other trees in the Development Permit Area for breeding activities even after the five-year period (for example, mating, feeding, fledgling perch sites, etc.), any new development activities, including tree removal, remain subject to the Development Permit process.
- 2) If the full Development Permit Area cannot be naturally maintained, a QEP assessment report must:
 - i) Describe the proposed development
 - ii) Demonstrate that all avenues to avoid and minimize development in the Development Permit Area have been exhausted
 - iii) Map all historical and current nest sites within 500 metres
 - iv) Consult with the WiTS data base and the provincial heron data base, include previous local reports (where applicable) and include any local reports of nesting activity
 - v) Map and include an assessment of important buffer, roost and perch trees
 - vi) Comprehensively describe the habitat noting species present, degree and age of tree cover, invasive species present
 - vii) Describe connectedness and importance of the Development Permit Area habitat to other natural area corridors
 - viii) Comment on existing uses in the Development Permit Area and how this impacts habitat. Describe which uses are grand-parented and which uses need to be restored or mitigated with supporting plans to achieve that
 - ix) Provide specific recommendations for timing or phasing of the development that is consistent with the provincial Develop with Care best management practices so as to avoid construction disturbance during the breeding season
 - x) Provide a detailed nest tree monitoring schedule based on recommended provincial methodology to record nesting success and to determine the effect of development disturbances to breeding birds; QEPs must report details on nesting success to the relevant provincial contact / data base
 - xi) Clarify that the nest monitor must take written notes and the monitor has the power to stop construction activity if nesting is disrupted by development activities
 - xii) Include the requirement to submit a post development QEP report
 - xiii) Include dated photo documentation
 - xiv) Describe signage and/or fencing or some other form of demarcation indicating the buffer boundary to deter encroachment into the buffer during construction and over time
 - xv) Include cost estimates for all works including materials, monitoring and report writing that are referenced in the report. During the eagle tree and general environmental development permit process, an assessment and

~~mapping of all existing perch trees and recruitment trees shall be provided as part of the environmental report.~~

- 3) The shape of the Development Permit Area may be altered to retain important habitat features that are not within the designated standard radius buffer measurement if supported by QEP assessment and provided there is no net habitat loss.
- 4) Any encroachments into the Development Permit Area or alterations to the standard radius buffer measurement shape of the Development Permit Area must be accompanied by specific QEP mitigation and restoration recommendations including:
 - a) Tree protection plans completed by a certified arborist to ensure how the nest tree(s) and other significant tree health will be maintained during site development and over the long term as a result of the development (may include hydrological considerations); wind firmness of perimeter trees must be discussed
 - b) Demonstration that there is enough room for whole tree failure to occur so as not to create targets and hazard tree concerns
 - c) Provide garbage removal and invasive species management plans aimed to improve habitat function
 - d) Provide revegetation plans that include native species tree recruitment and a minimum 5-year monitoring schedule; natural regeneration is acceptable provided it is supported by QEP rationale and adequate monitoring to ensure success
- 5) ~~If the 60 metre buffer cannot be achieved either due to lot size or location of the tree on the lot then the distance may be altered if the applicant supplies a report from a Qualified Environmental Professional with experience in raptor assessments. The report shall provide detailed recommendations for protecting the function of the nest tree and alteration of the 60 metre development permit area (or the portion of the 60 metre buffer on the subject property) must result in no net habitat loss. This may be accomplished by inclusion of known perch tree or buffer trees in the area for protection and the availability of recruitment nest tree habitat shall be addressed. The report shall also address known history of Bald Eagle use at the site including nest activity and other known nest sites within the breeding territory and distance to the adjacent Bald Eagle nest tree territories /nest locations shall be supplied. The Wildlife Tree Stewardship data base shall be referenced for existing site specific information and with nearby neighbours to help inform altered Development Permit Areas. Recommendations shall be compared with the more general recommendations to the latest BC Environment Best Management Practices for the species (Develop with Care). Requirements for development permit may be waived where the landowners have offered and entered into restrictive covenant to maintain an acceptable no disturbance buffer.~~
- 5) If the province grants a permit to remove a Bald Eagle nest tree, the owner must retain a Qualified Environmental Professional with experience in raptor assessments to develop a habitat compensation plan to ensure that there is no net habitat loss. The post development QEP report must contain the following information:
 1. Summary of construction and nest monitoring notes
 2. Clear demonstration as to how the Development Permit Area buffer criteria were met including the initial phases of mitigation and restoration (if required); include dated photo-documentation
 3. Outline outstanding recommendations and the timing for implementation of these including reporting requirements
 4. Details confirming that nest success was reported to the relevant provincial contact /data base

Hazard Conditions ~~Development Permit Area~~

Steep Slope Development Permit Area

Read this section in conjunction with the general environmental development guidelines which also apply in this Development Permit Area

Area Designation

The Steep Slope Development Permit Area is designated pursuant to s. 488 (1) (b) of the *Local Government Act*, for the purpose of protection of development from hazardous conditions.

The Steep Slope Development Permit Area consists of all land within 20 metres of a slope that is both at least a 30% grade and 10 metres high from the crest to the toe. Steep slope locations shown on Map 10 are intended to provide an approximate location only. Ground-truthing by professionals is required to accurately determine the location of steep slopes to determine if development falls within the development permit area. ~~Development permit approval in steep slope areas will be required prior to any site clearing, site excavation, tree or vegetation removal (subject to exemptions below).~~

Justification

The purpose of designating these areas is to minimize loss of life and damage to property and the environment in areas identified as having potential for landslide risk ~~flood risk and/or geotechnical (slope) instability~~ by initiating minimum standards and legislative requirements for safety and protection.

Exemptions

The following development ~~may be exempt~~ is exempted from the requirement to obtain a Steep Slope development permit for Hazardous Conditions:

- 1) ~~Development may be exempt from the development permit process,~~ Where a geotechnical report that meets the Guidelines for Legislated Landslide Assessments for Proposed Residential Developments in BC has been received ~~in conjunction~~ with an application for a single family residence on an existing lot only in conjunction with a building permit ~~or subdivision approval.~~
4. ~~Removing or moving soil in quantities below the thresholds identified in the Soil Deposition Bylaw;~~
5. ~~Erecting fencing~~
- 2) Minor structures including:
 - a) Fencing ~~above the crest of the slope;~~
 - b) Ancillary or non-occupied structures less than ~~below~~ 10m² where no variance is required, provided the structure is 10m from the crest and ~~providing~~ there is no fill or tree removal required.
- 3) For trees:
 - a) Removing dead trees that are hazardous as defined in the General Development Permit Area exemptions ~~provided that the stump remains undisturbed~~ provided that no bare soil or a depression is left that allows groundwater to collect and pond. Depending on the scale of the removal, the City may require a steep slope hazard assessment to determine if additional measures are needed to manage landslide risks;

- b) ~~Planting new trees~~ native trees in accordance with written advice of a Qualified Environmental Professional that provides recommendations for follow up monitoring until establishment, so long as existing trees are not removed;
- c) Removal of trees where the tree trunk diameter is less than 5cm (measured 1m from the base); ~~and~~
- d) Pruning and limbing where the tree trunk diameter is greater than 5cm (measured 1m from the base) ~~pruning, limbing and topping of trees provided~~ subject to a Certified Arborist provides a written opinion stating that the activity will not kill the tree.
- e) Tree modification to support nesting opportunities for Bald Eagles as recommended by a QEP may be considered in areas where recruitment nesting habitat is unavailable and, even if the modifications are not generally recommended by a certified arborist (for example topping large conifers);
- f) Vegetation maintenance as described in sections a., c., d. and e. is only permitted once an exemption form is completed to the satisfaction of the City;
- g) Vegetation maintenance as described in sections a., c., d. and e. is only permitted during the window of least risk for breeding birds (1 September through 28 February);
- h) All cut vegetation arising from maintenance activities conducted under sections a., c., d. and e ~~and d.~~ must be removed from the slope at the time of cutting;
- i) If yard waste or refuse exists on the slope, no vegetation maintenance as identified in condition c., d. or e. is permitted until a Qualified Environmental Professional addresses what should be done to correct the situation and those corrective measures are implemented; and
- j) Tree removal, pruning and limbing as referenced in conditions c, d and e are only permitted:
 - i) If a certified arborist describes in writing and shows on a site plan that at least 25% of the slope on the subject property has existing native tree cover (clustered or spread out) and that the proposed maintenance activities will not interfere with the native tree retention area targets. Limbing and pruning is permitted in the native tree retention areas to allow for views through the trees provided a certified arborist determines that the work will not kill the trees
 - ii) If 25% of the slope on the subject property does not have existing native tree cover, vegetation maintenance is not permitted until such time that a plan to restore the native tree target on the slope is in place and that plan is provided to the City for approval.

4) Domestic yard maintenance, gardening and planting, including:

- a. In the 20 metre buffer area at the crest or the toe of the slope, planting new vegetation and maintaining existing vegetation through mowing, pruning, and similar activities; and
 - b. Removing any live or dead vegetation with a stem diameter less than 5cm (measured 1m from the base), including ~~provided~~ the root structure is not disturbed provided that exposed soil is repacked, regraded and replanted; provided that yard waste deposition on the slope does not occur.
- ~~a. Removing any vegetation with stem diameter less than 5cm (measured 1m from the base), and not resulting in areas of exposed soil on a steep slope. Yard waste deposition on the slope is not permitted under any circumstances.~~

Hazard Conditions Development Permit Guidelines

In addition to the General Environmental Development Permit guidelines, the following specific guidelines shall be addressed for the Steep Slope Hazard Conditions Development Permit Area:

- 1) Development must maintain native vegetation on the steep slope and demonstrate that all avenues to avoid and minimize alteration to the steep slope have been exhausted.
- 2) Locate buildings, structures, and landscaping as far as reasonably possible from steep slopes and wet areas at the base of slopes
- 3) If the Development Permit Area cannot be naturally maintained, a slope hazard report must:
 1. In a steep slope area: For a property whose boundaries lie within 20 m of a slope that is both at least a 30% grade and 10 m high from the crest to the toe (a "steep slope")
 - a) Maintain the full Development Permit Area as a naturally vegetated area
 - b) Applicants shall submit a geotechnical report, prepared by a QEP. This report shall address all issues related to site drainage, soil slippage (surface and deep seated), seismic constraints, site clearing, vegetation retention, and how this relates to development usage, setbacks and design. The geotechnical report shall be co-ordinated with the environmental report required by other City Development Permit Areas, if applicable, to create a combined solution that mitigates both hazard and environmental impacts and protects environmentally valuable resources. If the Development Permit Area cannot be naturally maintained either through proposed development on the slope or works within the buffer (at the toe or crest of the slope), a slope hazard report must:
 - i) Additional QEP assessment, including advice from a certified arborist may also be required depending on the nature of the proposed works
 - i) Meet the standards in *Guidelines for Legislated Landslide Assessments for Proposed Residential Developments in BC* published by Engineers & Geoscientists BC for addressing the scope, level of effort, hazard analysis, and report requirements. The report must include all items listed in section 3.7 of the *Guidelines*
 - ii) Address the potential for landslips, rockfalls, slope failures, debris slides, debris flows, and any other relevant geohazards including any such geohazards that could affect the proposed development, regardless of whether the geohazard originates on or beyond the development property boundaries
 - iii) Describe site topography, geology, hydrology, hydrogeology, and other relevant terrain conditions
 - iv) Describe past slope failures events on the subject property and on the adjacent slopes, and the types of slope hazards within the general vicinity of the development property
 - v) Include detailed plan(s) showing the existing ground topography, the proposed development (i.e. final grades, structures, driveways, utilities, drainage facilities and detention areas, septic fields, irrigation structures, swimming pools, hot tubs, roads, site clearing, retaining walls etc.)
 - vi) Identify and map all large conifers that must be retained in order to maintain slope stability
 - vii) Identify the distance that all structures and all elements of the proposed development are to be set back from the crest and the toe of the slope
 - viii) Describe long-term maintenance of any development or mitigative works proposed in relation to the slope
 - ix) State if the proposed mitigative works could transfer risk to other proponents and, if so, broaden the assessment to include the entire area that could be affected by the mitigative works
 - x) Clearly describe the assumptions, methodology, and rationale used in the hazard or risk analysis, and the potential magnitude, frequency and runout of any potential hazard events

- xi) Describe climate data and modeling used in the assessment, and consider the potential impacts of climate change, including sea level rise
- xi) Provide a professional opinion, subject to conditions and qualifications contained in the report, that the land may be safely used for the purpose intended and meets provincial guidelines (where applicable)
- xii) ~~Must include~~ Include the completed "Landslide Assessment Assurance Statement," available in Appendix D of EGBC's *Guidelines*
- xiii) Articulate that no fill, including garden waste, lawn clippings, excavated material, or household refuse can be placed on the slope or along pre-existing drainage channels
- xiv) If yard waste or refuse exists on the slope, the report must address what should be done to correct the situation

4) If the Development Permit Area cannot be naturally maintained an environmental management report must:

- i. Include a tree inventory detailing the number, species, size (diameter at breast height), condition and approximate age of all trees on the property
- ii. Identify trees with significant wildlife values
- iii. Describe seepage and drainage areas and their associated plant communities
- iv. Inventory invasive plant species and their coverage
- v. Map these features on site plan
- vi. Include a vegetation management plan showing the limits of clearing and any required tree protection zones during the construction stage in order to retain a minimum of 25% native tree area on the slope including significant wildlife trees and as many conifers with a diameter >30cm as possible. If these targets cannot be met, a rationale must be included;
- vii. The native tree retention areas may be clustered in one area or spread out over the slope according to other natural features retained
- viii. Detail how seepage and drainage areas and the plant communities they support will be retained
- ix. Tree prescriptions with timelines describing how native tree retention areas will be managed to achieve multi-aged stands with at least half of the retained trees being mature trees, and at least half of all trees being conifers
- x. Native tree retention areas must be designed in a way that allows the trees to grow and deteriorate naturally through wind damage and decay without being declared hazard trees
- xi. Some limbing and pruning will be permitted in the native tree retention areas to allow for views through the trees provided a certified arborist determines that the work will not kill the trees
- xii. Tree modification to support nesting opportunities for Bald Eagles as recommended by a QEP may be considered in areas where recruitment nesting habitat is unavailable, even if the modifications are not generally recommended by a certified arborist (for example topping large conifers)
- xiii. Invasive species management plan detailing removal methods and disposal requirements in order to keep invasive plant coverage limited to no more than 20% of the slope face

5) Any vegetation removals that are approved through the appropriate technical assessment must be conducted during the window of least risk for breeding birds (1 September through 28 February) and if this is not possible, a QEP must complete a breeding bird survey prior to the works to identify any active nests, applicable buffers and timing windows for the work

6) Reference and review any work submitted by structural engineers as it relates to the development

2. Show how buildings, structures, and landscaping is located as far as reasonably possible from steep slopes and wet areas at the base of slopes
- 7) Surface water, including roof and surface drains must be diverted away from slopes in a controlled manner as designed by a qualified professional and ponding must be avoided near the slope crest
- 8) Terracing Show how terracing of the land should be avoided or minimized and landscaping must be native and follow the natural contours of the land
- 9) Where ever possible, avoid undercutting the base of slopes for building, landscaping or other purposes
- 10) Provide engineered designs where retaining walls are required. In some locations, shorter, tiered walls may be preferable to a single high wall
- 11) Where vegetation is removed or where soil is bare to disturbance, native vegetation must be reinstated in collaboration with a QEP
- 12) Where vegetation is cut, it must be removed from the slope at the time of cutting. Natural coarse woody debris including logs that existed on the forest floor prior to cutting should be retained
- 13) After the development is completed, a post development report completed by the qualified professionals is required that certifies:
 - a) That the hazard and environmental conditions have been met;
 - b) Identifies a timeline and milestones for tree prescriptions and invasive plant management where required; and
 - c) Presents management recommendations / protocols