

## ESA DPA Guidelines and Application Checklist

The following guidelines and checklist summarize the requirements of projects within Environmentally Sensitive Area (ESA) Development Permit Areas (DPAs) and are intended to streamline the application review process. This checklist must be completed by the Qualified Environmental Professional and submitted along with the Development Permit application.

The following items are required for all ESA DPA applications. Additional reports such as (but not limited to) an erosion and sediment control plan, stormwater plan, arborist report, geotechnical assessment, and construction and environmental monitoring plan may also be required at the discretion of the Town or at the recommendation of a QEP.

1. **A QEP Report** must be submitted containing the following information:
  - a. Name(s) and qualifications of the Qualified Environmental Professional (e.g. RPBio, RPF, PEng, etc.);
  - b. Summary of current site conditions;
  - c. Maps of the location of ESAs, natural features, nests, invasive plant species and any other site characteristics relevant to the ESAs;
  - d. Mapped locations of watercourses, top of bank, and the riparian protected area as defined under the Development Permit Area;
  - e. Summary of the planned development concept;
  - f. Recommendations to ensure that ESAs are protected throughout the development process;
  - g. Location and type of any environmental degradation and opportunities for restoration;
  
2. **A Restoration Plan** must be developed or approved by a QEP and contain the following information:
  - a. Location and description of environmental degradation such as encroachment, invasive species infestation or clearing;
  - b. Description of actions required to restore the area to a natural and healthy plant community.
  - c. Maintenance and monitoring requirements for a 3-year period, to ensure at least 80% plant survival.
  - d. A cost estimate of the proposed restoration works for bonding purposes.

Refer to chapter 6.0 of the DPA2 Update Report (2024) for additional guidance and requirements for restoration plans.

3. The following DPA2 Guideline Application Checklist must be submitted along with the DP application.

Development Guideline		Terrestrial Ecosystems	Freshwater & Riparian	Marine & Eelgrass Beds	Comments
<b>Move Development Away from ESAs and Reduce their Footprint</b>		Consistent – Yes, No, or N/A. Grey boxes indicate the guidelines that do not apply.			
Locate development and infrastructure as far away as possible from ESAs.	Locate development footprints and infrastructure as far away as possible from ESAs. If development must be located within an ESA, minimize its footprint and size to reduce impacts to the ESA.				
	For Terrestrial Ecosystem ESAs, if development is within an ESA, an environmental assessment by a QEP is required to outline mitigation measures to minimize the impact of development.				
	For Freshwater and Riparian ESAs, if development is less than 30 m from the Top of Bank, riparian setbacks must meet or exceed the minimum setbacks required by the <i>Riparian Areas Protection Regulation</i> (or future versions of this regulation) and be determined by a QEP.				
	For Marine & Eelgrass ESAs, if development is less than 50 m from the high-high watermark, marine setbacks must meet or exceed a minimum setback of 15 m from the highest high tide line, and be determined by a QEP. If the required setback results in the sterilization of a lot, the minimum setback must be determined by a QEP in discussion with the Town of Gibsons. A project review from the Department of Fisheries and Oceans may be required. Marine developments cannot impact known eelgrass beds.				

Development Guideline		Terrestrial Ecosystems	Freshwater & Riparian	Marine & Eelgrass Beds	Comments
Establish a transition area between ESAs and development.	Provide a transition area between the ESA and structures, infrastructure, and impervious surfaces. The width and recommendations for implementing this transition area must be provided by a QEP. No impervious surfaces are allowed in this area. Tree retention or planting, stormwater management, nature-scaping, and trails in these areas are encouraged. A landscape plan may be required at the discretion of the town.				
Locate and design new developments to avoid requirements for shoreline erosion protection.	When erosion protection is required, implement natural measures and engineered approaches to restore natural processes. New shoreline stabilization and protection structures are not permitted for the purpose of extending available space for new development (including buildings, lawns, gardens, additions to existing structures etc.)				
Where permitted by the province, locate docks, private floats, and wharves in areas that would prevent impacts to shoreline habitat.	When permitted, locate docks, private floats, and wharves in previously disturbed areas. Avoid disrupting native vegetation, slopes, and shoreline habitat. Marine developments cannot impact known eelgrass beds.				

Development Guideline		Terrestrial Ecosystems	Freshwater & Riparian	Marine & Eelgrass Beds	Comments
<b>Design to Minimize Impacts to ESAs</b>					
Protect trees in ESAs.	Provide an arborist report to ensure trees in the ESA are protected. The arborist report must identify trees that will be removed or retained, protection measures and a replanting plan.				
	Construct tree protection barriers for all trees in the ESA. Tree protection barriers must follow standards outlined in the Tree Preservation Bylaw (Bylaw No. 1282).				
	Retain and protect dead-standing wildlife trees that do not pose a risk to people or property. Only trees that are identified as posing a high risk by a certified Tree Risk Assessor can be removed or modified in the ESA.				
	Retain and protect established trees and understory vegetation outside of the ESA, where possible, to create continuous vegetated corridors.				
Preserve vegetation in retained ESAs.	Protect all native understory vegetation in the retained ESA.				

Development Guideline		Terrestrial Ecosystems	Freshwater & Riparian	Marine & Eelgrass Beds	Comments
Protect habitat for species and ecosystems at risk.	Protect and enhance identified critical habitat for federally and provincially listed species at risk found on site.				
Protect raptor and other protected nests.	Conduct raptor and heron nest surveys within 100m of the property.				
	If any raptor's nest or otherwise protected nests are identified, they must be protected following the provincial "Guidelines for Raptor Conservation during Urban and Rural Land Development in British Columbia (2013)" or future versions if one is released. Protected nests, as outlined by the federal <i>Migratory Birds Regulation</i> , must also be protected according to guidelines.				
Minimize light and window impacts on ESAs.	Consider the use of light reduction techniques such as directing light away from the ESA and reducing spill lighting.				
	Building design should consider reducing glass and transparent surfaces to reduce the potential for bird collisions or implementing measures to reduce bird collisions.				

Development Guideline		Terrestrial Ecosystems	Freshwater & Riparian	Marine & Eelgrass Beds	Comments
Implement design standards for safe wildlife crossings where new roads are required through an ESA.	Considerations may include culverts under roadways, bump outs, speed control measures, educational signage, fencing, and naturalization of medians.				
Minimize the crossing of watercourses and their riparian areas.	Minimize road, utility, and other crossings of watercourses and riparian ecosystems. Where crossings are necessary, design them to be narrow and perpendicular to riparian areas.				
Improve or maintain fish habitat and access.	Design all culverts and bridges over fish-bearing and seasonally fish-bearing watercourses to be fish-passable. This includes those crossing Charman Creek, Goosebird Creek, Gibson Creek and Chaster Creek and their associated tributaries.				
	Use clear-span bridges or open-bottomed stream crossings whenever feasible.				
	Incorporate fish baffles or other best management practices to support fish passage in enclosed crossings.				
Minimize impervious surfaces and promote natural filtration.	Incorporate absorbent landscaping and encourage the permeability of landscaped areas adjacent to ESAs by protecting and re-using native topsoil, preventing compaction during construction, and aerating or loosening compacted soils.				

Development Guideline		Terrestrial Ecosystems	Freshwater & Riparian	Marine & Eelgrass Beds	Comments
	Avoid paved features in ESAs, such as parking lots and paved trails. Use permeable materials where feasible.				
	Ensure maintenance vehicles are able to access stormwater infrastructure such as ditches, culverts, and creeks while maintaining the integrity of the ESA.				
Direct rainwater and surface runoff towards green stormwater management infrastructure.	Incorporate green infrastructure wherever appropriate, such as bioswales, rain gardens, or stormwater ponds, as part of site stormwater management.				
Minimize altering natural grades. Reduce the impacts associated with the deposition of fill or removal of soils.	Maintain the natural grade of the land unless the area is subject to flooding.				
	Ensure any unavoidable grading and soil movement does not negatively alter the hydrology of ESAs.				
	Protect existing habitat from unstable slopes associated with current or historic development activity.				
Protect ESAs from unstable slopes.	Protect ESAs from unstable slopes associated with current or historic developments. If there are steep or unstable slopes adjacent to or near the site, a geotechnical assessment may be required (see guidelines for Geotechnical Hazardous DPA1).				

Development Guideline		Terrestrial Ecosystems	Freshwater & Riparian	Marine & Eelgrass Beds	Comments
<b>Protect, Restore and Enhance ESAs</b>					
Ensure the long-term integrity of retained ESAs.	Register a natural state covenant on retained ESAs or dedicate ESA areas to the Town. Dedication of ESAs will be at the discretion of the Town and reviewed on a site-by-site basis.				
Restore disturbed and degraded lands within ESAs.	Develop a restoration and enhancement plan for the ESA. This plan must include monitoring and maintenance for a minimum of 3 years.				
	In shorelines and riparian areas, remove non-native fill, structures, and materials.				
Preserve and restore natural drainage patterns.	Avoid or mitigate changes to natural drainage patterns, including surface and groundwater volumes and flows and rates of infiltration and recharge.				
	Locate development away from recharge/discharge areas, including wetlands.				
	Maintain or enhance base flows to nearby watercourses by using permeable surfacing when possible.				
Maintain and enhance ditches.	Avoid or minimize culverting for driveway crossings.				
	If ditches with no headwater or groundwater inputs require removal, they should be replaced with green infrastructure.				

Development Guideline		Terrestrial Ecosystems	Freshwater & Riparian	Marine & Eelgrass Beds	Comments
Assess options to restore degraded watercourse channels and/or daylight culverts that connect to natural streams.	Consider the feasibility of daylighting or restoring any sections of a stream that is currently channelized or run through a culvert. Prioritize connected watercourses with the potential to expand fish habitat.				
<b>Minimize Impacts to ESAs During Construction</b>					
Schedule development activities to minimize risks to ESAs and restrict construction work during sensitive timing windows.	Bird nests are protected in accordance with the <i>BC Wildlife Act</i> , and <i>Migratory Birds Convention Act</i> . The nests of raptors such as bald eagle, peregrine falcon, osprey, and various owls are protected year-round. Active nests of all other birds cannot be removed or disturbed during the nesting season, March 1 to August 31. If tree or vegetation removal occurs within the nesting season, a bird nesting survey must be completed prior to any activity which may disturb nesting birds.				
	Any work within a fish-bearing watercourse must be completed during the regional instream window as determined by the province.				
	Focus construction activities adjacent to aquatic habitat during favourable weather and low water conditions to avoid sedimentation.				

Development Guideline		Terrestrial Ecosystems	Freshwater & Riparian	Marine & Eelgrass Beds	Comments
Avoid the introduction of invasive plant species to ESAs and eradicate any existing invasive plant species.	All invasive plant species identified on-site must be eradicated. Care must be taken to ensure they are not spread into the ESA. Follow BMPs to manage any invasive species found on site.				
	Monitor for and do not dump green waste into ESAs.				
	An invasive species management plan may be required to ensure construction does not facilitate the spread of invasives.				
	Dispose of all invasive plant material at an appropriate facility or treat on site where facilities are not available.				
	Avoid the introduction of new invasive plants on site by cleaning equipment before they arrive on site and ensuring any soil deposits are free of invasive plant fragments and seeds.				
Monitor activities during construction to avoid impacts and encroachment to ESAs.	Develop and implement a construction environmental management plan (CEMP). Complete monitoring reports at intervals identified in the CEMP and submit them to the Town. Monitoring intervals identified through consultation with staff.				

Development Guideline		Terrestrial Ecosystems	Freshwater & Riparian	Marine & Eelgrass Beds	Comments
Protect freshwater fish and their habitat.	All work in and around a stream must meet the requirements of the Water Sustainability Act and the Riparian Areas Protection Regulation. Instream work requires either a notification or change approval application to be submitted by a QEP under section 11 of the <i>Water Sustainability Act</i> and approved by the Ministry of Forests.				
Protect marine fish and fish habitat.	All work in and around the shoreline must avoid impacts on marine fish and fish habitat. Follow the Codes of Practice for projects near water to avoid impacting fish and fish habitat. If there is potential for the works to impact fish habitat, request a project review from the Department of Fisheries and Oceans (DFO) if required.				
Install protection fencing around the ESA.	Install temporary protection fencing around the retained ESA for the entirety of construction. This fencing may be combined with Tree Protection Fencing, provided it follows standards outlined in the Tree Preservation Bylaw (Bylaw No. 1282).				
	Install permanent fencing and signage following construction to avoid future impacts to the ESA. Ensure permanent fencing does not impede wildlife movement.				

Development Guideline		Terrestrial Ecosystems	Freshwater & Riparian	Marine & Eelgrass Beds	Comments
Prevent the release of sediment-laden water and pollutants into ESAs.	Incorporate erosion and sediment control best management practices to prevent sediment from entering nearby watercourses and ESAs. An ESC plan may be required at the discretion of the Town.				
	Incorporate stormwater infrastructure to minimize the long-term pollution impacts from surface runoff to ESAs associated with the development.				

Form completed by: (Project QEP)	Date:
Form checked by: (TOG Staff)	Date