

Guidelines for Dealing with Development Effects on Species and Ecosystems at Risk on the South Coast of British Columbia

Purpose:

The BC Government is committed to a **results based regulatory system** with decisions informed by **best available science**. In the interest of expediting the approval process for developments and providing local governments with appropriate conservation tools, these guidelines attempt to provide clarity around requirements for assessing, avoiding and mitigating impacts to species¹ and ecosystems² at risk during developments.

These guidelines are intended to ensure that development proponents use best available science to:

1. Identify potential occurrences of species and ecosystems at risk in development areas,
2. Conduct appropriate surveys to confirm presence/absence of species and ecosystems at risk, and
3. Avoid or mitigate impacts to species and ecosystems at risk (individuals, residences, and important habitats).

The intent of these guidelines is to be results based. Beyond meeting statutory requirements, proponents may propose alternate approaches, provided that equivalent results are achieved. For details on the roles and responsibilities of the BC Government and Recovery Teams, please see the Appendix 1.

Developments where these Guidelines Apply:

- All terrestrial land developments on private, municipal or regional district lands, excluding small family projects (i.e., those under about 0.25 ha and not involving subdivision), and
- All in-stream or wetland developments on private, municipal or regional district lands, regardless of scale.

Specific Planning Processes where these Guidelines Apply:

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| • Community Development Plans | • Watershed Plans |
| • Official Community Plans | • Regional Growth Strategies |
| • Neighbourhood Concept Plans | • Sector Plans |

¹*Species at risk* include species, sub-species or populations that are COSEWIC or provincially Red and Blue listed or considered regionally important.

²*Ecosystems at risk* include species communities that are provincially Red and Blue listed.

Step 1 – Identify Potential for Occurrences of Species and Ecosystems at Risk in Proposed Development or Work Areas

Proponents should assemble a comprehensive and updated list of all COSEWIC and provincially Red and Blue listed species and ecological communities (including vertebrates, plants, plant communities, fish and invertebrates) that potentially might occur within the study area. This information should be obtained from all possible sources, including:

- A search under the appropriate Forest District(s) and habitat types on the Ministry of Environment's "Species and Ecosystems Explorer" web page (www.env.gov.bc.ca/atrisk/toolintro.html).
- A request to the Conservation Data Centre (CDC) for rare element occurrence records (www.env.gov.bc.ca/atrisk/ims.htm).
- A review of all other appropriate species and ecosystems occurrence data sources (see list of data sources at South Coast Conservation Program web site – www.sccp.ca – on the *View Species and Habitat Data* page).
- Communication with Lower Mainland Ministry of Environment staff (Phone 604-582-5200).
- Communication with relevant local and regional governments, university researchers, First Nation organizations, local naturalists and local herbaria.

To facilitate monitoring of projects that might affect species and ecosystems at risk and to ensure that methods are considered credible, assessment results should be submitted to the Lower Mainland regional office of the Ministry of Environment (2nd Flr 10470 152nd Street, Surrey, V3R 0Y3; Phone 604-582-5200).

Sources for further information include, but are not limited to:

- COSEWIC, provincial and regional Status Reports, provincial Inventory Reports and provincial Identified Wildlife Management Strategy species accounts
- Provincial or federal Recovery Strategies and Action Plans
- Sensitive Ecosystems Inventory (SEI) information and Species Inventory Data System (SPI)

Step 2 – Conduct Appropriate Surveys to Inform on the Presence of Species and Ecosystems at Risk

Proponents should survey the study area for all COSEWIC and provincially Red and Blue listed species and ecological communities identified as potentially occurring in the region and the study area in particular. Note that permits may be required for some survey procedures as specified in the B.C. *Wildlife Act* (www.env.gov.bc.ca/pasb/index.html) and/or federal *Species at Risk Act* (www.sararegistry.gc.ca/agreements/permits_e.cfm).

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- Sampling must be conducted in accordance with any detailed standards that have been recommended by the Ministry of Environment (see Appendix 1 for list of species).
- If detailed standards are not available, then Resources Inventory Standards Committee (RISC) approved sampling methodology must be followed (ilmbwww.gov.bc.ca/risc/standards.htm).
- To ensure that data are considered credible, sampling must be conducted by a qualified environmental professional.
- Surveys should be conducted at the appropriate time of year because for some species detection out of season may be impossible (e.g. Phantom Orchid).
- Survey methods should be adjusted where possible to avoid incidental mortality of non-target species (e.g., when minnow trapping in the range of the Pacific Water Shrew, consider this article - http://www.forrex.org/publications/streamline/ISS31/streamline_vol9_no2.pdf).

To facilitate monitoring of projects that might affect species and ecosystems at risk and to ensure that methods are considered credible, survey results should be submitted to the Lower Mainland regional office of the Ministry of Environment (2nd Flr 10470 152nd Street, Surrey, V3R 0Y3; Phone 604-582-5200).

General information on Species and Ecosystems at Risk: www.env.gov.bc.ca/wld/serisk.htm

Resources Inventory Standards Committee: ilmbwww.gov.bc.ca/risc/index.htm

Step 3 – Avoid or Mitigate Impacts to Species and Ecosystems at Risk (including Individuals, Residences and Important Habitats)

The BC Government has committed to protect species at risk and their habitat (Accord for the Protection of Species at Risk, 1996) and the federal *Species at Risk Act* mandates effective protection to listed species under provincial jurisdiction. Proponents should thus follow the below guidance for avoiding and mitigating harm to species and ecosystems at risk.

Provincial Best Management Practices guidelines have been produced that outline how development impacts can be mitigated for species and ecosystems at risk in both terrestrial and aquatic environments (see www.env.gov.bc.ca/wld/BMP/bmpintro.html and the *Guidelines* page at www.sccp.ca).

For some species, recovery team recommendations might be integrated into more specific Best Management Practices guidelines. The Species and Ecosystem Explorer (www.env.gov.bc.ca/atrisk/toolintro.html), South Coast Conservation Program web site (www.sccp.ca) and Lower Mainland Region Ministry of Environment staff (Phone 604-582-5200) should be consulted to inquire about the availability of such guidelines. For some species (e.g. Pacific Water Shrew – see www.sccp.ca), these documents will form the basis of advice on both survey standards and mitigation of development effects. The same sources also should be consulted to inquire about the availability of other information such as recovery strategies or action plans for particular species. In lieu of any information as described above, proponents

should consult with Lower Mainland Ministry of Environment staff on the best available methods for mitigation of impacts (Phone 604-582-5200).

Step 4 – Monitor Mitigation Measures and Take an Adaptive Management Approach

It is important to monitor the effectiveness of the implemented mitigation measures to ensure that impacts to species and ecosystems at risk, including avoidance of harm to individuals, residences, and essential habitat, have been avoided/mitigated/compensated. This may include monitoring the populations and/or the operation and/or functionality of a mitigation measure (e.g. wildlife crossing for migration, fencing, plantings etc.).

Relevant questions include, but are not limited to:

- Are mitigation measures working as expected? Can they be improved upon?
- Are the measures adequate to achieve no net loss in habitat or population numbers?
- What further measures should be considered?
- What can we learn (positive and negative)?
- Have species and ecosystems at risk persisted in the long-term?

To facilitate monitoring of projects that might affect species and ecosystems at risk, to ensure that methods are considered adequate, and to ensure that we learn from past practice, mitigation strategies and results including monitoring should be submitted to the Lower Mainland regional office of the Ministry of Environment (2nd Flr 10470 152nd Street, Surrey, V3R 0Y3; Phone 604-582-5200).

Appendix 1

Roles and Responsibilities of BC Government and Recovery Teams:

1. Recovery Teams provide Government and other interested parties with best available science in the form of Recovery Strategies, Action Plans or other information sources.
2. Recovery Teams advise Government on the biological feasibility of recovery through Recovery Strategies, and advise Government on the socio-economic costs of Action Plans and benefits to be derived from their implementation.
3. Recovery Team recommendations will inform management practices, consistent with and dependent on all other relevant legislation and the biological and socio-economic feasibility of recovery. Where appropriate, Government will set Recovery Team recommendations into Best Management Practices (BMPs).
4. Recovery Teams will review the effectiveness of recovery actions (which may include application of BMPs) on an ongoing basis, and of the implementation of Recovery Strategies every five years.
5. Government, in consultation with Recovery Teams, will monitor success or failure in recovery and application of the BMPs. The level of success will be reviewed every five years, unless otherwise specified by Government.

Species with Special Survey Standards Available for the following:

- Great Blue Heron
 - Oregon Forestsnail
 - Oregon Spotted Frog
 - Western Painted Turtle
 - Pacific Water Shrew
 - Phantom Orchid
 - Streambank Lupine
 - Spotted Owl
 - Tall Bugbane
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- General advice for plant surveys (see Plant Identification page at www.eflora.bc.ca; note specific advice for rare plants)
 - General advice for bat surveys

For more information on a particular species above, including plants and bats, please phone 604-582-5200

Citation

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