Planning & Development Department
Trees and Landscape Section

Breeding Bird Survey/ Land Clearing Plan

Terms of Reference
March 2025

City of Surrey – Breeding Bird Survey and Land Clearing Plan
Terms of Reference

Between **March 1 and August 31** applications for a Tree Cutting Permit (TCP) relating, but not limited, to a Building Permit (BP), Development Permit (DP), Development Variance Permit (DVP) or Subdivision (SD) must submit a Breeding Bird Survey report before a tree cutting permit will be issued. A Qualified Environmental Professional (QEP) must complete the Breeding Bird Survey and report.

A QEP is a registered professional, such as a Registered Professional Biologist (R.P.Bio.) or Registered Biology Technologist (R.B.Tech.), with knowledge and practice in wildlife monitoring and survey design, and who is in good standing with their professional body. The QEP must be familiar with the standards and Best Management Practices (BMP's) provided at the end of this Terms of Reference.

Background

In British Columbia, breeding birds are protected under the provincial *Wildlife Act* and/or the federal *Migratory Birds Convention Act* and Migratory Birds Regulations. Under Section 34 of the *Wildlife Act*, a person commits an offence if the person possesses, takes, injures, molests or destroys a bird or its egg, or a nest that is occupied by a bird or its egg.

Additionally, Subsection 34(b) of the *Wildlife Act* and Schedule 1 of the Migratory Birds Regulations provide year-round protection to the nest of an eagle, peregrine falcon, osprey, heron, and pileated woodpecker whether the nest is active or not. The nests of these protected species may require a separate 'Protected Species Management Plan' if encountered.

In Surrey, the general breeding window for birds is between **March 1 and August 31**. However, favourable weather and/or other conditions may support breeding outside of these dates. As well, certain species may breed year-round (e.g., Barn Owl) and/or breed in habitats other than trees (e.g., on the ground or buildings, in shrubs or slash piles, etc.). It's recommended to engage a QEP prior to starting activities on site to identify if there are any timing restrictions and/or measures needed on site to avoid contravening the *Wildlife Act* and/or the *Migratory Birds Convention Act*.

If an activity or development risks injuring, molesting, or destroying a nest site, protective buffers and mitigation measures are to be prescribed by a QEP and followed to avoid contravening the *Wildlife Act* and/or the *Migratory Birds Convention Act*.

Breeding Bird Survey Process

The City will advise the applicant when a Breeding Bird Survey is required as part of their permit application. Should an active bird nest or bird nesting behaviour be observed during the Breeding Bird Survey, a Land Clearing Plan will also be required within the submitted report. Information requirements for a Breeding Bird Survey and Land Clearing Plan report are outlined in the following sections.

> **Note:** Due to the time sensitivity of Breeding Bird Survey's - typically 5 days or less - it's recommended that the survey take place only once all other TCP information requirements are complete and not more than 48 hours prior to scheduled vegetation clearing.

Submit the report to BirdSurvey@surrey.ca for review. A TCP will not be issued until the City has reviewed and accepted the Report.

Once accepted, the Breeding Bird Survey/Land Clearing Plan report will be included as an appendix of the TCP. Any QEP recommendations and/or mitigation measures identified in the report will be included as conditions of the permit.

Breeding Bird Survey Requirements

The Breeding Bird Survey is to be carried out by a QEP in a methodical and scientifically defensible manner, reflective of industry standards and Best Management Practices (BMPs). The survey area should extend beyond the area of proposed works to account for any active nests whose protective nest buffers may impact or engage the proposed works area.

Two consecutive surveys are required unless the QEP provides rationale to support why only one survey is required in their professional opinion. Chosen survey methods and intensity of effort should be reflective of habitat complexity, anticipated bird species, proposed development activities, and/or land use change. Surveys are to be conducted during appropriate weather

conditions (see Table 1 herein) and during an appropriate time of day when birds are most active (i.e., 3-4 hours after sunrise or before sunset)[1].

Table 1. Acceptable and unacceptable weather conditions for songbird surveys as adopted from the provincial Resource Inventory Committee (1999) Inventory Methods for Forest and Grassland Songbirds[1]		
	Acceptable	**Unacceptable**
Wind	Beaufort 0 (> 2km/hr). Calm Beaufort 1 (2-5 km/hr). Light Air Beaufort 2 (6-12 km/hr). Light breeze, leaves rustle	Beaufort ≥ 3 (12+ km/hr). Gentle Breeze, leaves and twigs constantly move
Precipitation	None, Fog, Misty to Drizzle	Light Rain, Hard Rain, Snow
Temperature	> 7°C (breeding)	< 7°C (breeding)

All nesting behaviours are to be documented. If an active bird nest is found, the QEP is to establish a protective nest buffer and setback distance to preclude disturbance until the species has completed breeding and young are no longer dependant on the nest for survival. The protective nest buffer is to be clearly delineated in the field by the QEP and included on a map in the Land Clearing Plan.

The following information must be included in the Breeding Bird Survey report:

1. QEP Qualifications:
   State the qualifications of the QEP completing the survey(s). The QEP must self-declare that they are qualified to design and conduct Breeding Bird Survey(s) and, if required, develop the Land Clearing Plan. The report is to be signed and stamped by the QEP.
2. Survey Methods:
   Describe how the survey was carried out, methods used, and intensity of effort. A minimum of **two (2) consecutive surveys** are required within 3-4 hours of dawn and/or dusk,[1] unless justified by the QEP.

[1] Ministry of Environment, Lands and Parks Resources Inventory Committee [MoELP RIC]. 1999. *Inventory Methods for Forest and Grassland Songbirds. Standards for Components of British Columbia's Biodiversity No. 15 (Version 2.0)*. Prepared for theTerrestrial Ecosystem Task Force Resources Inventory Committee. p.49

3. Weather, Time, and Duration:
   Describe the weather conditions, time of day, and duration of the survey following standard BMPs for completing bird surveys.
4. Site Description:
   Document property characteristics, surrounding land use, vegetation, and habitat types (e.g. cavities, buildings, grassy areas, wood or slash piles, thickets, etc.).
5. Observed Behaviour:
   Report all breeding behaviour and/or any off-site observations requiring protective buffers within the subject area.
6. Survey Duration:
   Identify the length of the time that the Breeding Bird Survey is valid for and include the rationale. Typical surveys are valid for three (3) to five (5) days and must be determined by the QEP based on relevant factors (e.g., species, timing, weather, activity, etc.).
7. Representative Photographs:
   Include photographs showing site features, vegetation, and any bird nesting features of interest. A brief description of the photograph's content, location, and date must be provided.
8. Survey Plan:
   Include a scaled plan showing the survey area relative to the proposed works area. A mark up of the arborist tree clearing plan is recommended to clearly identify the survey area and/or nest buffers relative to trees proposed for retention or removal.
9. Protected Species:
   If the nest of a protected species listed in Subsection 34(b) of the *Wildlife Act* or Schedule 1 of the Migratory Birds Regulation is identified, a Protected Species Management Plan may be required. Please email BirdSurvey@surrey.ca for further details on what to do if the nest of a protected species is encountered.
10. Land Clearing Plan:
    If an active bird nest is identified, the Breeding Bird Survey report is to include a Land Clearing Plan (described in the following section).

Land Clearing Plan Requirements

A Land Clearing Plan is to be included in the Breeding Bird Survey report where an active bird nest is present or suspected present. The Land Clearing Plan must clearly identify protective nest buffers relative to the proposed works area and any mitigation or monitoring strategies to preclude disturbance. The duration of the Land Clearing Plan must cover the incubation, rearing, and fledgling period until the young have left and are no longer dependant on the nest for survival.

Protective buffers around the active nest are to be prescribed by the QEP and in accordance with industry standards and BMP's. Determining the protective buffer distance should be methodical and prescribed based on the degree of tolerance of the species (e.g., alert and flush distances), landscape context, and anticipated level of disturbance. The protective buffer is to be clearly delineated in the field by the QEP and should be visible to all operators and crew members on-site. The protective nest buffer is to remain in place until the QEP confirms the nesting period is complete and/or the nest is inactive.

The Land Clearing Plan must include the following information:

1. Nest Identification:
   Specify the nest type, bird species, observed behaviour, and anticipated nesting stage (e.g., incubation, nestling, fledgling, etc.).
2. Protective Buffer Zones:
   Identify protective buffers around active nests (i.e., vegetation and/or noise buffer zones);
   Detail methods used to determine protective nest buffers (e.g., alert and flushing distance).
3. Management Strategies:
   - Outline vegetation management strategies relative to the nest buffer zones (e.g., phasing of clearing activities, temporary retention measures);
   - Outline noise management strategies inclusive of any recommended mitigation measures (e.g., QEP monitoring, modified work, etc.);
4. Monitoring and Duration:
   The Land Clearing Plan must be inclusive through incubation, rearing, and fledgling periods and/or until the nest is deemed inactive by the QEP. Detail the proposed monitoring strategy and any recommended follow-up inspection dates.
5. Adherence to BMPs
   List the appropriate BMPs and indicate how the BMPs for the subject species will be achieved through the Land Clearing Plan, or provide justification for their exclusion or amendment.

6. Survey Plan:
   Include a scaled plan showing the Nest Buffer Zones (i.e., vegetated buffer, noise disturbance buffer etc.) relative to the proposed land clearing activities. A mark up of the arborist tree clearing plan is recommended to clearly identify the survey area and/or nest buffers relative to trees proposed for removal and/or retention (temporary or permanent).

Note: If the QEP recommendations depart from provincial and/or federal BMPs, the report must indicate how and why the QEP recommendations depart from the BMPs and that in their opinion, the *Wildlife Act* and/or the *Migratory Birds Convention Act* will not be contravened through the implementation of those recommendations.

Should the developer/land-owner choose to depart from the QEP's recommendations, that developer/land-owner accepts liability for the potential contravention of the *Wildlife Act* and/or the *Migratory Birds Convention Act* .

Standards and Best Management Practices

The QEP must be familiar with and reference the following resources where they apply to the site-specific Breeding Bird Survey and/or Land Clearing Plan:

- Develop with Care (2014) Environmental Guidelines for Urban and Rural Land Development in British Columbia
  https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/laws-policies-standards-guidance/best-management-practices/develop-with-care
  - Develop with Care (2014) Section 4.0 – Environmentally Valuable Resources
    https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/best-management-practices/develop-with-care/dwc-section-4.pdf
  - Develop with Care (2014) Section 5.6 – South Coast Region
    https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/best-management-practices/develop-with-care/dwc-section-5-6-south-coast-region.pdf

- Government of British Columbia (2013) Guidelines for Raptor Conservation during Urban and Rural Land Development in British Columbia
  http://www.env.gov.bc.ca/wld/documents/bmp/raptor_conservation_guidelines_2013.pdf

- Government of British Columbia - Resource Inventory Standards Committee (RISC) Inventory Methods: https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/laws-policies-standards-guidance/inventory-standards/terrestrial-ecosystems-biodiversity
  - Inventory Standards for Forest and Grassland Songbirds (1999) https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/nr-laws-policy/risc/songml20.pdf
  - Inventory Standards for Raptors (2001) https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/nr-laws-policy/risc/rapt_ml_v2.pdf
  - Standardized Inventory Methodologies: Shorebirds (1997) https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/nr-laws-policy/risc/shorml10.pdf
  - Inventory Methods for Swallows and Swifts (1998) https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/nr-laws-policy/risc/sws.pdf
  - Inventory Standards for Waterfowl and Allied Species (1999) https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/nr-laws-policy/risc/waterfowl.pdf
  - Inventory Methods for Woodpeckers (1999) https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/nr-laws-policy/risc/woodml20.pdf

- Government of Canada (No Date): Guidelines to avoid harm to migratory birds https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/reduce-risk-migratory-birds.html

The Wildlife Tree Stewardship Program (WiTS) aims to document wildlife usage and location of wildlife trees as well as conserve wildlife trees within the remnant habitats of southern BC's altered ecosystems. If applicable, WiTS protocols and data collection forms may be used and the final report sent to WiTS for inclusion in their raptor nest database and continuous monitoring. Available online: www.wildlifetree.org