
Appendix 13

**Songbird Nesting Survey
Protocols for the Sea To Sky
Highway Improvement Project**

1.0 Song Bird Nesting Survey Protocols

All Song Bird Nesting Surveys (SBNS) must be conducted by a professional biologist (R.P. Bio).

1.1 Initiating a New Survey Cycle.

To obtain approval for a **NEW** cycle of SBNS, 1 survey and 2 replicates must be performed within a 5 day period. When performed correctly and approved by CWS, the surveys will allow for a clearing period starting on the day after the last survey and lasting 10 days thereafter.

Example:

- Pasco survey #1 conducted on the 10th.
- Pasco survey #2 conducted on the 12th.
- Pasco survey #3 conducted on the 14th.

A clearing period starting from the 15th - 24th is obtained following CWS approval. Surveys conducted on the 10th, 11th and 12th would be acceptable as well but would shift the clearing period to the 13th - 22nd.

1.2 Extension of Survey Cycle 1-5 Days Following On-Alignment Survey.

To obtain an extension of an existing SBNS cycle for an on-alignment area, 1-5 days after the most recent approved survey, **ONE** replicate survey must be conducted within this 1-5 day period.

Example:

- Previous on-alignment survey #4 conducted on the 14th.
- New on-alignment survey #5 must be conducted on or prior to the 18th.

A clearing period extension from the 24th to the 28th is obtained following CWS approval.

 Note that the day of the most recent approved survey count as day 1 and therefore the replicate survey is conducted, at the latest, on the 18th not the 19th.

1.3 Extension of Survey Cycle 1-4 Days Following Off-Alignment Survey.

To obtain an extension of an existing SBNS cycle for an off-alignment area, 1-4 days after the most recent approved survey, **ONE** replicate survey must be conducted within this 1-4 day period.

Example:

- Previous off-alignment survey #4 conducted on the 14th.
- New off-alignment survey #5 must be conducted on or prior to the 17th.

 Note that the day of the most recent approved survey count as day 1 and therefore the replicate survey is conducted, at the latest, on the 17th not the 18th.

1.4 Extension of Survey Cycle 6-9 Days Following On-Alignment Survey.

To obtain an extension of an existing SBNS cycle for an on-alignment area, 6-9 days after the most recent approved survey, **TWO** consecutive replicate surveys must be conducted within the 6-9 day period.

Example:

- Previous on-alignment survey #4 conducted on the 4th.
- Two new consecutive on-alignment surveys #5 and #6 must be completed on or prior to 12th for #5 and 13th for #6.

A clearing period extension until the 23rd is obtained following CWS approval.

1.5 Extension of Survey Cycle 5-9 Days Following Off-Alignment Survey.

To obtain an extension of an existing SBNS cycle for an off-alignment area, 5-9 days after the most recent approved survey, **TWO** consecutive replicate surveys must be conducted within the 5-9 day period.

Example:

- Previous off-alignment survey #4 conducted on the 4th.
- Two new consecutive off-alignment surveys #5 and #6 must be completed on or prior to 12th for #5 and 13th for #6.

1.6 Report Format, Naming, and Numbering.

A formal written report must be submitted to Liz Kovics, Andrew Allen, and Cristian Puga no later than 24 hrs following a bird nesting survey. The report and

the corresponding maps and data sheets must be electronically attached together and submitted via email as **ONE** .PDF file. The file name must follow the **exact formatting** given below.

(Seg #)(DB#)(Station #)(Area Comments)(Date)(Rep#)

Example:

- (Seg1)(DB1)(99+760-100+130)(Overland South)(May-26-06)(Rep10).pdf

Every conducted survey receives its own unique report #. The report # is assigned based on the previous survey conducted in the area.

Example:

- Pasco Survey conducted on the 10th is #1.
- Pasco Survey conducted on the 12th is #2.
- Pasco Survey conducted on the 14th is #3.
- Pasco Survey conducted on the 18th is #4.

1.7 Restarting a Cycle

If for any reason an SBNS cycle period expires, a new cycle can be started by following the rules given in section 1.1 above. Note that although a new survey cycle has been started, the unique report # will follow the previous numbers and will not be reset.

1.8 Flagging

When the professional biologist conducting the survey determines that a bird nest is active, the tree should be clearly flagged with ESA tape. Furthermore, a 20m (radius from nest tree) species specific buffer zone should be established in on-alignment areas. In off-alignment areas, a 30m (radius from nest tree) buffer zone should be established. When the professional biologist conducting the survey determines that a bird nest is inactive, the tree must be clearly flagged with ESA tape.

1.9 Pre-Clearing Survey

A pre-clearing survey must be conducted prior to the potential clearing of an area. This survey must be conducted by a wildlife specialist, bird surveyor, or a designate. Although a pre-clearing survey does not require a report, a confirmation email must be sent to the people mentioned in section 1.6. The



Kiewit



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email must clearly indicate the area surveyed and any comments or concerns that may have arise. A Current list of designates is listed below.

- Claudio Bianchini
- Phil Henderson
- Ken Summers
- Byron Andres
- Brenda Andres
- Adam Powchuk
- Liz Kovics
- Flyn McCarthy (only Seg 3)
- Kate Moss
- Linda Dupuis
- Alex Sartori