# Comprehensive Data Delivery README FILE

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| **Study Section** | Study 10.19: Evaluation of Wildlife Habitat Use |
| **Study Component** | (not applicable) |
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| **Field Date Range** | (not applicable; desktop study only) |

**Introduction:** The overall goal of Study 10.19, the Evaluation of Wildlife Habitat Use (hereafter Habitat Evaluation Study), was to provide Project-specific habitat value information for birds, mammals, and amphibians to facilitate quantitative assessments of the impacts on wildlife habitats in areas with the potential to be affected by construction and operation of the proposed Susitna-Watana Hydroelectric Project (hereafter Project) in Alaska. The Habitat Evaluation Study focused on systematically analyzing available habitat-use information for wildlife species (birds, mammals, and amphibians) to assess the value of each of the mapped wildlife habitats in the study area. In this study, categorical habitat values were determined for each mapped habitat type and each wildlife species known or expected to occur in the study area. The habitat impact assessments to be developed using the study results would occur during preparation of AEA’s License Application.

The study area for Study 10.19 consists of two separate, but connected, study areas. The upstream study area for the Habitat Evaluation Study consists of a 2-mi buffer zone surrounding the proposed reservoir (at projected maximum pool elevation), the proposed dam and camp facilities area, and the three alternative transportation/access road corridors. This study area matches exactly that used to map wildlife habitats in the Vegetation and Wildlife Habitat Mapping Study in the Upper and Middle Susitna Basin (Study 11.5 SCR) and to map wetlands in the Wetland Mapping Study in the Upper and Middle Susitna Basin (Study 11.7 SCR). The downstream study area for the Habitat Evaluation Study consists of the Susitna River floodplain from the proposed Watana Dam site downstream to just past the confluence of the Yentna and Susitna rivers at Project River Mile (PRM) 29.5. This study area matches exactly that used to map wildlife habitats in the Riparian Vegetation Study Downstream of the Proposed Susitna-Watana Dam (Study 11.6 SIR for 2015–2017). The Habitat Evaluation Study made use of existing habitat-association information from the field surveys for other Project wildlife studies (Studies 10.5–10.18); the relevant scientific literature for interior and southcentral Alaska, including information from the Alaska Power Authority Susitna Hydroelectric Project studies conducted in the 1980s; and professional judgement based on ABR staff experience studying wildlife in interior and southcentral Alaska. The Study Completion Report (SCR) for Study 10.19 was finalized in 2017.

**Data Summary:** Data generated for the Habitat Evaluation Study consist of GIS data layers created in the process of evaluating wildlife habitat use (see below). All other Project data used in the study have been archived under the appropriate wildlife study in which the data were collected (Studies 10.5–10.18) or the appropriate botanical study in which the mapping of wildlife habitats and wetlands was completed (Studies 11.5–11.7) All GIS data for the study have undergone at least a QC3 level of review.

*Field Data*—No field data were collected for Study 10.19. The study relied on data previously collected as part of the Project wildlife studies (Studies 10.5–10.18) and the Project botanical studies (Studies 11.5–11.7).

*Map Data*—The mapping data used to assess wildlife habitat values in this study were created in Studies 11.5 and 11.7 (upstream study area) and Study 11.6 (downstream study area) and have been archived under the appropriate study in which the data were collected. In this study, an additional set of habitats were added to the mapped habitats, in the upstream and downstream areas, to provide a set of habitats better suited to an evaluation of habitat use by nesting raptors. Similarly, a specific set of waterbird habitats, in the upstream area only, were generated from the mapping of wetlands in Study 11.7. .

**Data Organization:**

The GIS data are archived in the GIS subfolder /10-WLD/10.19-WLDHAB/GIS, which contains one geodatabase (SuWa\_10\_19\_GIS\_20170630.gdb) containing:

* WLDHAB\_NWI\_HAB\_Linked\_Data: feature class containing habitat map polygons which represent the upstream portion of the 10.19 Habitat Evaluation Study study area.
* WLDHAB\_RIP\_HAB\_Linked\_Data: feature class containing habitat map polygons which represent the downstream portion of the 10.19 Habitat Evaluation Study study area.
* WLDHAB\_RPTR\_Habs\_Downstream: feature class containing downstream mapped habitats for eagles and other raptors. Habitats evaluated include the 28 habitat types identified in Study 11.6 plus additional cliff and bluff habitat classes delineated from field survey maps created in the Survey of Eagles and Other Raptors (Study 10.14) and refined using digital elevation models.
* WLDHAB\_RPTR\_Habs\_Upstream: feature class containing upstream mapped habitats for eagles and other raptors. Habitats evaluated included the 28 habitat types identified in Study 11.5 plus (1) cliff and bluff habitat classes delineated from field survey maps created in Study 10.14 and refined using digital elevation models; and (2) narrow buffer areas delineated along streams and large lakes to isolate higher-value nesting habitats for Bald Eagles.
* WLDHAB\_Study\_Area: feature class containing polygons that represent the Wildlife Habitat Use Evaluation Study evaluation area (upstream and downstream study areas combined).
* WLDHAB\_WTRBRD\_Habs\_Upstream: feature class containing habitat map polygons for waterbirds; uses various combinations of National Wetland Inventory (NWI) wetland types to generate waterbird habitats in three general categories (riverine wetlands, lakes and ponds, and flooded wetlands).

**Online Data Link:** <http://gis.suhydro.org/SuWa/10-WLD/10.19-WLDHAB/>

**Online Report Link:** 10.19 Evaluation of Wildlife Habitat Use – Study Completion Report under 2017; Study Completion and Implementation Reports at <http://www.susitna-watanahydro.org/type/documents>

[[1]](#endnote-1)

1. **Data Distributor Contact Information:**

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