# comprehensive Data delivery README FILE

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| **Study Section** | Study 9.7: Salmon Escapement |
| **Study Component** | Gillnet Fish Capture for Radio Tagging |
| **Field Date Range** | September 10, 2014 ─ September 30, 2014 |

**Introduction:** The overall focus of Study 9.7 is to characterize the distribution, abundance, habitat use, and migratory behavior of all species of adult anadromous salmon (*Oncorhynchus* spp.) across mainstem river habitats and select tributaries above the Three Rivers Confluence (i.e., confluence of the Susitna, Chulitna, and Talkeetna rivers). Study 9.7 is focused on with the potential to be affected by construction and operation of the proposed Susitna-Watana Hydroelectric Project (Project) in Alaska.

Sonar data from 2013 showed that the Middle River fishwheels were not effective in September when river discharge and turbidity decreases. As a study variance in 2014, AEA used set gillnets to capture Coho Salmon in September. Eight specific objectives have been developed for Study 9.7, a few of which include multiple tasks. Use of a gillnet to collect Coho Salmon for radio tagging and subsequent tracking was as part of Objectives 1 and 2 and will help to provide a baseline characterization of salmon spawning locations migratory behavior and timing. These data will support the identification and evaluation of potential Project-induced effects on fish assemblages, and inform development of any necessary protection, mitigation, and enhancement measures.

**Data Summary:** In 2014, Middle River fishwheel operations ended on September 7, 2014 and every second day from September 10 to September 30 set gillnets were used to capture adult Coho Salmon for radio tagging in the Middle Susitna River in vicinity of Curry (PRM 124.2). The data structure consists of detailed information about survey effort (date/time, location, net mesh sizes, water quality), and fish catch (species, sex, length, radio tag specifications).

Data were collected in accordance with the methods outlined in the Final Study Plan for 9.7 with the exception of the variances identified in the ISR Part D (November 2015). Data management followed the QA/QC protocol described in the Implementation Plan ultimately resulting in a relational database of gillnet salmon data collected for the Susitna-Watana Project.

Data have undergone 3 levels of data quality control (QC), named QC1 to QC3. The QC levels, briefly, are as follows:

* QC1–Field Review: Review of field forms before leaving the field, or the QC level of raw data collected via field equipment such as thermistors, cameras, GPS units, etc.
* QC2–Data Entry: Data from paper forms are entered into an electronic format and verified.
* QC3–Senior Review: Final review by senior professional before submitting field data to AEA, or the QC level of raw data cleaned up for delivery to AEA.

**Data Organization:**  The gillnet data are delivered as an MS Excel file and accompanied by a data dictionary for information such as table and attribute descriptions.

**Software Considerations:** MS Excel or compatible software is needed for the gillnet data file.

**Online Data Link:** Folder Gillnet at <http://gis.suhydro.org/SuWa/09-FISH/9.07-ESCAPE/>

File 9\_FAQ\_Database\_Data\_Dictionary\_20170630.pdf at <http://gis.suhydro.org/SuWa/09-FISH/00/FAQ_Data_Documentation/>

**Online Report Link:** AEA has prepared several documents with data pertaining to this study component. However, because database QC is an ongoing process, the most recent version of the data found through the hyperlink above may supersede the results reported in study documents. Copies of the datasets used for analysis in the ISR and SIR are available through the hyperlink found at the beginning of the results section (Section 5). To aid review, study documents using this study component are listed below. Each of these documents is accessible on AEA’s Project licensing website (<http://www.susitna-watanahydro.org/type/documents/>) or through FERC’s eLibrary system (<http://www.ferc.gov/docs-filing/elibrary.asp>), in Docket No. P-14241.

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| **Title** | **Date Filed** | **Description** | **Links** |
| Salmon Escapement Study (Study 9.7), 2014 Implementation and Preliminary Results Technical Memorandum | 9/30/2014 | This attachment includes a report describing the methods and variances related to 2014 implementation of the Salmon Escapement Study, and preliminary results. | [Sept. 2014 TM for Study 9.7](http://www.susitna-watanahydro.org/wp-content/uploads/2014/09/09.07_ESCAPE_TM_Short-Version_new.pdf) |
| Initial Study Report –Part D for Study 9.7 | 11/6/2015 | The purpose of Part D to the Initial Study Report for Study 9.7 is to report on any additional implantation of the Study Plan from June 2014 to the end of the 2014 calendar year. | [ISR Part D for Study 9.7](http://www.susitna-watanahydro.org/wp-content/uploads/2015/11/09.07_ESCAPE_ISR_PartD.pdf) |
| Salmon Escapement Study, Study Plan 9.7, Study Completion Report | 11/6/2015 | This report described methods, variances and results for 2014 study year, along with synthesis of findings from the full 3 years of implementation (2012-2014) for salmon escapement study. | [SCR for Study 9.7](http://www.susitna-watanahydro.org/wp-content/uploads/2015/11/09.07_ESCAPE_SCR.pdf) |

**[[1]](#endnote-1)**

1. **Data Distributor Contact Information:**

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