

Initial Study Report Meeting

Study 9.17 *Cook Inlet Beluga Whale*

October 15, 2014

Prepared by
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Study 9.17 Objectives

- Document CIBWs and other marine mammals in the Susitna River delta, focusing on CIBW distribution and upstream extent
- Document CIBW group size, group composition, and behavior within the Susitna River delta
- Develop a model to describe the relationships between river flows, water surface elevation, and CIBW foraging habitats in the Susitna River

Study 9.17 Components

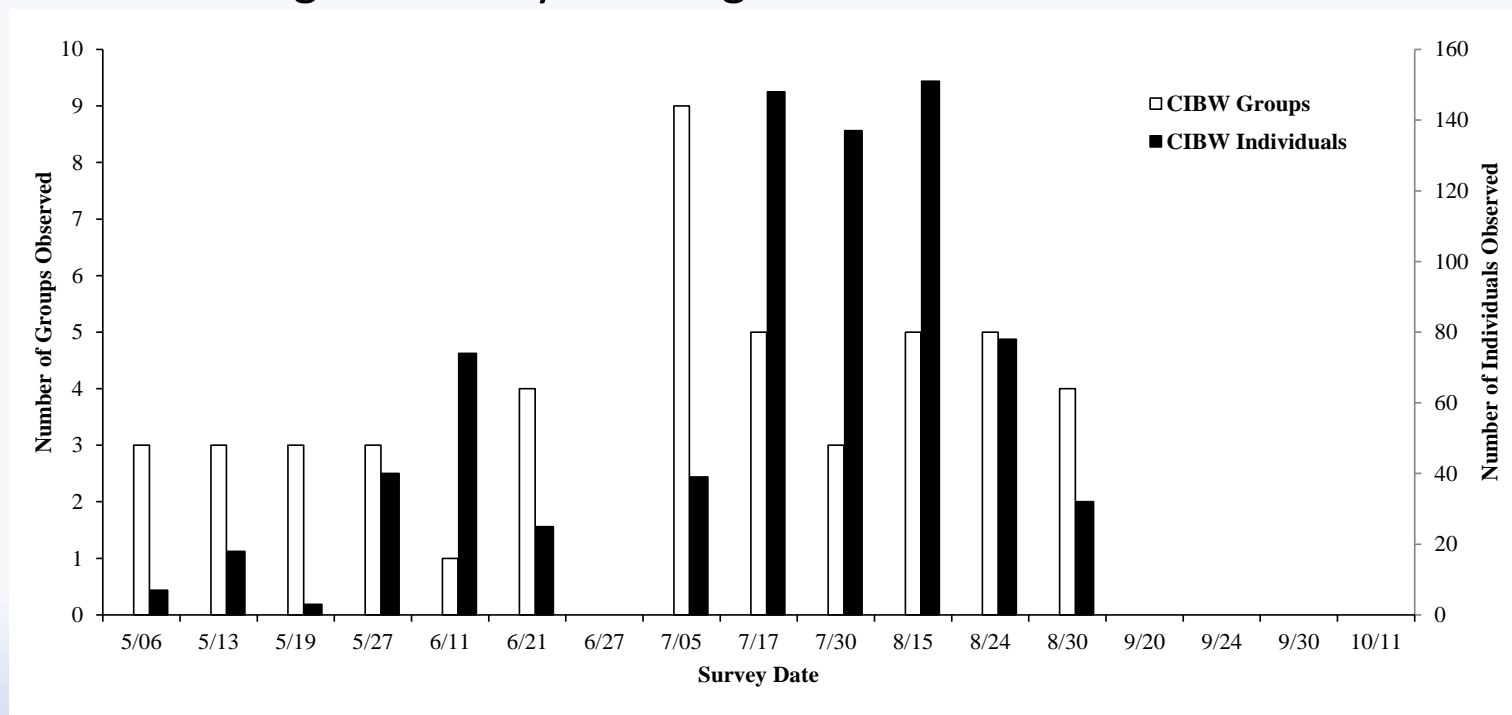
- **Document CIBW and Other Marine Mammal Presence within the Susitna River Delta** (ISR Part A, Section 4.1; pg 2)
- Document CIBW Group Size, Group Composition and Behavior in the Susitna River (ISR Part A, Section 4.2; pg 4)
- Develop a model to describe the relationships between river flows, water surface elevation, and CIBW foraging habitats in the Susitna River delta (ISR Part A, Section 4.3; pg 7)

Study 9.17 Variances

- Section 9.17.4.2.1 - **Observers did not document the angle of aerial survey sightings** as it was deemed unnecessary. Angles to sightings can be used to estimate density. Estimating density was not an objective of this study.
- Section 9.17.4.2.1 – Rather than using the median of CIBW group counts, each observer independently counted the number of animals in each group during multiple passes (up to five). **Observers then agreed upon a “best” count for each CIBW group.**
- Section 9.17.4.2.2 – Video cameras at PRM 6 were installed at the west camera station on June 24 and the east camera station on July 12; however, the **live-feed function of the cameras was not operational until September 25, 2013.** From September 13 through September 24, video from the cameras fixed at a wide-angle view of the river was recorded onto harddrives for later review. Additionally, two still cameras were installed at each video camera station on September 3 and they collected an image every 5 seconds through October 17.
- Section 9.17.4.3 – **Water surface elevation modeling was deferred until the next year of study.**

Study 9.17 Summary of Results in ISR (ISR Study 9.17, Part A – Section 5)

- Aerial surveys (ISR, Section 5.1; pg 8)
 - CIBWs sighted on 12 of 17 aerial surveys
 - Most sightings were within two miles of the shoreline
 - Sighting rates increased from May to July;
 - highest in July and August.

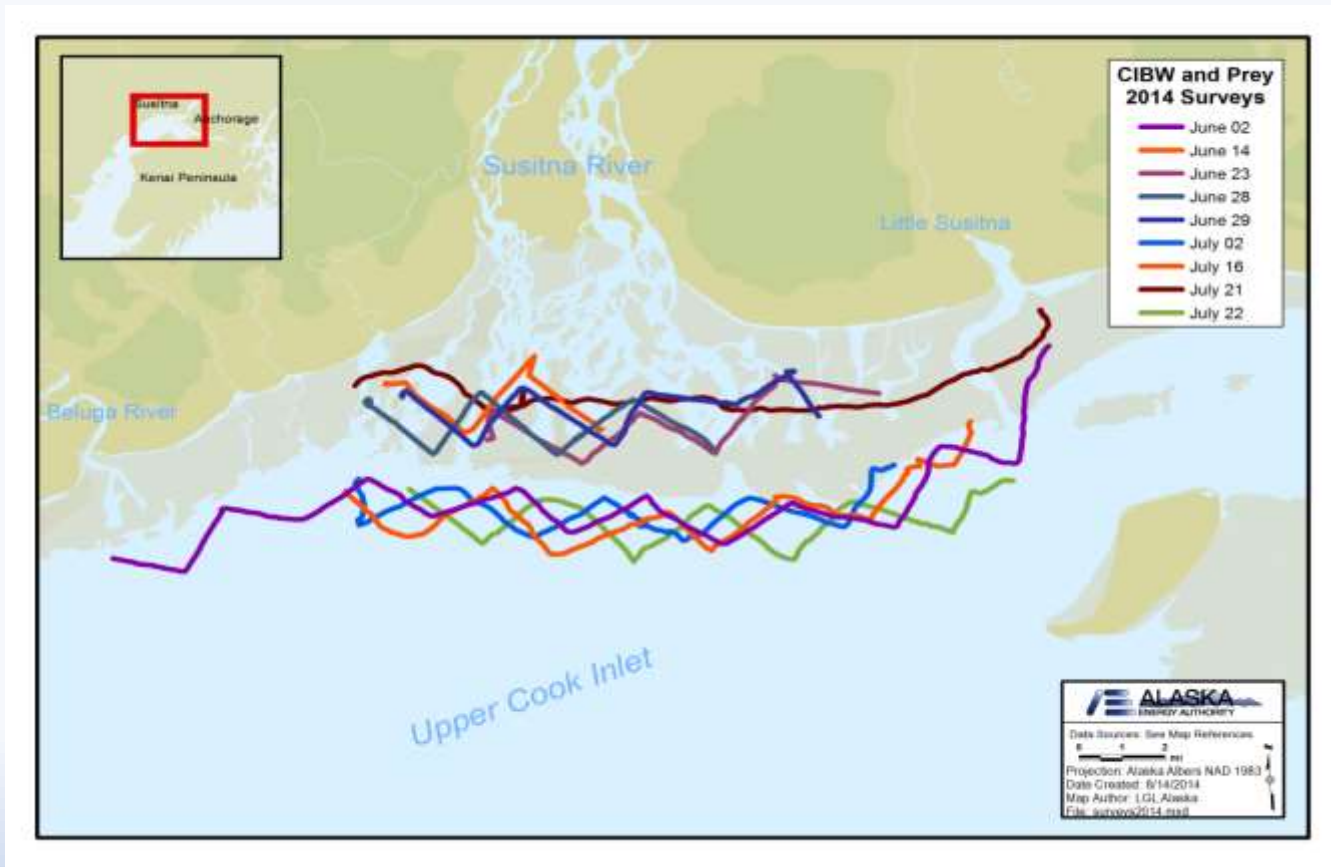


Study 9.17 Summary of Results in ISR (ISR Study 9.17, Part A – Section 5)

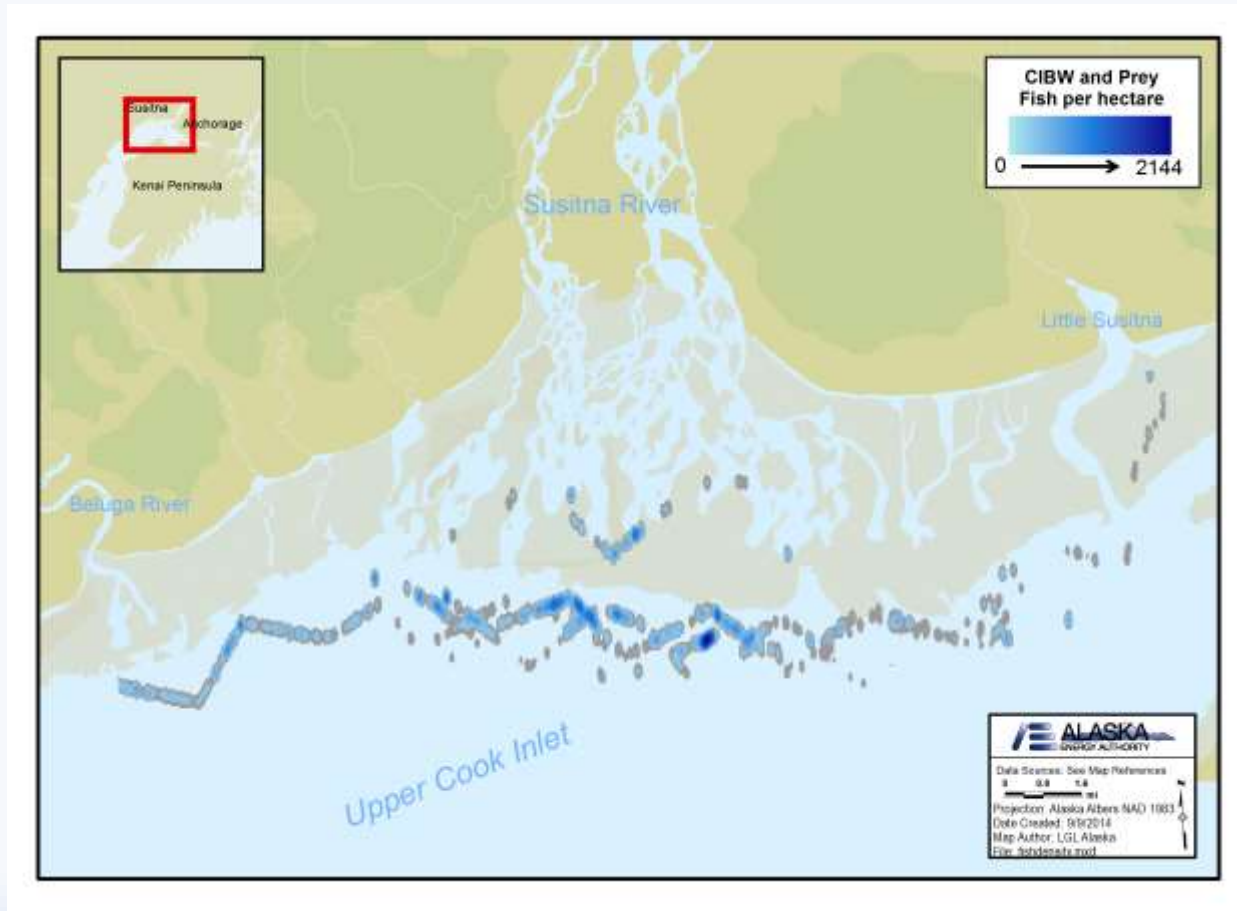
- Video and still cameras (ISR Section 5.2; pg 10)
 - Video was recorded Sep 3 – 24 at PRM 6
 - 7 sightings (likely the same group) on Sep. 20
 - 2 sightings on Sep. 22
 - Live-feed video was monitored Sep. 25 – Oct. 17
 - No sightings
- 1 group (2 CIBWs) was photographed on Sep. 4 at PRM 6
- No beluga whales were photographed by still cameras positioned from PRM 11 through PRM 16

Study 9.17 Summary of Results since ISR (2014 Study Implementation Technical Memo, September 2014)

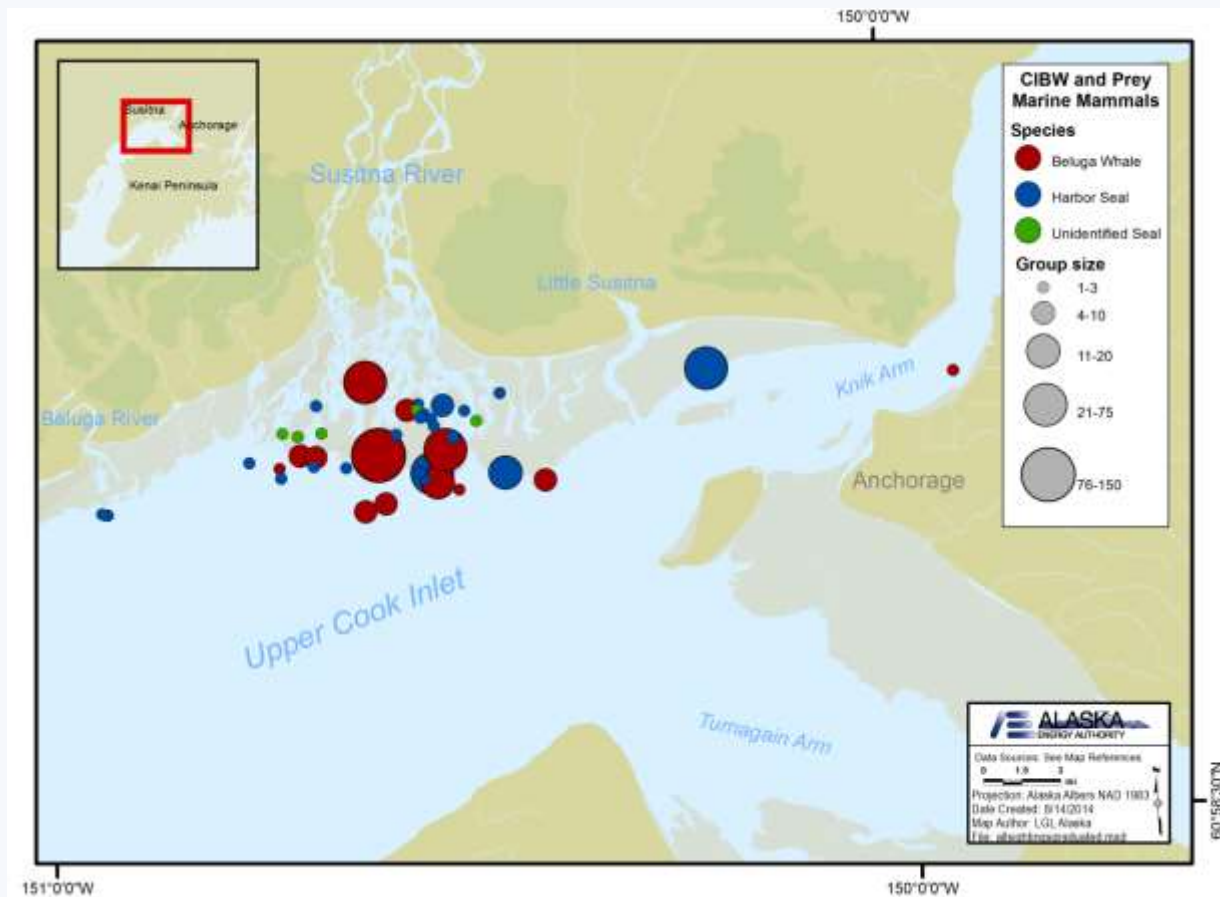
- Vessel-based surveys for beluga prey species
 - June and July 2014.



Study 9.17 Summary of Results since ISR (2014 Study Implementation Technical Memo, September 2014)



Study 9.17 Summary of Results since ISR (2014 Study Implementation Technical Memo, September 2014)



AEA Proposed Modifications to Study 9.17 in ISR (ISR Study 9.17, Part C – Section 7.1.2)

- Modified Revised Study Plan (MRSP) has been provided as Attachment 1 to the ISR.
- This MRSP applies to study plan activities that would occur in 2014 and 2015.

AEA Proposed Modifications to Study 9.17 in ISR (ISR Study 9.17, Part C – Section 7.1.2)

7.1.2.1. General Description of the Proposed Study

- **The Modified Revised Study Plan (MRSP) does not modify the study objectives**

7.1.2.3. Study Area and Timing

- **The MRSP does not change the study area or timing for activities in 2015**

7.1.2.4. Study Methods

- This section describes the phased approach for completing study activities in 2014 and 2015
- **The Implementation Plan (IP) describes revised methods for 2015 including:**
 - Aerial surveys will be replaced by incidental observations from vessels conducting activities for the Eulachon Study (9.16)
 - Camera stations will be replaced by manned observation stations
 - Water surface elevation modeling will be replaced by:
 - Stage height measurements and modeling performed by the Instream Flow Study (Study 8.5)
 - Wetted perimeter analysis performed for the Eulachon Study (9.16)

7.1.2.6. Schedule

- **AEA has updated this section to reflect activities planned in 2014 and 2015**

New Modifications to Study 9.17 since ISR (2015 Implementation Plan, September 2014)

2015 Implementation Plan Modifies:

- Methods described in the MRSP Section 9.17.4
- Schedule described in the MRSP

2015 Implementation Plan Does Not Alter:

- General Description of Study including study objectives
- Existing Information
- Study Area and Timing

New Modifications to Study 9.17 since ISR (2015 Implementation Plan, September 2014)

Camera Stations will be replaced by land-based observations (IP Section 4.1)

- Two stations (near PRM 6 and between PRM 15-20).
- Intensive sampling during peak CIBW use.

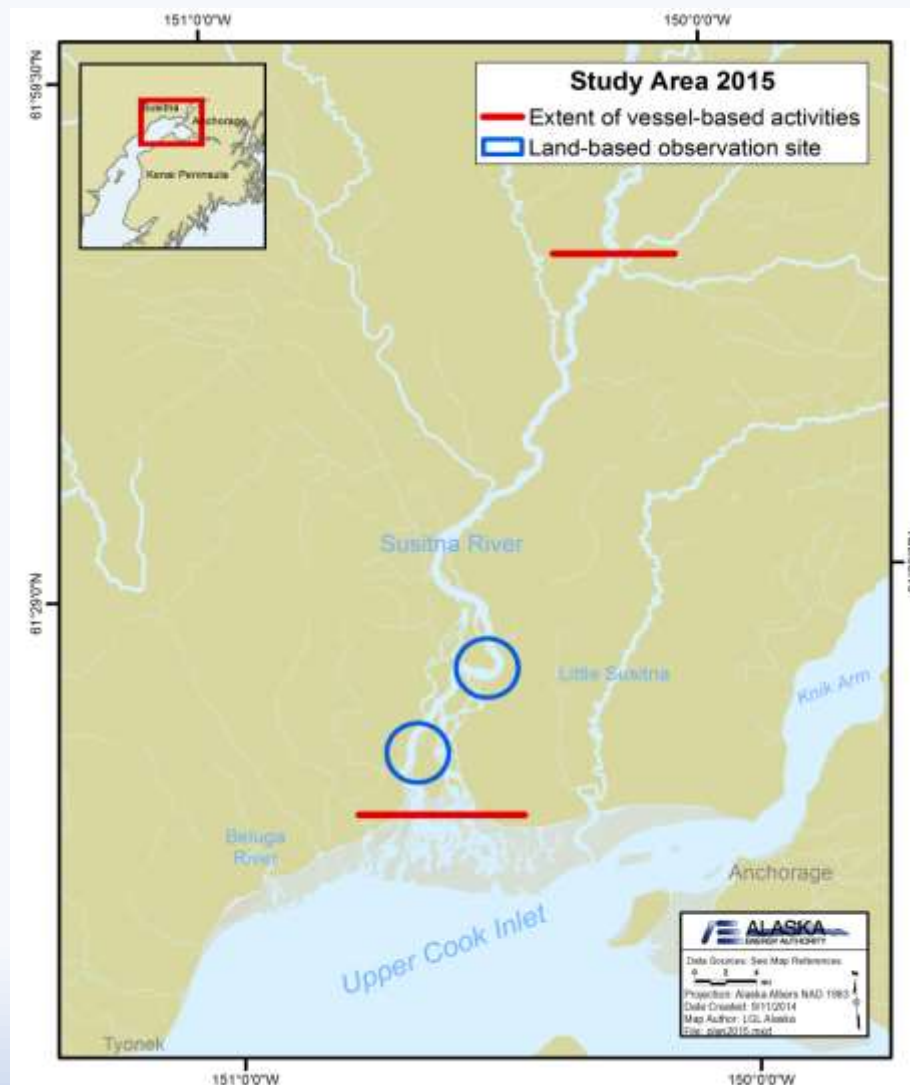
Aerial surveys will be replaced by Vessel-based incidental observations (IP Section 4.2)

- Eulachon Study (Study 9.16) biologists will look for belugas during transits.
- Record observation effort and CIBW sightings.

Habitat Modeling

- Extend stage height model into Lower River (Study 8.5)
- Wetted perimeter analysis (Study 9.16)

New Modifications to Study 9.17 since ISR (2015 Implementation Plan, September 2014)



Current Status and Steps to Complete Study 9.17

- Aerial surveys in 2013 and non-ILP studies have adequately documented CIBW distribution and timing in the Susitna River Delta.
- Methods tested in 2014 are not adequate to fully address study objectives in 2015.
- Land-based observations and vessel-based incidental observations will be conducted in 2015 to document CIBW use of the Lower Susitna River.
- Data from 2015 will be analyzed and results will be combined with those from 2013 and 2014 to fulfill study objectives.

Licensing Participants Proposed Modifications to Study 9.17?

- Agencies
- CIRWG meeting and Ahtna
- Public