

Initial Study Report Meeting

Study 9.17 Cook Inlet Beluga Whale

March 22, 2016

Prepared by DOWL

Study 9.17 Status

- ISR Documents (ISR Part D, Section 4)
 - Initial Study Report Parts A, B, and C (June 3, 2014)
 - Modified Revised Study Plan (ISR Part C, Attachment 1)
 - 2014 CIBW Study Implementation TM (Sept 26, 2014)
 - 2015 CIBW Implementation Plan TM (Sept 30, 2014)
 - ISR Part D (Nov 6, 2015)
- First year of data collection completed in 2013 (June 2014 ISR).
- **Vessel-based surveys** were conducted in 2014 to collect data on prey species and marine mammal distribution, behavior, and group composition (**Sept 26, 2014 TM**).
- Modifications to the June 2014 ISR have been identified but not implemented (Sept 30, 2014 TM and ISR Part D).

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

Components

Aerial surveys to document CIBW and other mammals within the Susitna River delta

A combination of video and still cameras to increase ability to detect CIBWs and to document group composition and behavior

Development of a model to describe the relationships between river discharge and water surface elevation in CIBW foraging habits at the delta

Variances

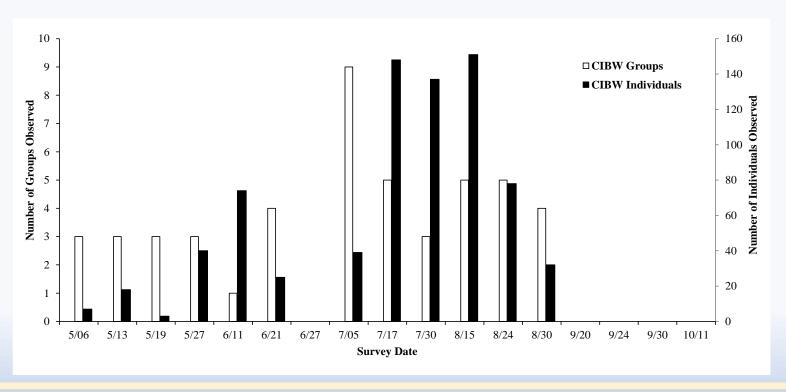
(ISR Part A, Section 4.1; pg 2)

- Observers did not document the angle of aerial survey sightings. (ISR Part A Section 9.17.4.2.1)
- Observers utilized a "best" count technique for each CIBW group. (ISR Part A Section 9.17.4.2.1)
- The live-feed function of the cameras was not operational until September 25, 2013. (ISR Part A Section 9.17.4.2.2)
- Water surface elevation modeling was deferred. (ISR Part A Section 9.17.4.2.3)

Summary of Results - 2013 Aerial Surveys

(ISR Part A, 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
- Peak sightings occurred in July and August.



Summary of Results – 2013 Cameras

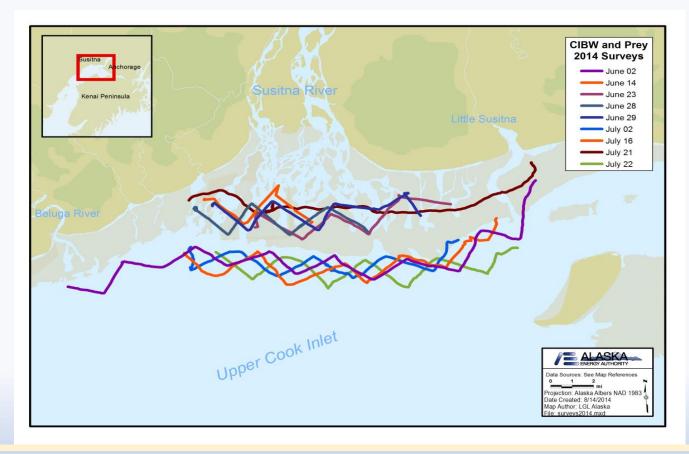
(ISR Part A, Section 5.2; pg 10)

- Video recorded Sept. 3 24 at PRM 6
 - 7 sightings (likely the same group) on Sept. 20
 - 2 sightings on Sept. 22
- Live-feed video was monitored Sept. 25 Oct. 17
 - No sightings
- Still Cameras
 - PRM 6 (operational Sept. 3 Oct. 17)
 - 1 group (2 CIBWs) was photographed on Sept. 4
 - PRM 11 PRM 16 (operational July 1– Oct. 8)
 - No CIBW were photographed

Summary of Results – 2014 Vessel Surveys

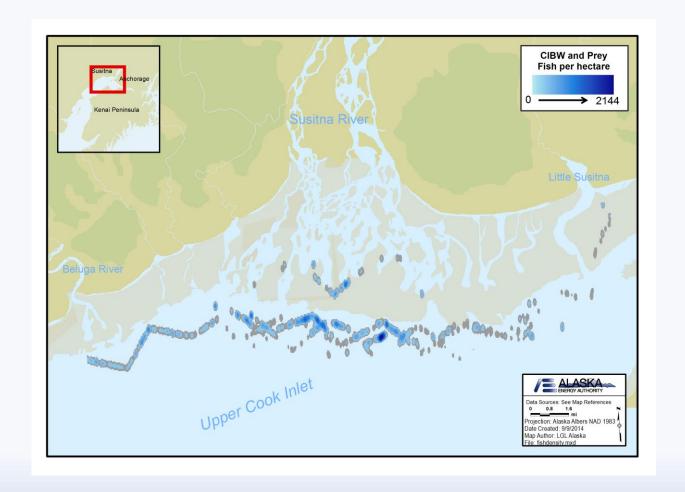
(Sept 26, 2014 TM)

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



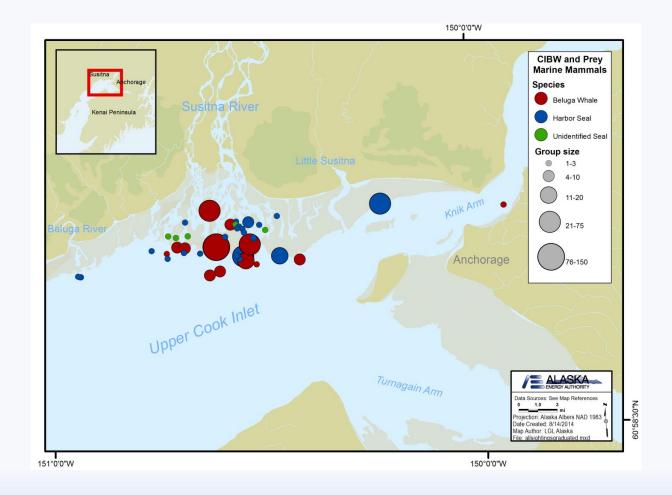
Summary of Results

(Sept 26, 2014 TM)



Summary of Results

(Sept 26, 2014 TM)



AEA Proposed Modifications

(ISR Part C, Section 7.1 and Attachment 1)

Aerial surveys would be replaced by **vessel-based incidental observations** (ISR Part C, Section 7.1.2.4.1)

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

Camera stations would be replaced by land-based observations (ISR Part C, Section 7.1.2.4.2)

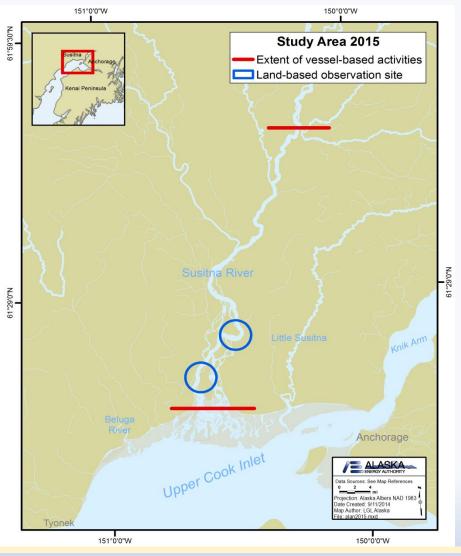
CIBW surveys would be conducted near the 2013 camera observation stations

Water surface elevation (WSE) model would be replaced by **habitat** modeling (ISR Part C, Section 7.1.2.4.3)

 Use ongoing modeling in the Geomorphology Study (Study 6.6) and Water Quality Study (Study 5.6) to evaluate potential Project effects on CIBW foraging habitat

AEA Proposed Modifications

(ISR Part D, Section 7.2; 2015 Implementation Plan, September 2014)



Current Status and Steps to Complete

- Land-based observations and vessel-based incidental observations will be conducted to document CIBW use of the Lower Susitna River.
- Data from future year of study 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 members and Ahtna
- Public