Susitna-Watana Hydroelectric Project Document **ARLIS Uniform Cover Page**

Title:		
Cook Inlet beluga whale study (9.17): Initial study report. Appendices		SuWa 207
Author(s) – Personal:		
Author(s) – Corporate:		
Prepared by HDR, Inc.		
AEA-identified category, if specified:		
Draft initial study report		
AEA-identified series, if specified:		
Series (ARLIS-assigned report number):	Existing numbers on document:	
Susitna-Watana Hydroelectric Project document number 207		
Published by:	Date published:	
[Anchorage : Alaska Energy Authority, 2014]	February 2014	
Published for:	Date or date range of report:	
Alaska Energy Authority		
Volume and/or Part numbers:	Final or Draft status, as indicated: Draft	
Study plan Section 9.17		
Document type:	Pagination:	
Atlas (only appendices C and D, which compose most of volume)	29 p. in various pagings	
Related work(s):	Pages added/changed by ARLIS:	
Notes:		
NOTES.		

Contents: appendix A. Video cameras and example images -- appendix B. Still cameras and example images -- appendix C. Composite sightings for aerial surveys during high, intermediate, and low tides -- appendix D. Individual arial [sic] survey maps for 2013.

The following parts of Section 9.17 appear in separate files: Main report; Appendices.

All reports in the Susitna-Watana Hydroelectric Project Document series include an ARLISproduced cover page and an ARLIS-assigned number for uniformity and citability. All reports are posted online at http://www.arlis.org/resources/susitna-watana/





APPENDIX A: VIDEO CAMERAS AND EXAMPLE IMAGES

APPENDIX B: STILL CAMERAS AND EXAMPLE IMAGES

APPENDIX C: COMPOSITE SIGHTINGS FOR AERIAL SURVEYS

DURING HIGH, INTERMEDIATE, AND LOW TIDES

APPENDIX D: INDIVIDUAL AERIAL SURVEY MAPS FOR 2013

Susitna-Watana Hydroelectric Project (FERC No. 14241)

Cook Inlet Beluga Whale Study (9.17)

Appendix A Video Cameras and Example Images

Initial Study Report

Prepared for

Alaska Energy Authority



Prepared by

HDR, Inc.

February 2014 Draft

Video Camera Figures



Figure 1: Video camera West site. Left image shows camera. Right image shows camera view.



Figure 2: Video camera East site. Left image shows camera. Right image shows camera view.



Figure 3: Video camera repeater site.

Susitna-Watana Hydroelectric Project (FERC No. 14241)

Cook Inlet Beluga Whale Study (9.17)

Appendix B Still Cameras and Example Images

Initial Study Report

Prepared for

Alaska Energy Authority



Prepared by

HDR, Inc.

February 2014 Draft

Still Camera Figures



Figure 1: Still camera site 1. Left image shows camera. Right image shows camera view.



Figure 2: Still camera site 2. Left image shows camera. Right image shows camera view.



Figure 3: Still camera site 3. Left image shows camera. Right image shows camera view.



Figure 4: Still camera site 4. Left image shows camera. Right image shows camera view.

Susitna-Watana Hydroelectric Project (FERC No. 14241)

Cook Inlet Beluga Whale Study (9.17)

Appendix C

Composite Sightings for Aerial Surveys During High, Intermediate, and Low Tides

Initial Study Report

Prepared for

Alaska Energy Authority



Prepared by

HDR, Inc.

February 2014 Draft

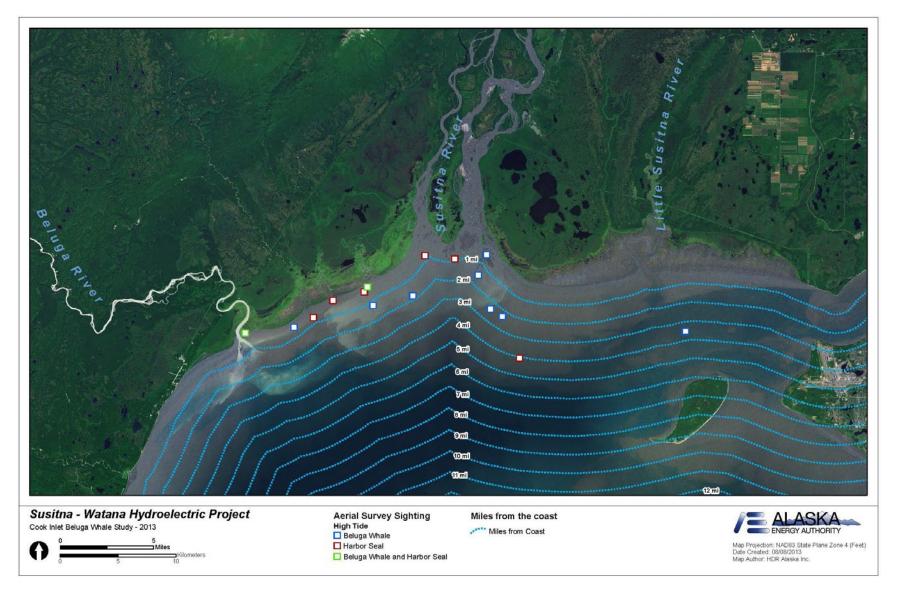


Figure 1. Distribution of Cook Inlet beluga whale and harbor seal sightings during aerial surveys targeting high tide. Dotted lines placed at one-mile increments from the "typical" shoreline.

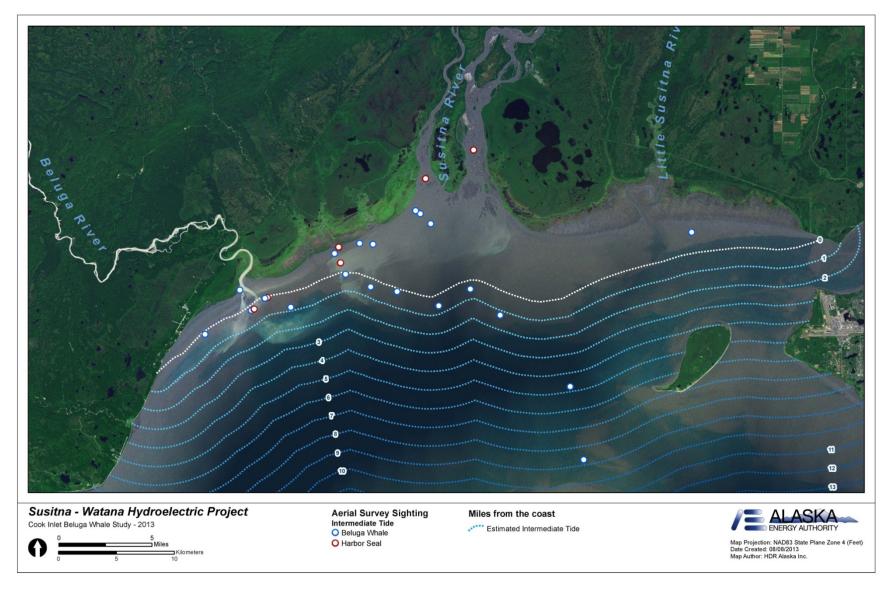


Figure 2. Cook Inlet beluga whale and harbor seal sightings during aerial surveys targeting intermediate tide. Northern extent of inundation (exclusive of deep channels) estimated as the white dotted line. Other dotted lines placed at one-mile increments from the inundation extent.

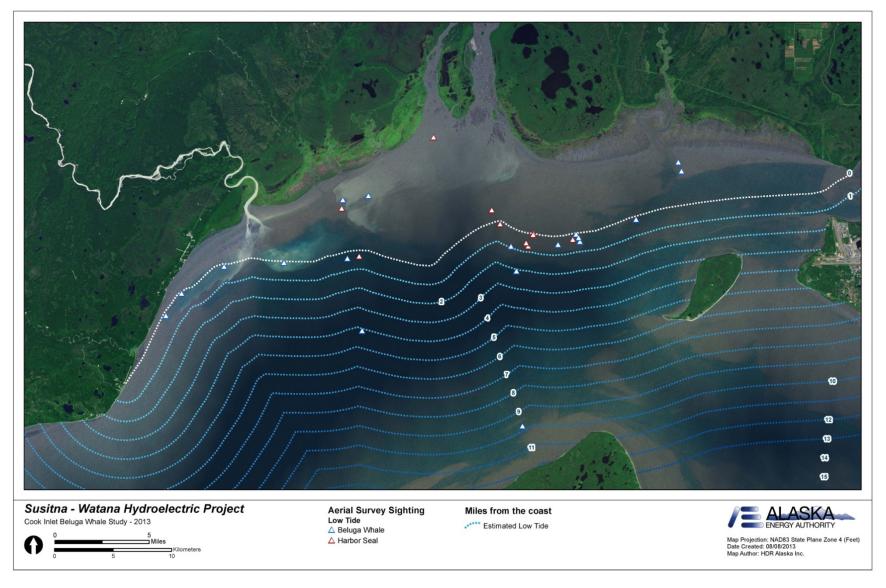


Figure 3. Cook Inlet beluga whale and harbor seal sightings during aerial surveys targeting low tide. Northern extent of inundation (exclusive of deep channels) estimated as the white dotted line. Other dotted lines placed at one-mile increments from the inundation extent.

Susitna-Watana Hydroelectric Project (FERC No. 14241)

Cook Inlet Beluga Whale Study (9.17)

Appendix D Individual Arial Survey Maps for 2013

Initial Study Report

Prepared for

Alaska Energy Authority



Prepared by

HDR, Inc.

February 2014 Draft

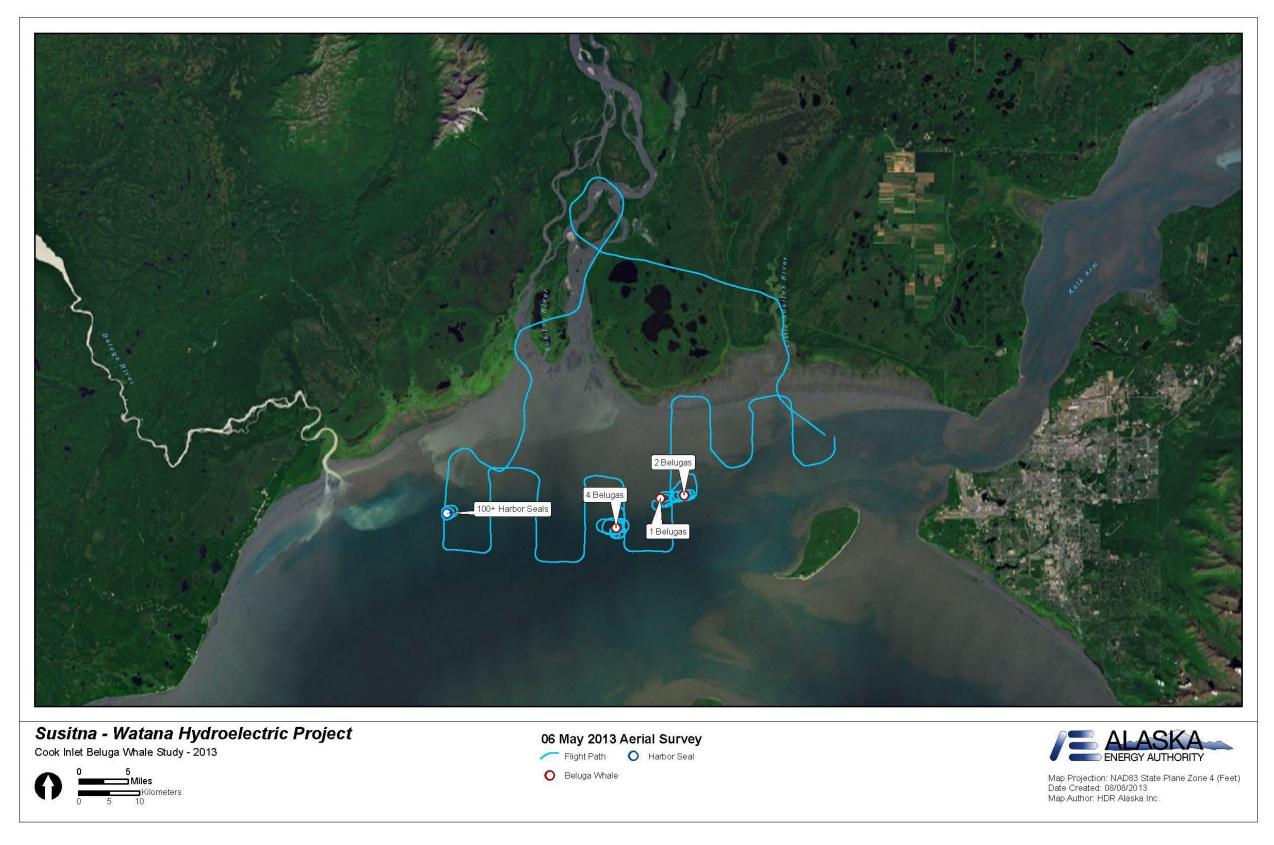


Figure 1. Map of aerial survey flown on May 6, 2013 showing locations of beluga whales and harbor seals.



Figure 2. Map of aerial survey flown on May 13, 2013 showing locations of beluga whales and harbor seals.



Figure 3. Map of aerial survey flown on May 19, 2013 showing locations of beluga whales and harbor seals.

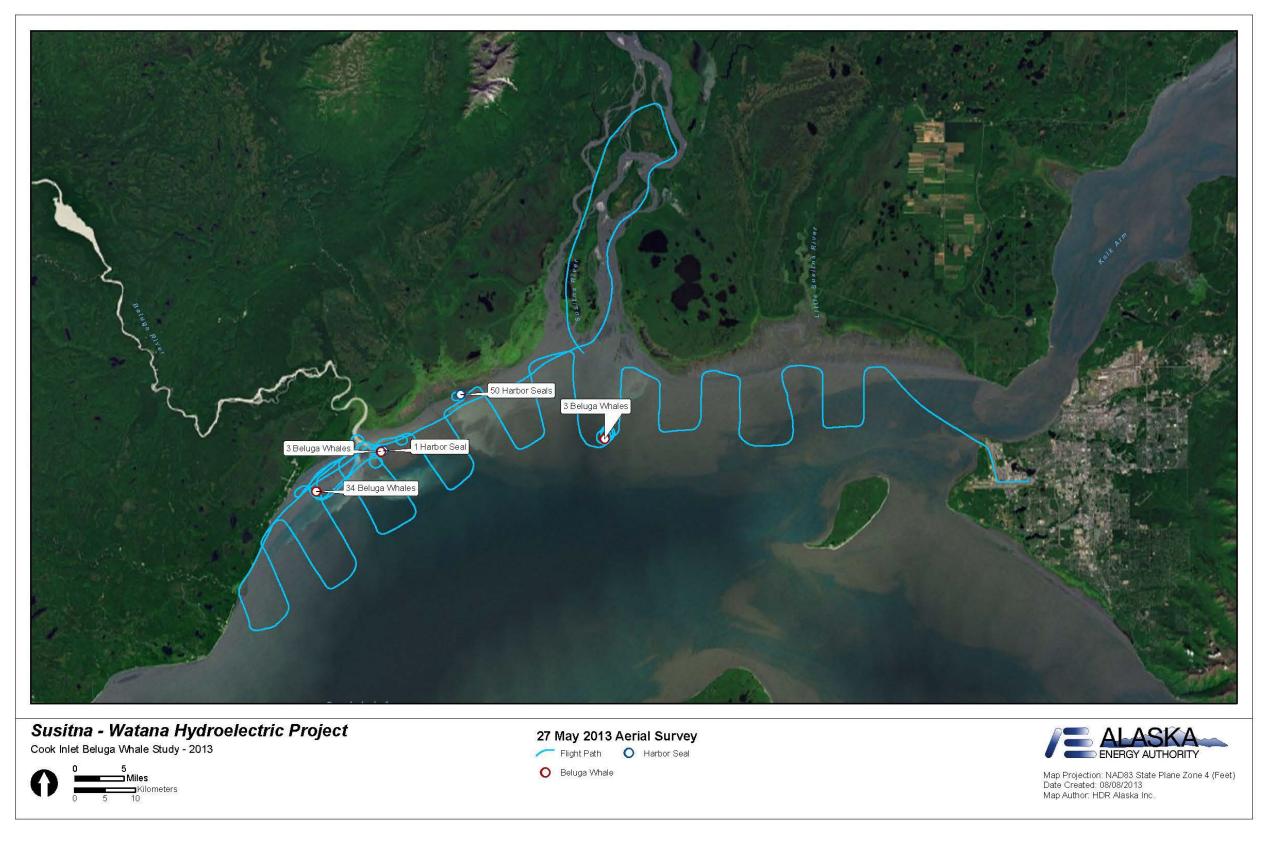


Figure 4. Map of aerial survey flown on May 27, 2013 showing locations of beluga whales and harbor seals.

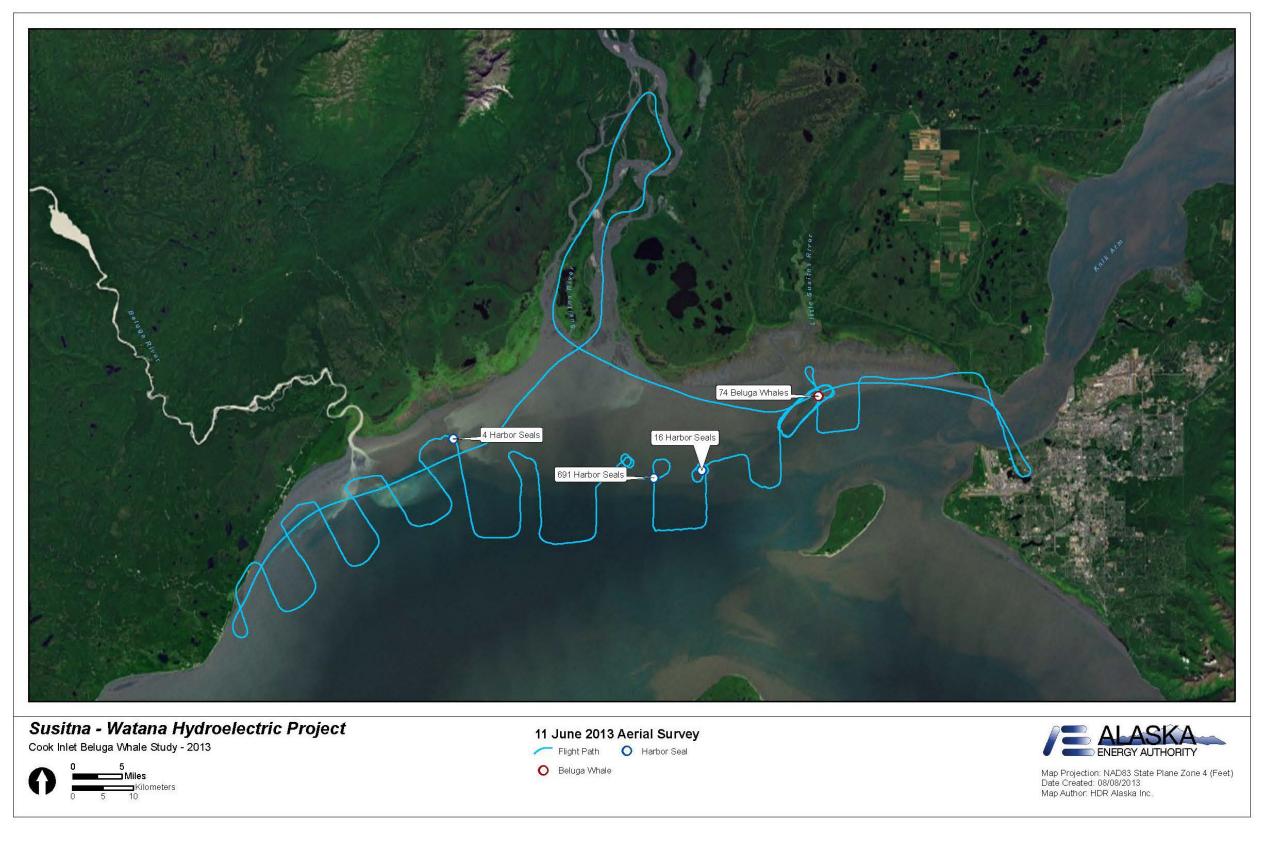


Figure 5. Map of aerial survey flown on June 11, 2013 showing locations of beluga whales and harbor seals.

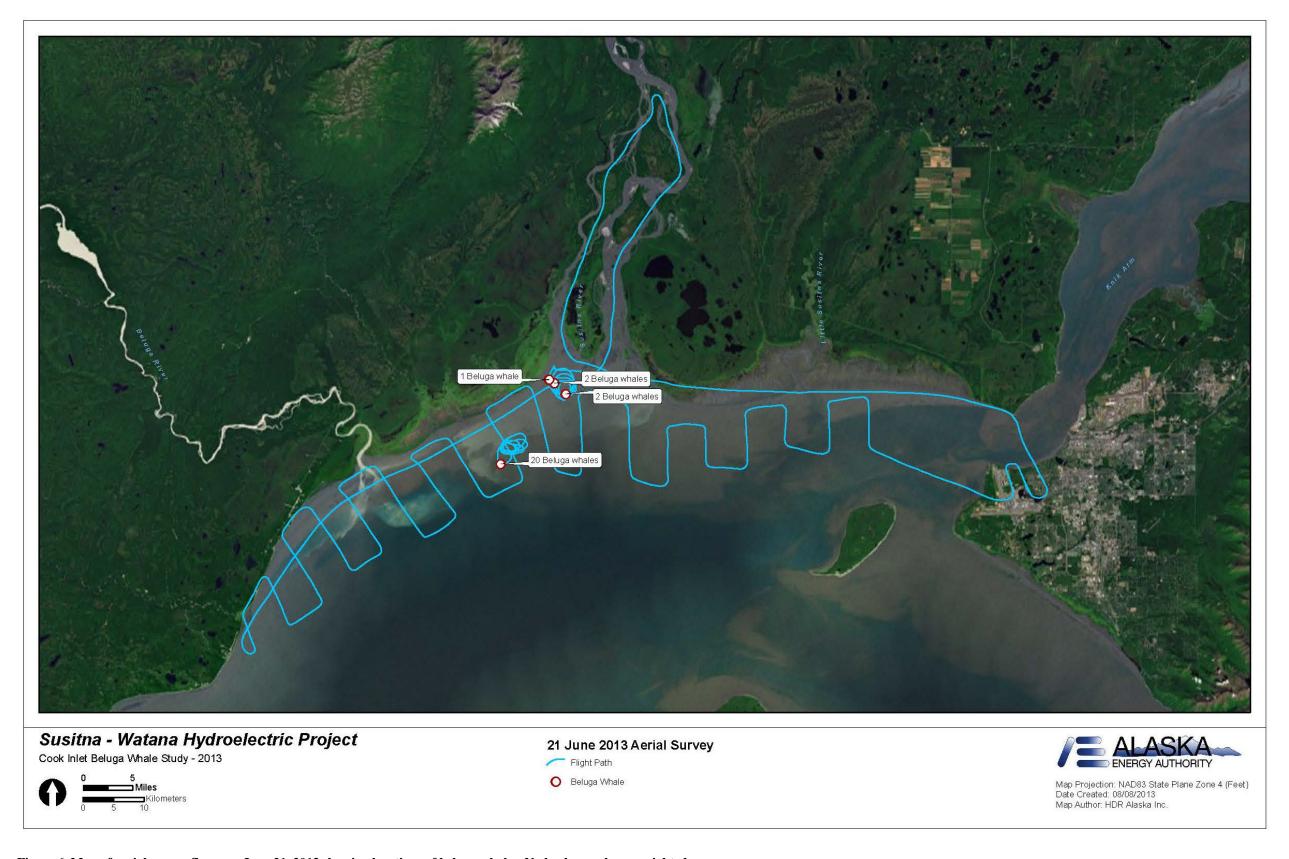


Figure 6. Map of aerial survey flown on June 21, 2013 showing locations of beluga whales. No harbor seals were sighted.

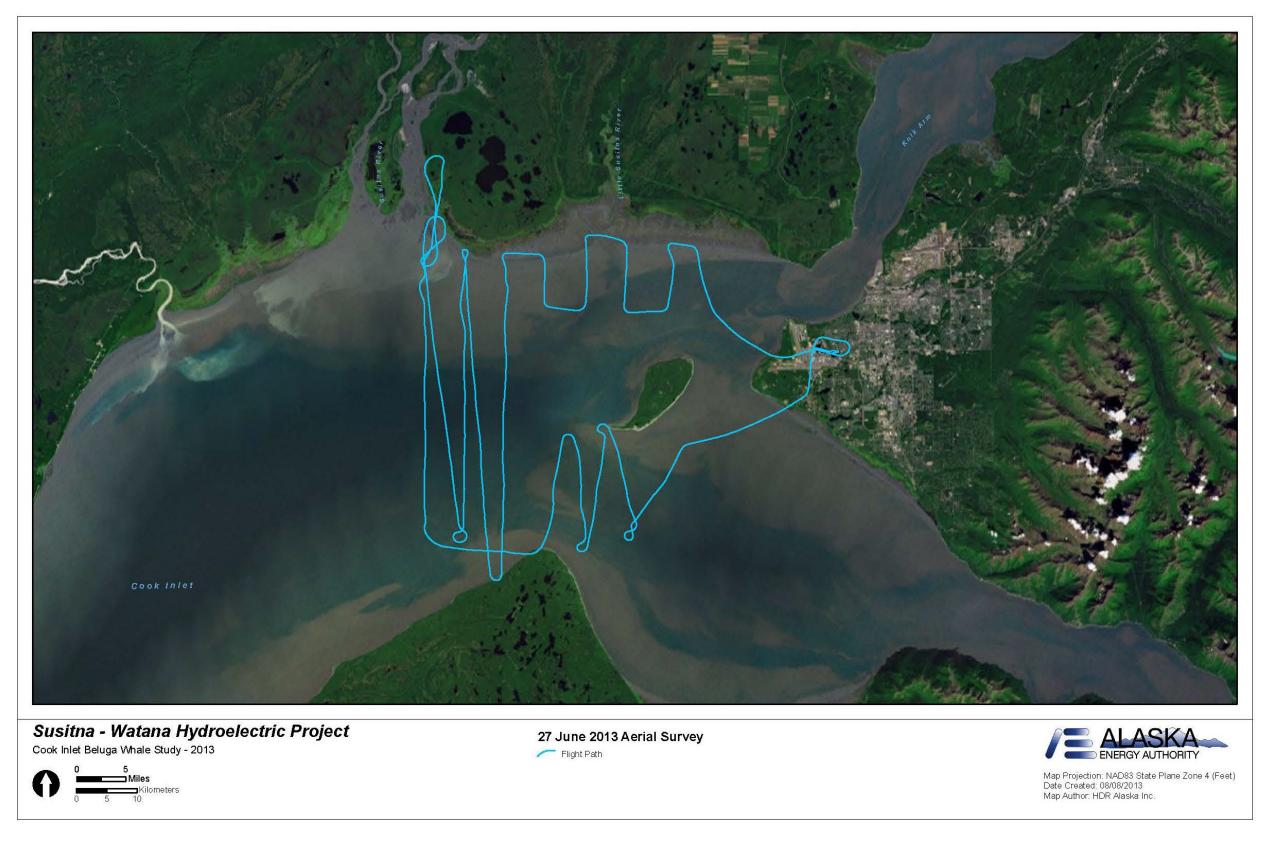


Figure 7. Map of aerial survey flown on June 27, 2013. No beluga whales or harbor seals were sighted.

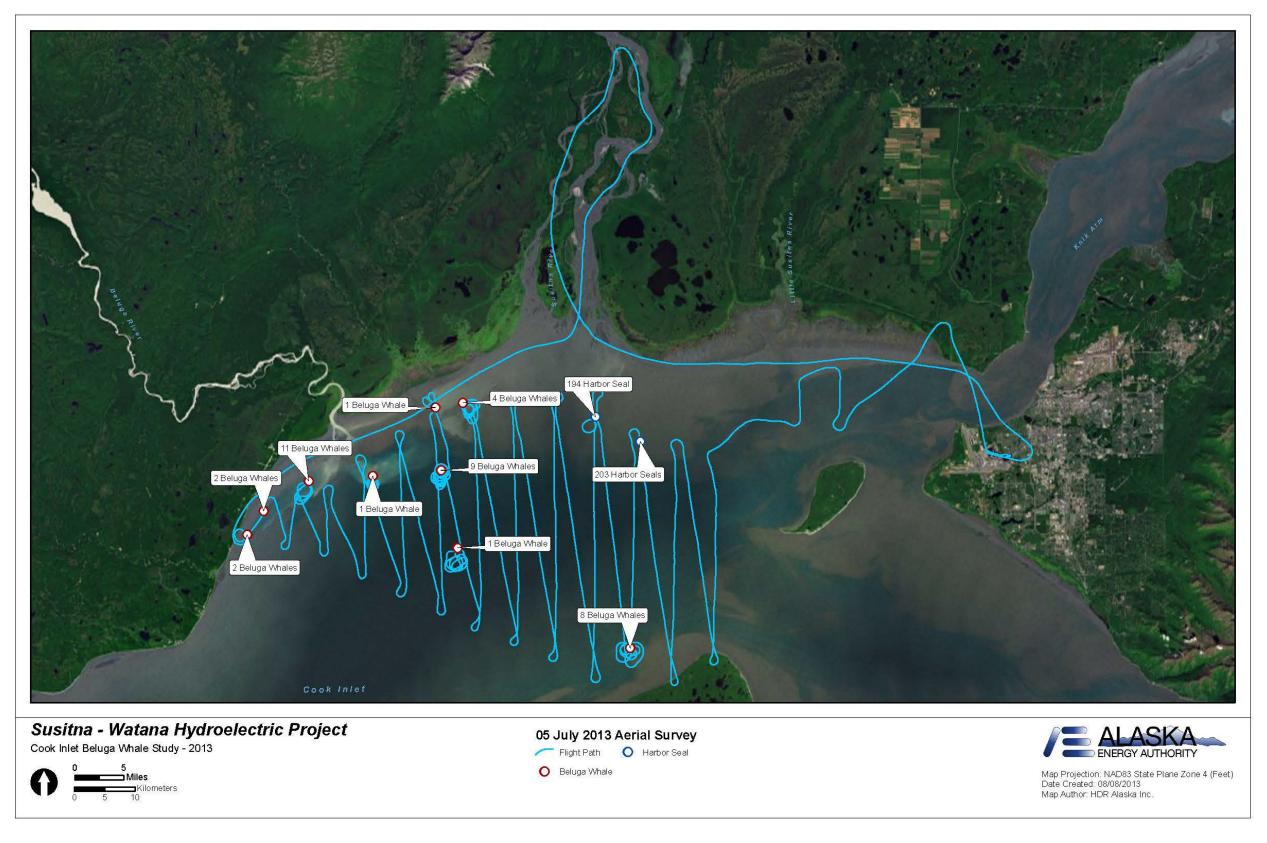


Figure 8. Map of aerial survey flown on July 5, 2013 showing locations of beluga whales and harbor seals.

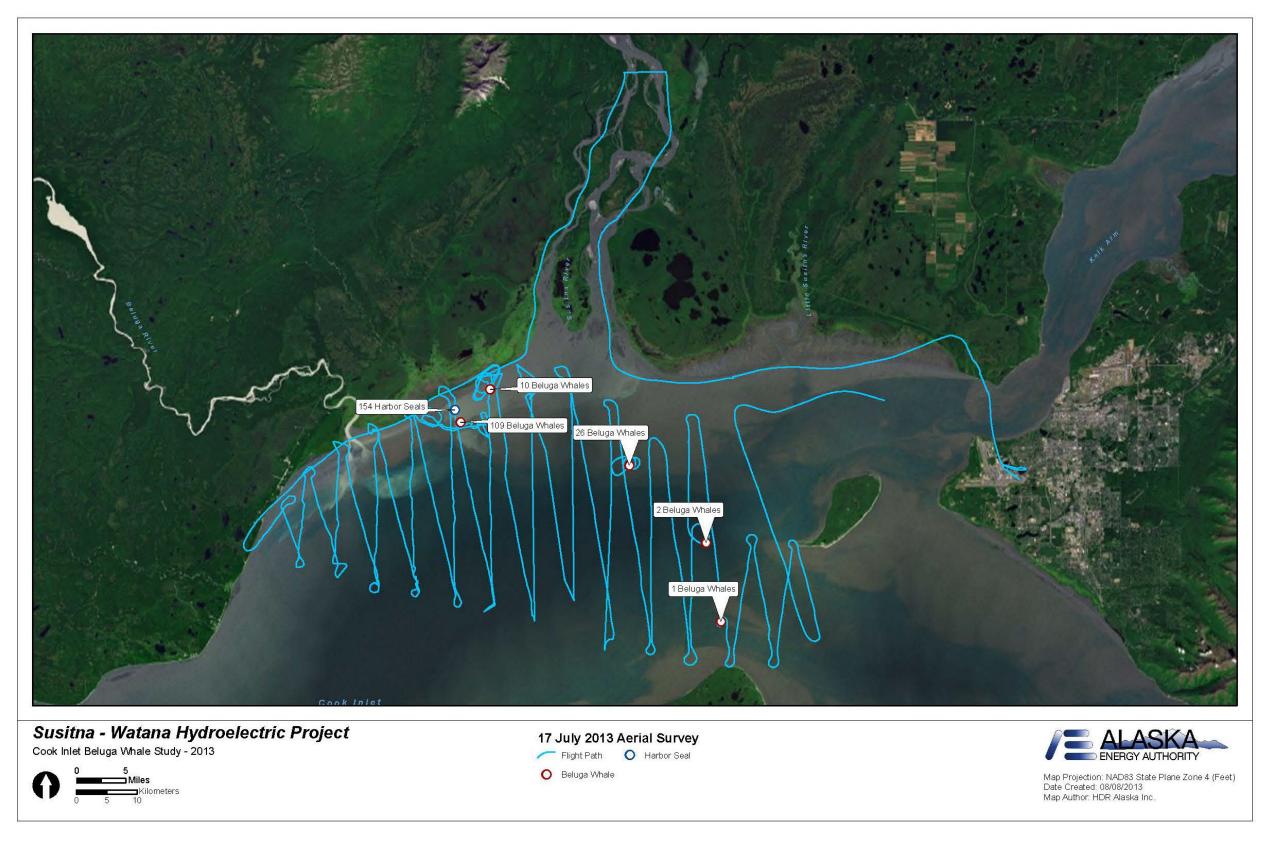


Figure 9. Map of aerial survey flown on July 17, 2013 showing locations of beluga whales and harbor seals.

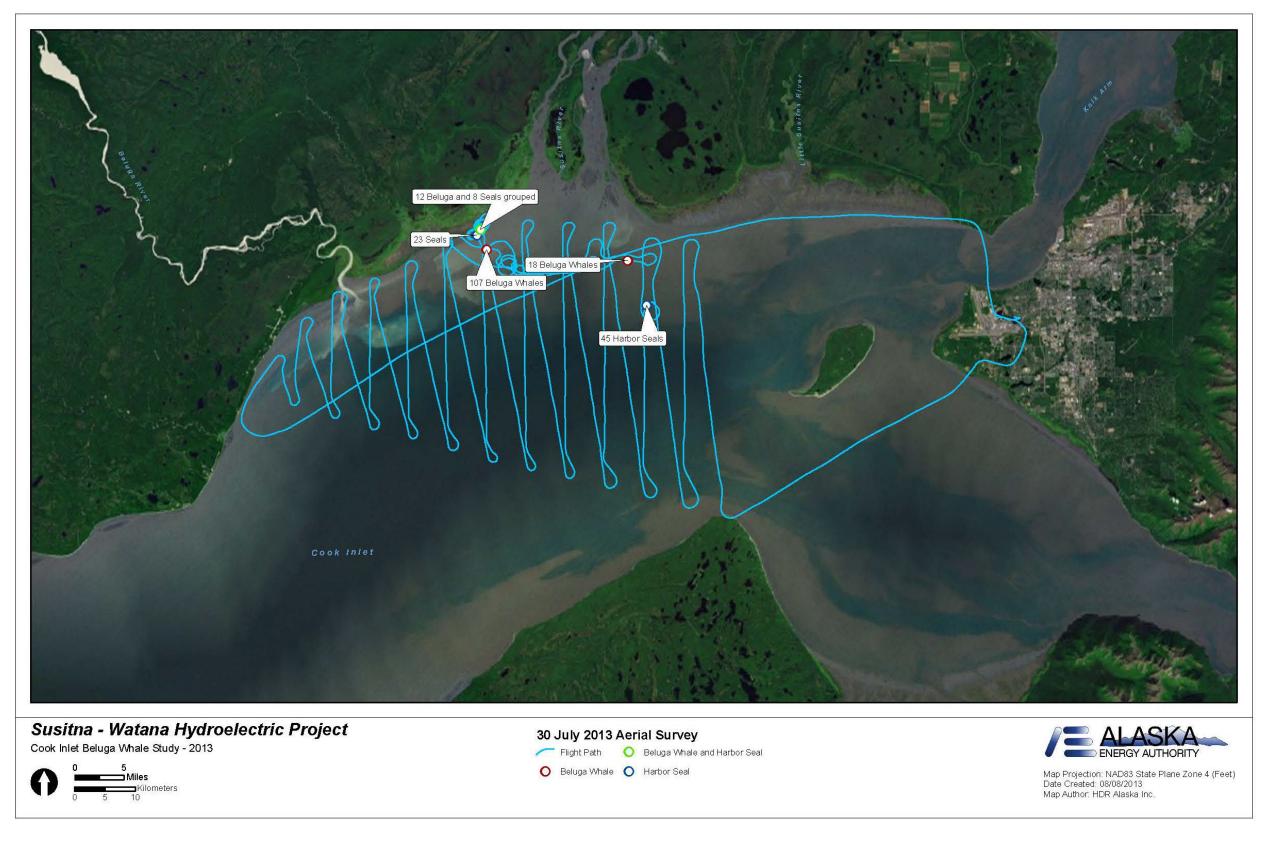


Figure 10. Map of aerial survey flown on July 30, 2013 showing locations of beluga whales and harbor seals.

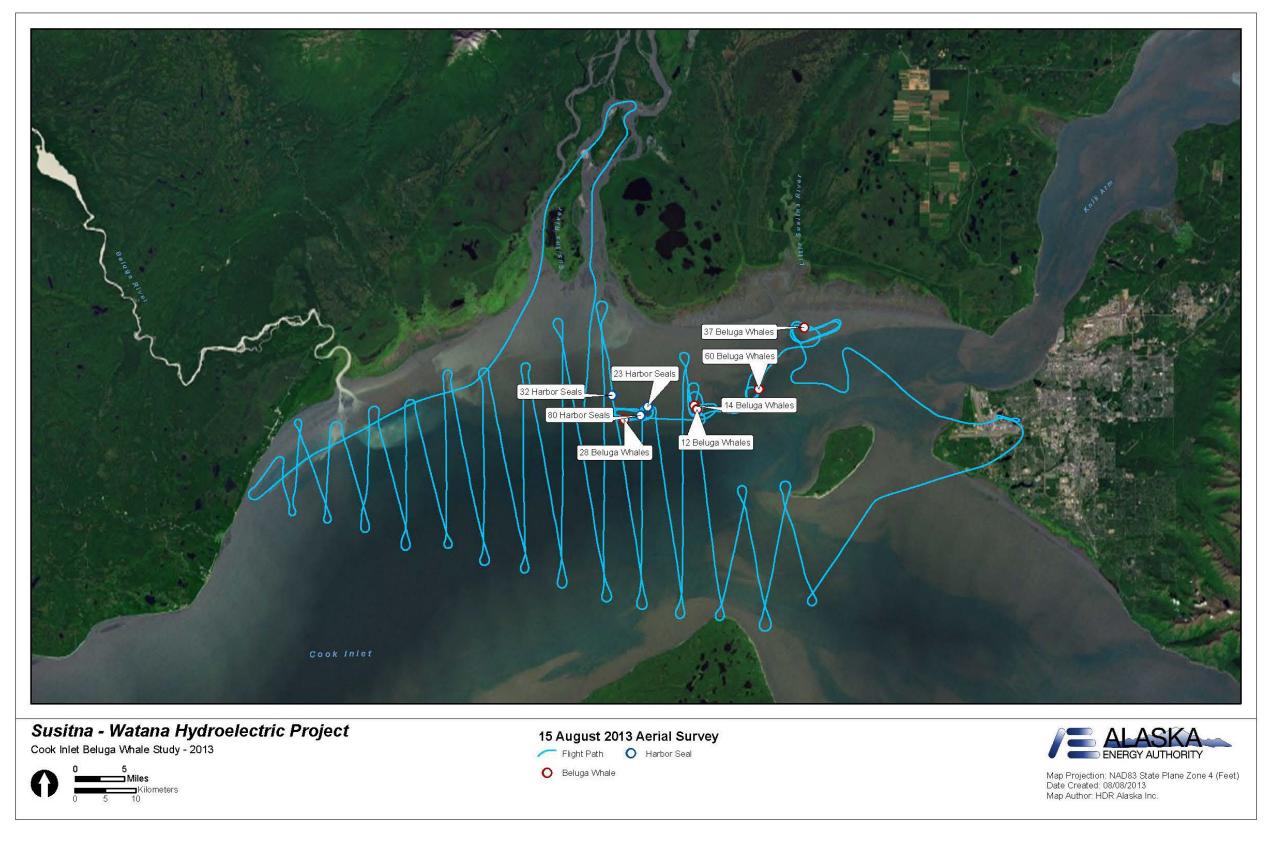


Figure 11. Map of aerial survey flown on August 15, 2013 showing locations of beluga whales and harbor seals.

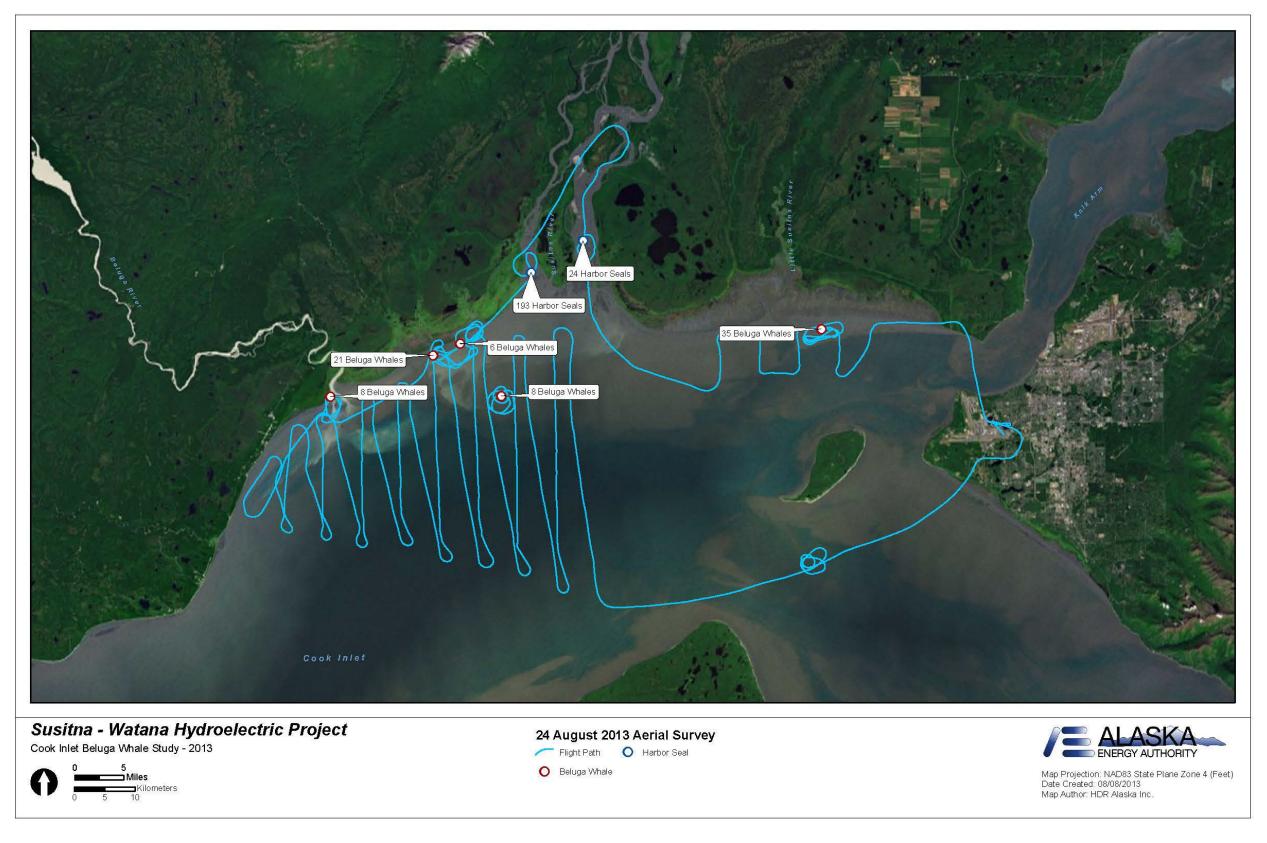


Figure 12. Map of aerial survey flown on August 24, 2013 showing locations of beluga whales and harbor seals.

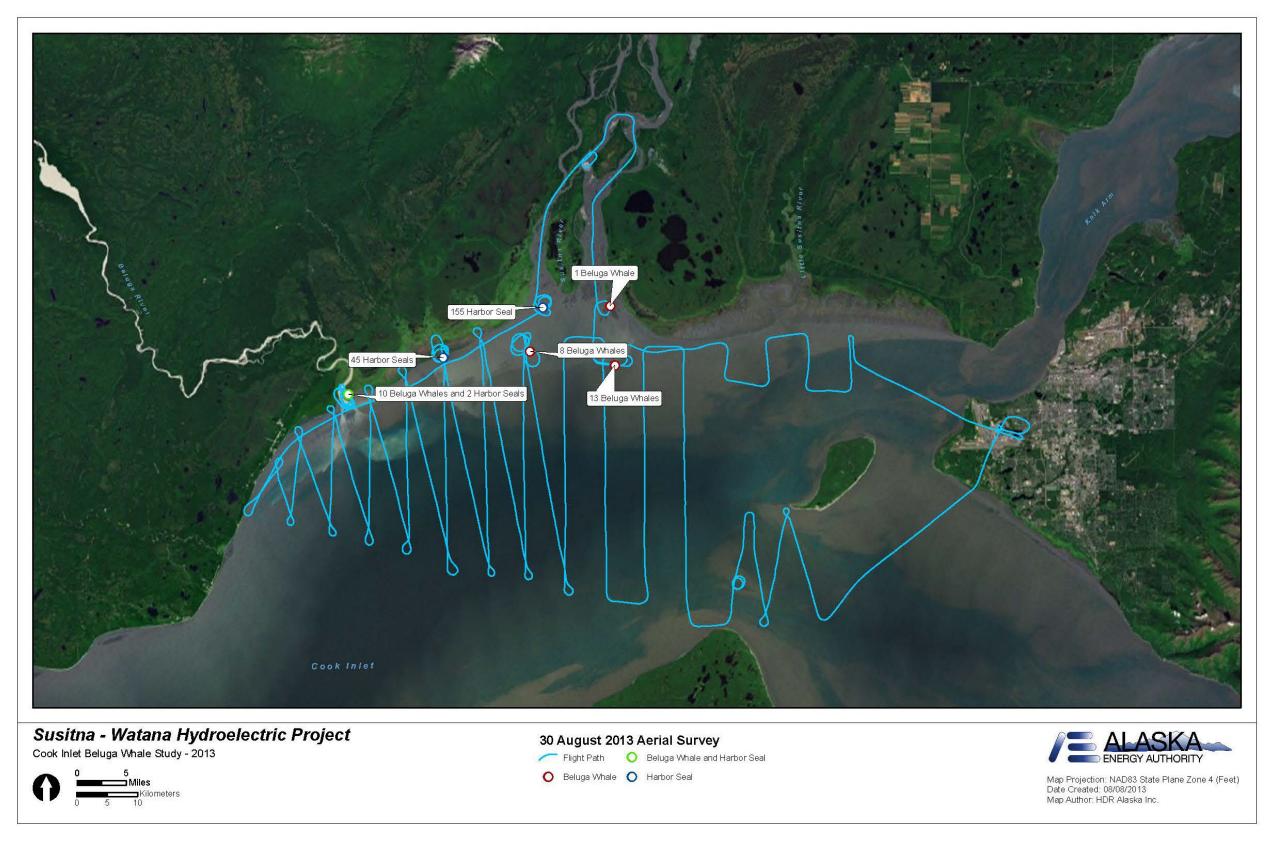


Figure 13. Map of aerial survey flown on August 30, 2013 showing locations of beluga whales and harbor seals.

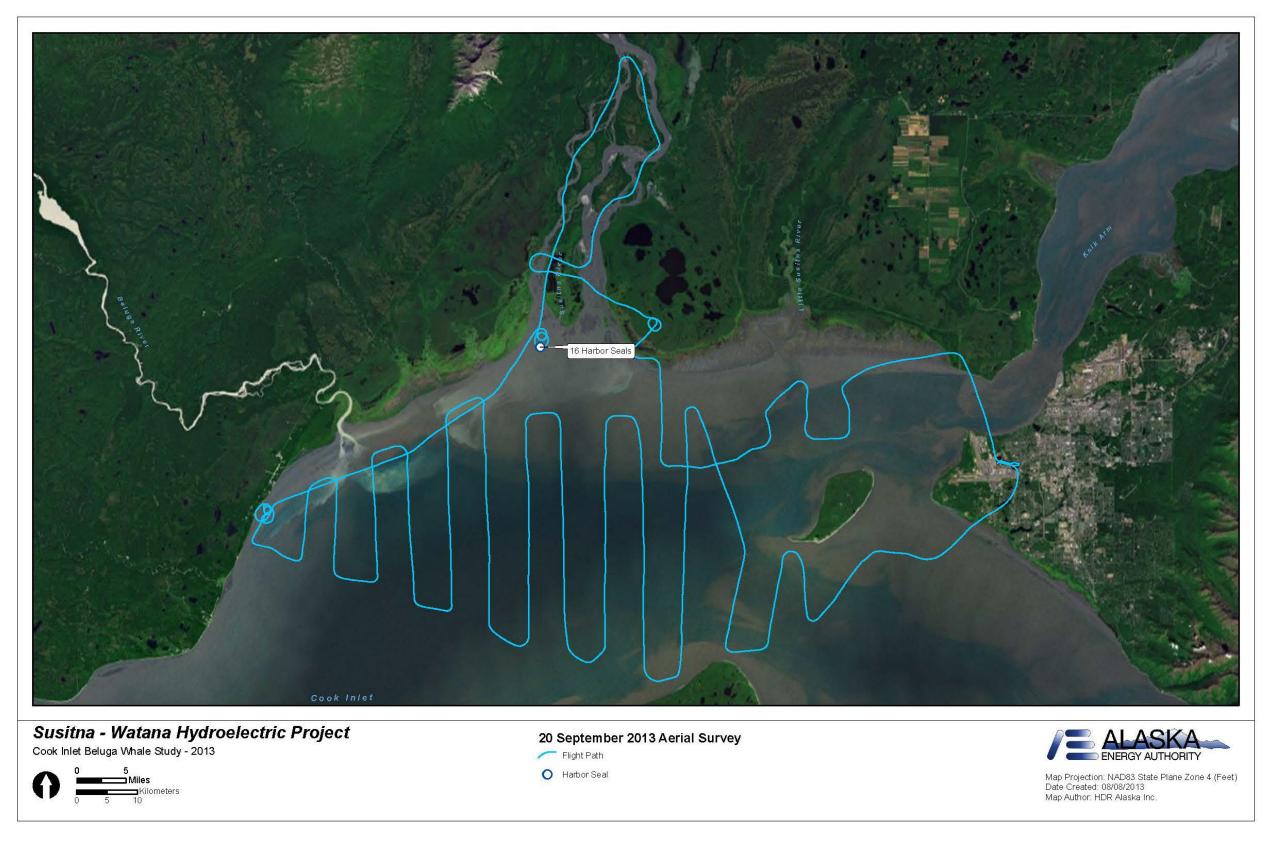


Figure 14. Map of aerial survey flown on September 20, 2013 showing locations of harbor seals. No beluga whales were sighted.



Figure 15. Map of aerial survey flown on September 24, 2013. No beluga whales or harbor seals were sighted.



Figure 16. Map of aerial survey flown on September 30, 2013. No beluga whales or harbor seals were sighted.

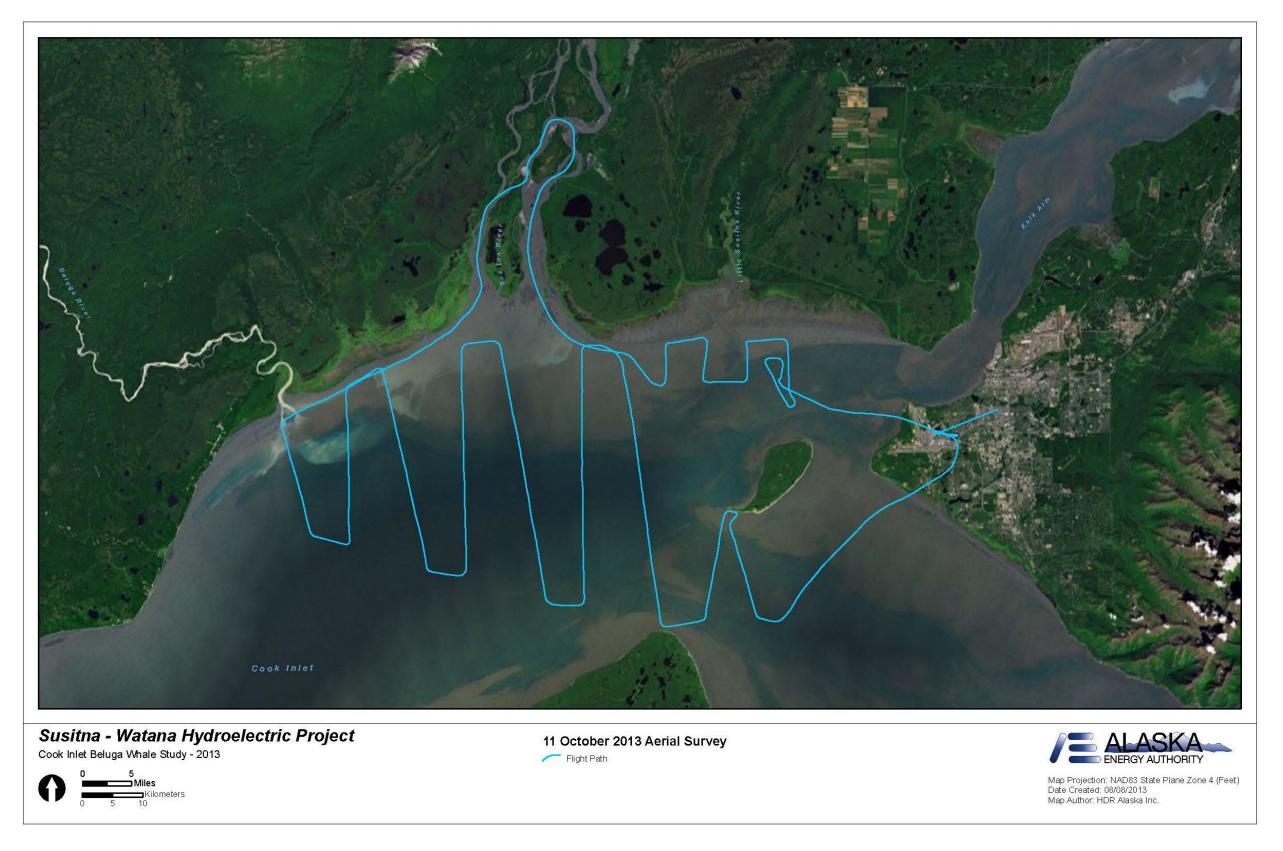


Figure 17. Map of aerial survey flown on October 11, 2013. No beluga whales or harbor seals were sighted.