

Susitna-Watana Hydroelectric Project Document

ARLIS Uniform Cover Page

Title: Cook Inlet beluga whale study, Study plan Section 9.17 : Initial study report -- Part A: Appendices		SuWa 223
Author(s) – Personal:		
Author(s) – Corporate: HDR, Inc.		
AEA-identified category, if specified: Initial study report		
AEA-identified series, if specified:		
Series (ARLIS-assigned report number): Susitna-Watana Hydroelectric Project document number 223		Existing numbers on document:
Published by: [Anchorage : Alaska Energy Authority, 2014]		Date published: June 2014
Published for: Alaska Energy Authority		Date or date range of report:
Volume and/or Part numbers:		Final or Draft status, as indicated:
Document type: Appendices A-B: Photographs Appendices C-D: Atlas		Pagination: 29 p. in various pagings
Related work(s): The following parts of Section 9.16 appear in separate files: Part A ; Part A Appendices ; Part B ; Part C.		Pages added/changed by ARLIS:
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 aerial survey maps for 2013.		

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



PART A - APPENDIX A: VIDEO CAMERAS AND EXAMPLE IMAGES

PART A - APPENDIX B: STILL CAMERAS AND EXAMPLE IMAGES

PART A - APPENDIX C: COMPOSITE SIGHTINGS FOR AERIAL
SURVEYS DURING HIGH, INTERMEDIATE, AND LOW TIDES

PART A - APPENDIX D: INDIVIDUAL AERIAL SURVEY MAPS FOR 2013

**Susitna-Watana Hydroelectric Project
(FERC No. 14241)**

Cook Inlet Beluga Whale Study (9.17)

**Part A - Appendix A
Video Cameras and Example Images**

Initial Study Report

Prepared for

Alaska Energy Authority



SUSITNA-WATANA HYDRO

Clean, reliable energy for the next 100 years.

Prepared by

HDR, Inc.

June 2014

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)

**Part A - Appendix B
Still Cameras and Example Images**

Initial Study Report

Prepared for

Alaska Energy Authority



SUSITNA-WATANA HYDRO

Clean, reliable energy for the next 100 years.

Prepared by

HDR, Inc.

June 2014

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.

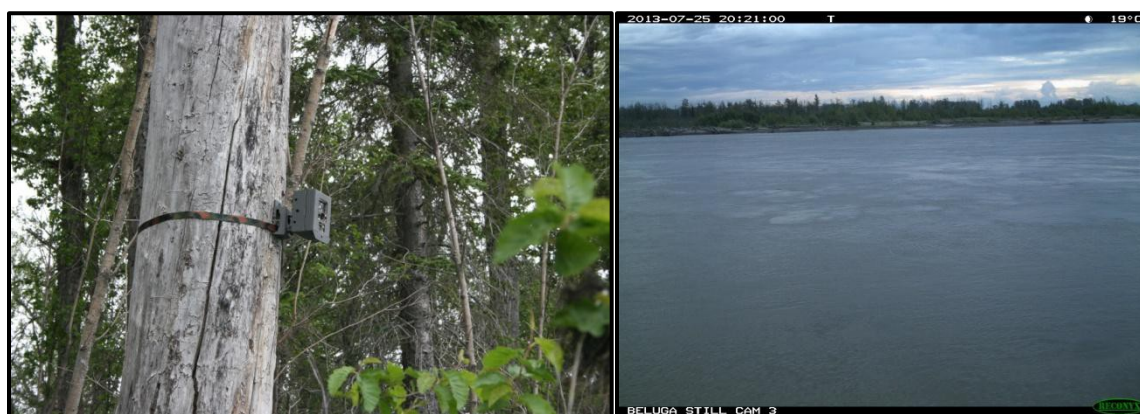


Figure 3: Still camera site 3. Left image shows camera. Right image shows camera view.



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)

**Part A - Appendix C
Composite Sightings for Aerial Surveys During High,
Intermediate, and Low Tides**

Initial Study Report

Prepared for

Alaska Energy Authority



SUSITNA-WATANA HYDRO

Clean, reliable energy for the next 100 years.

Prepared by

HDR, Inc.

June 2014

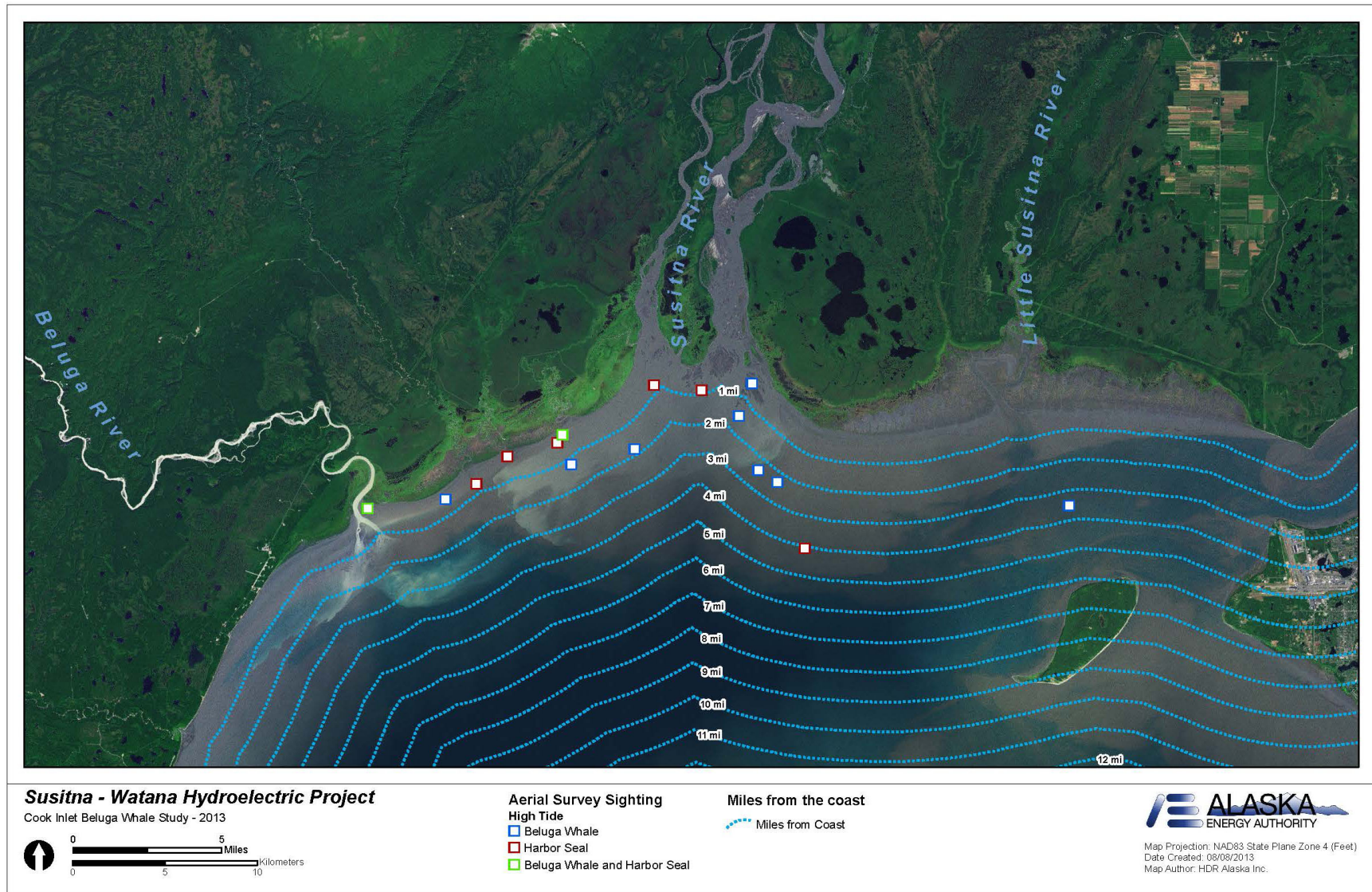


Figure 1. Distribution of Cook Inlet beluga whale and harbor seal sightings during aerial surveys targeting high tide. Dotted lines placed at one-mile increments from the "typical" shoreline.

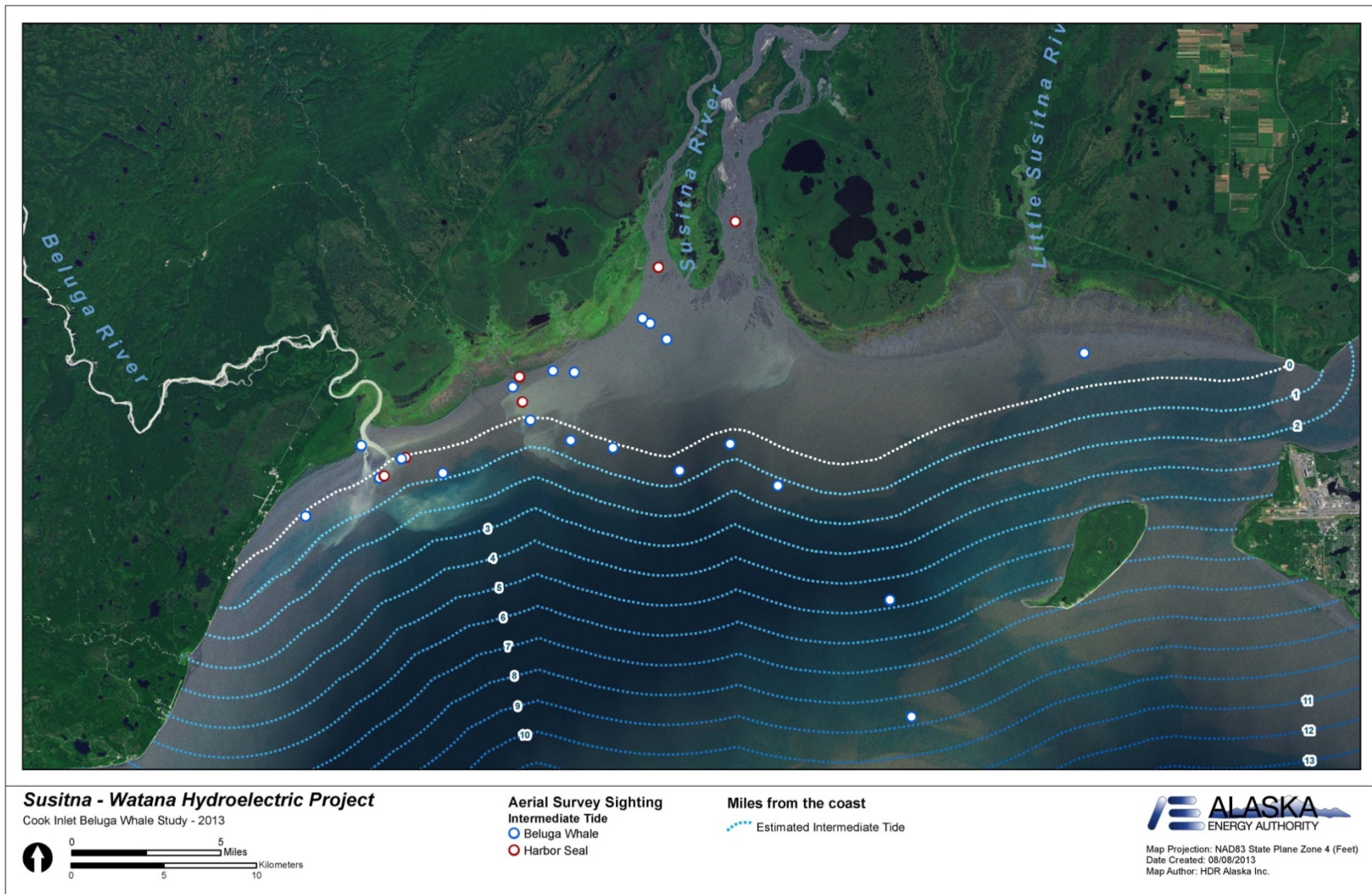


Figure 2. Cook Inlet beluga whale and harbor seal sightings during aerial surveys targeting intermediate tide. Northern extent of inundation (exclusive of deep channels) estimated as the white dotted line. Other dotted lines placed at one-mile increments from the inundation extent.

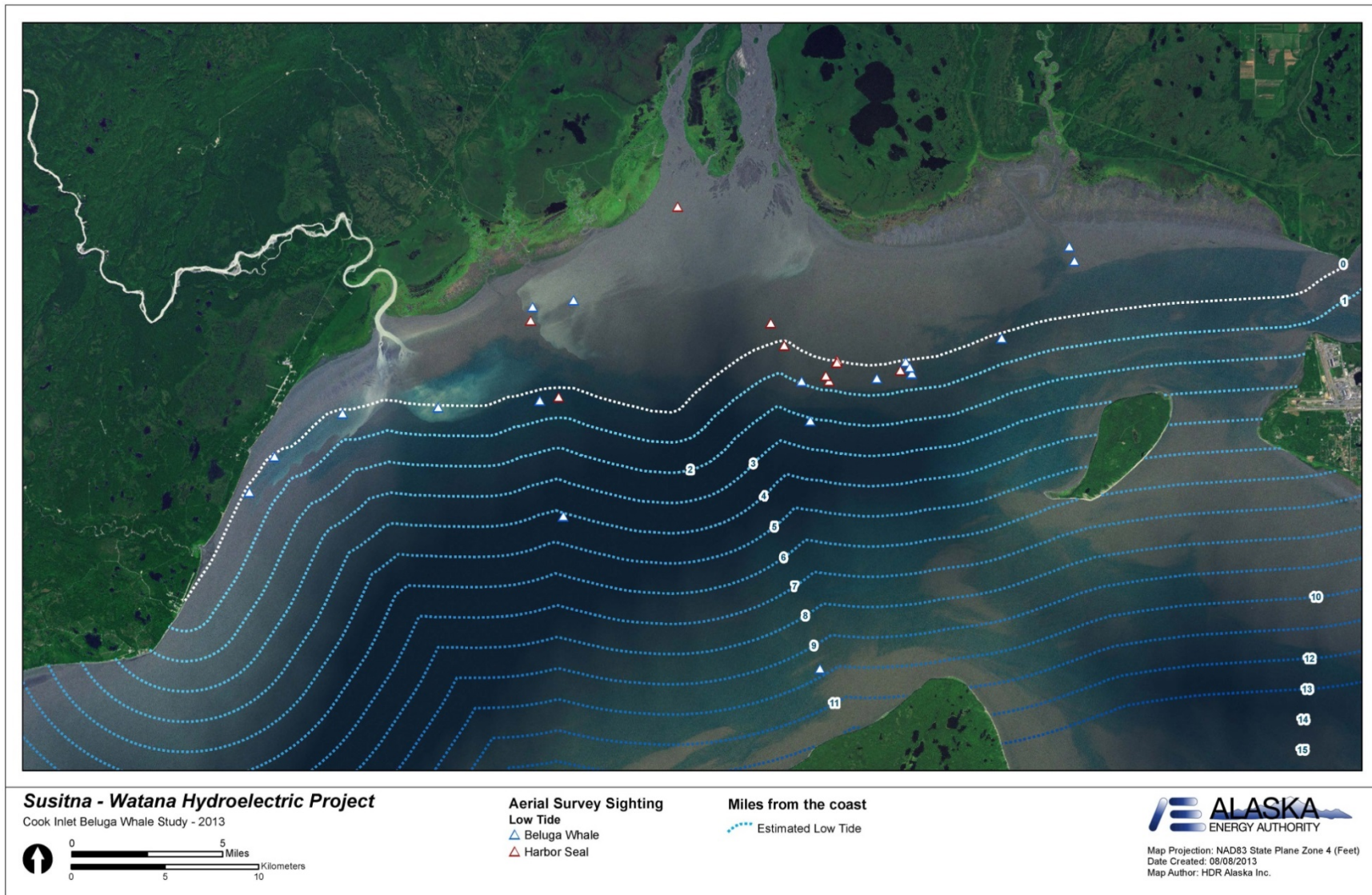


Figure 3. Cook Inlet beluga whale and harbor sealsightings during aerial surveys targeting low tide. Northern extent of inundation (exclusive of deep channels) estimated as the white dotted line. Other dotted lines placed at one-mile increments from the inundation extent.

**Susitna-Watana Hydroelectric Project
(FERC No. 14241)**

Cook Inlet Beluga Whale Study (9.17)

**Part A - Appendix D
Individual Arial Survey Maps for 2013**

Initial Study Report

Prepared for

Alaska Energy Authority



SUSITNA-WATANA HYDRO

Clean, reliable energy for the next 100 years.

Prepared by

HDR, Inc.

June 2014

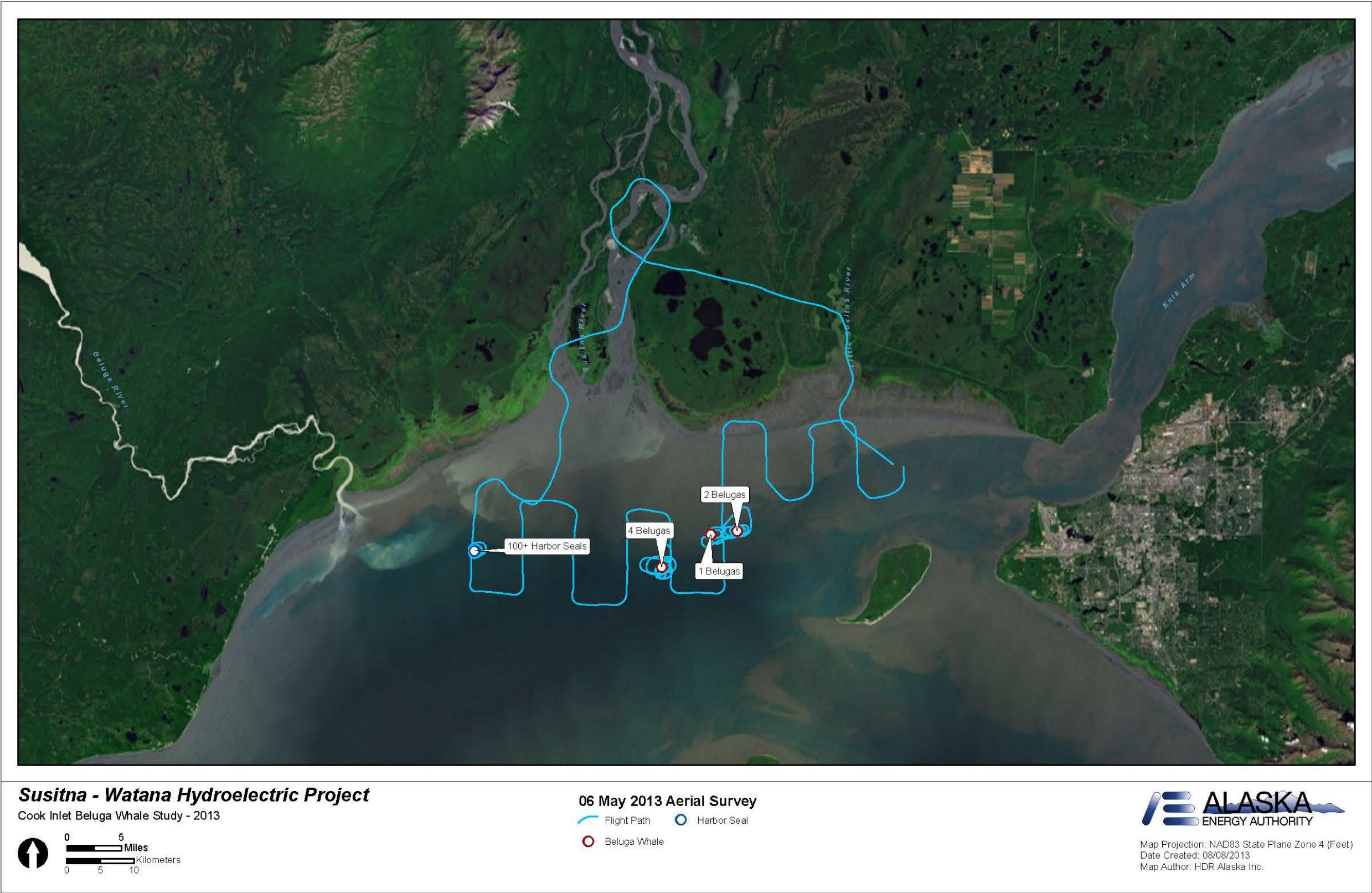


Figure 1. Map of aerial survey flown on May 6, 2013 showing locations of beluga whales and harbor seals.

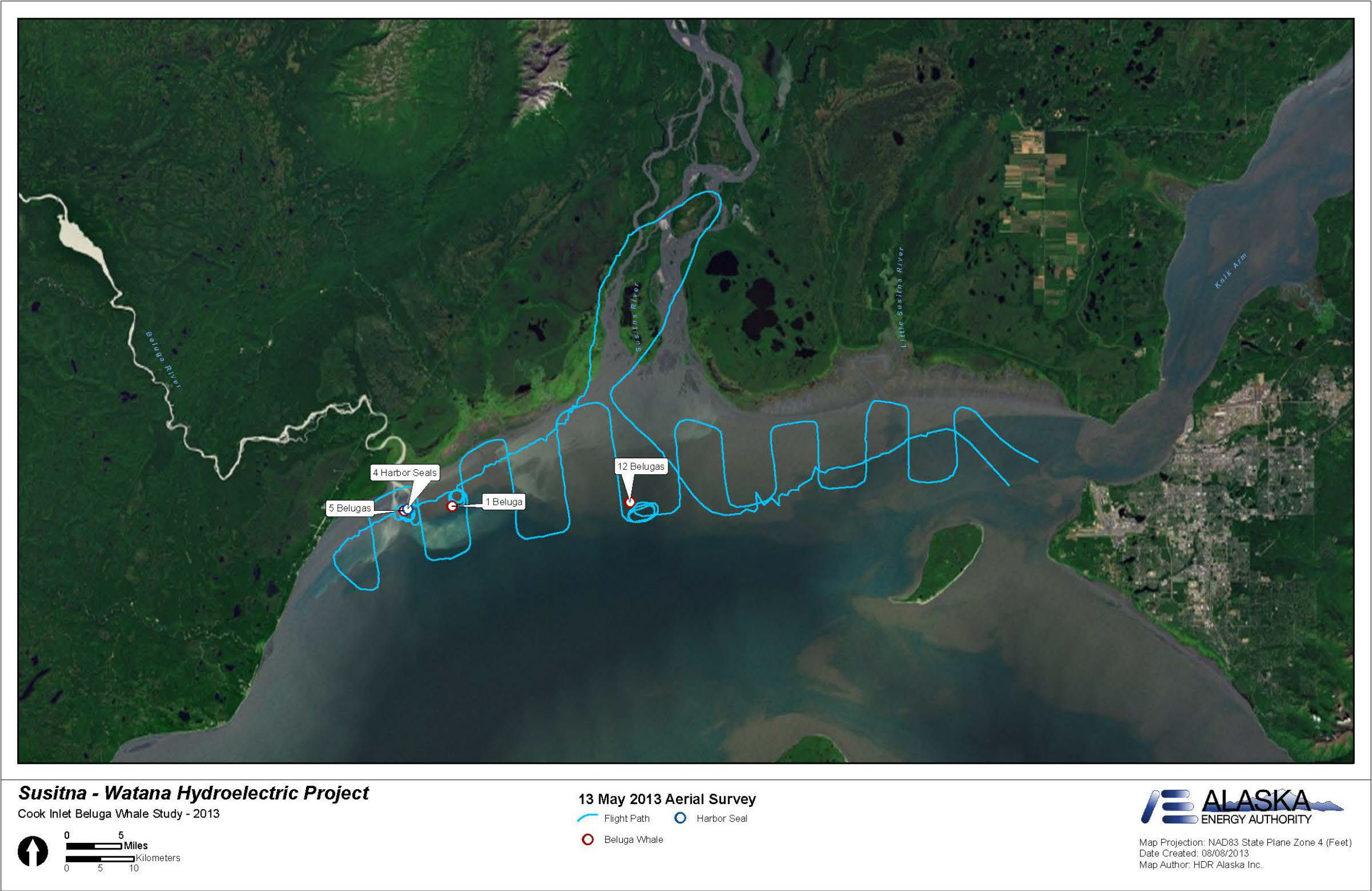


Figure 2. Map of aerial survey flown on May 13, 2013 showing locations of beluga whales and harbor seals.

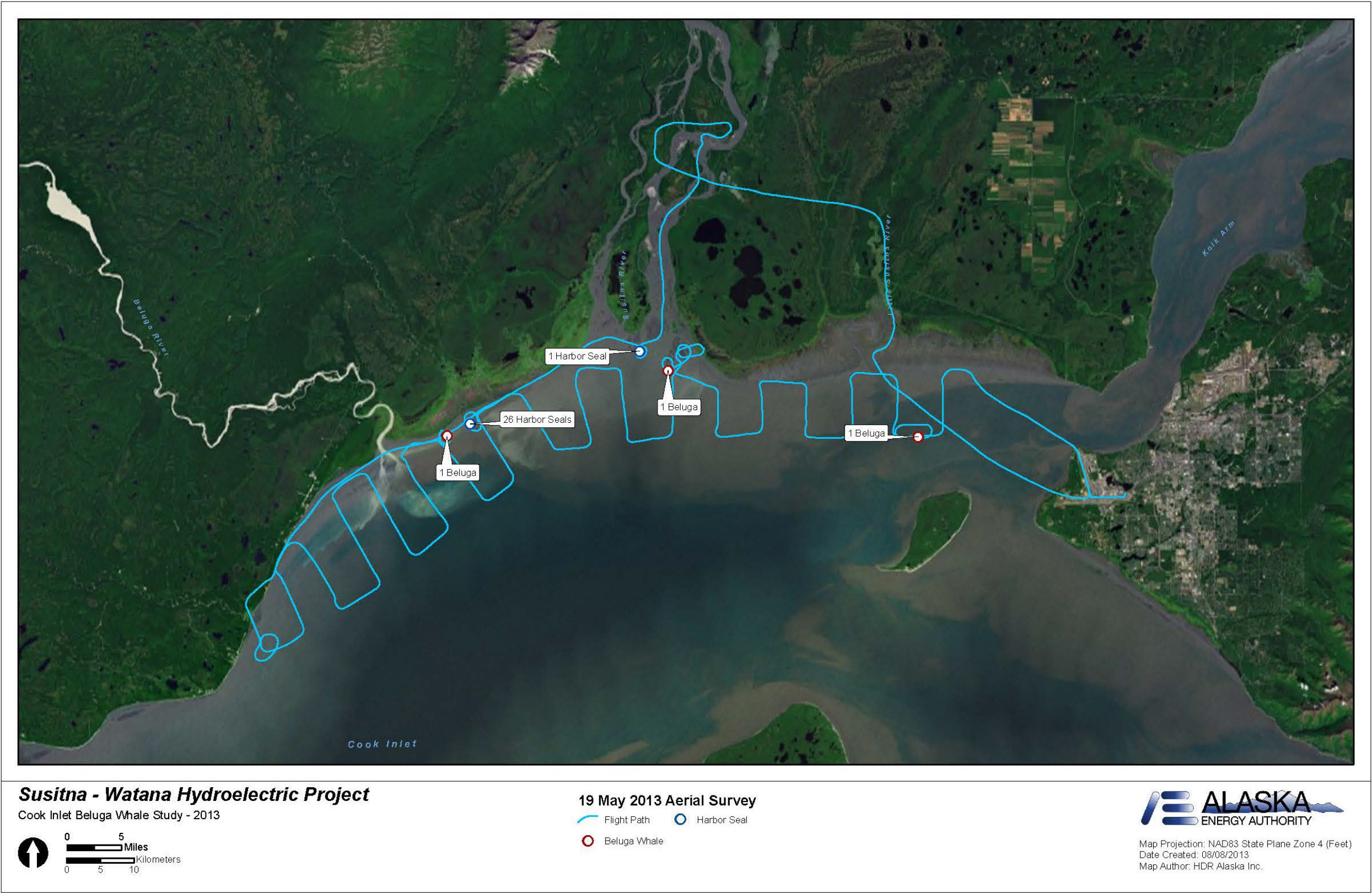


Figure 3. Map of aerial survey flown on May 19, 2013 showing locations of beluga whales and harbor seals.

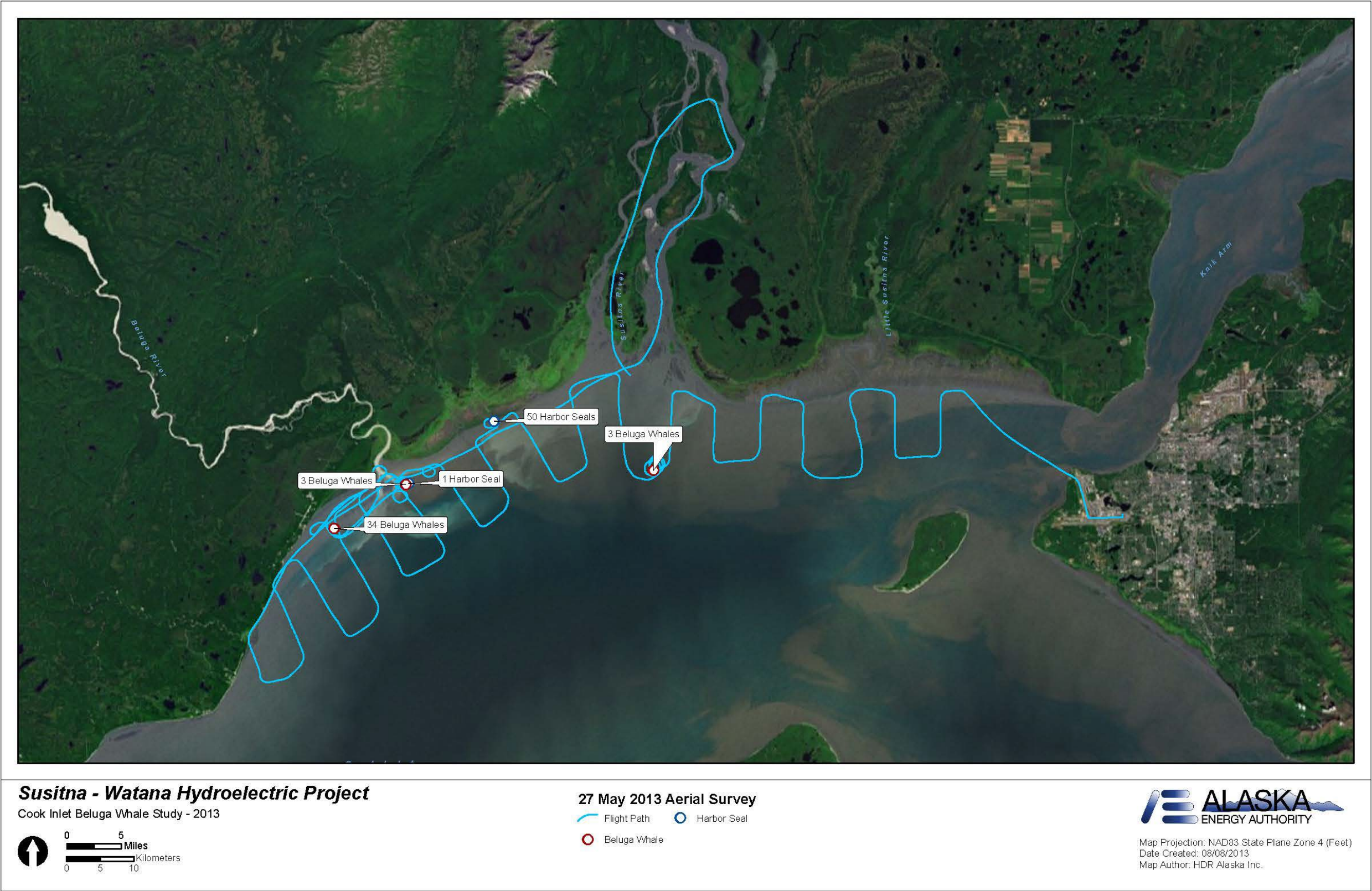


Figure 4. Map of aerial survey flown on May 27, 2013 showing locations of beluga whales and harbor seals.

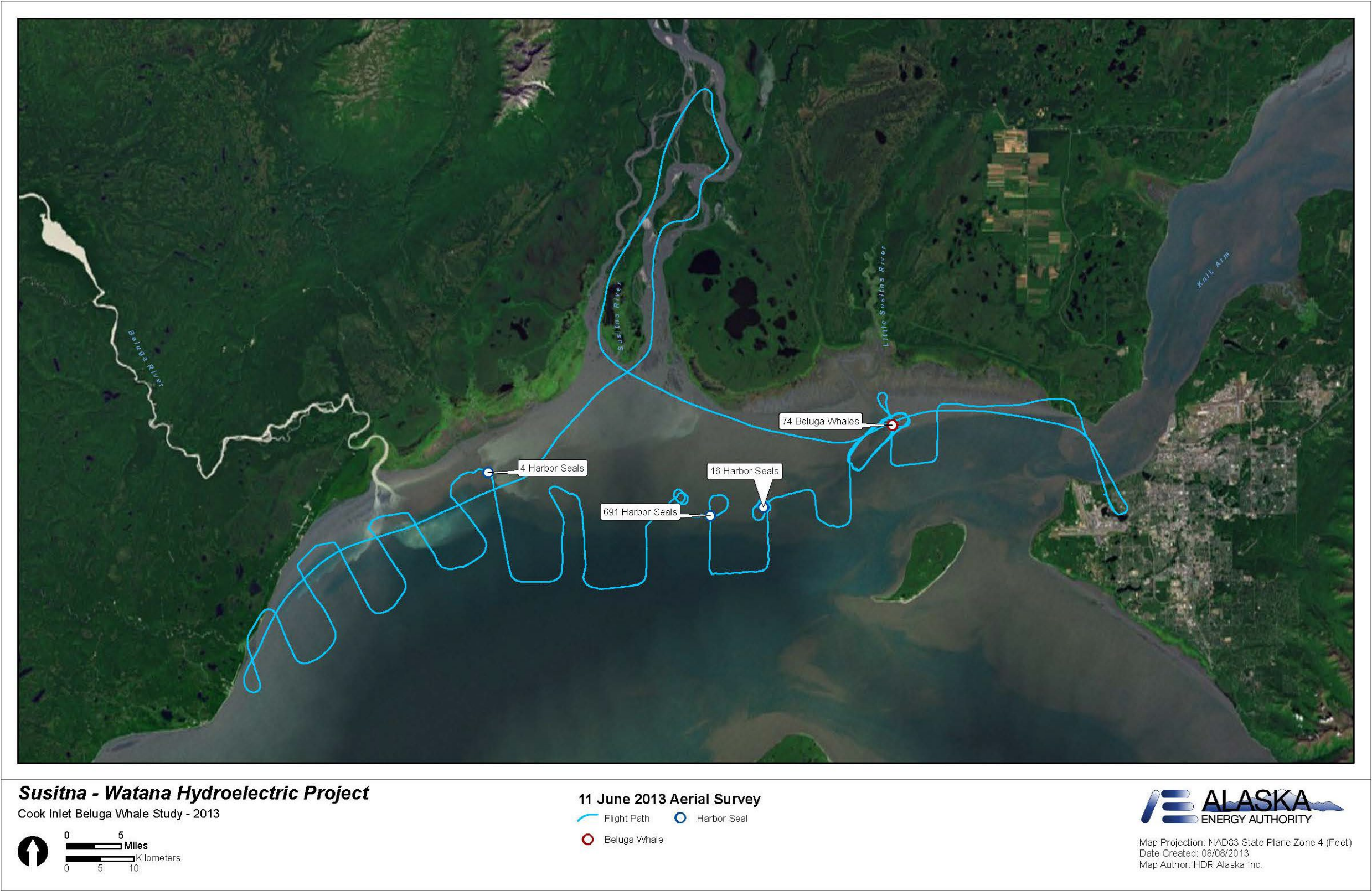


Figure 5. Map of aerial survey flown on June 11, 2013 showing locations of beluga whales and harbor seals.

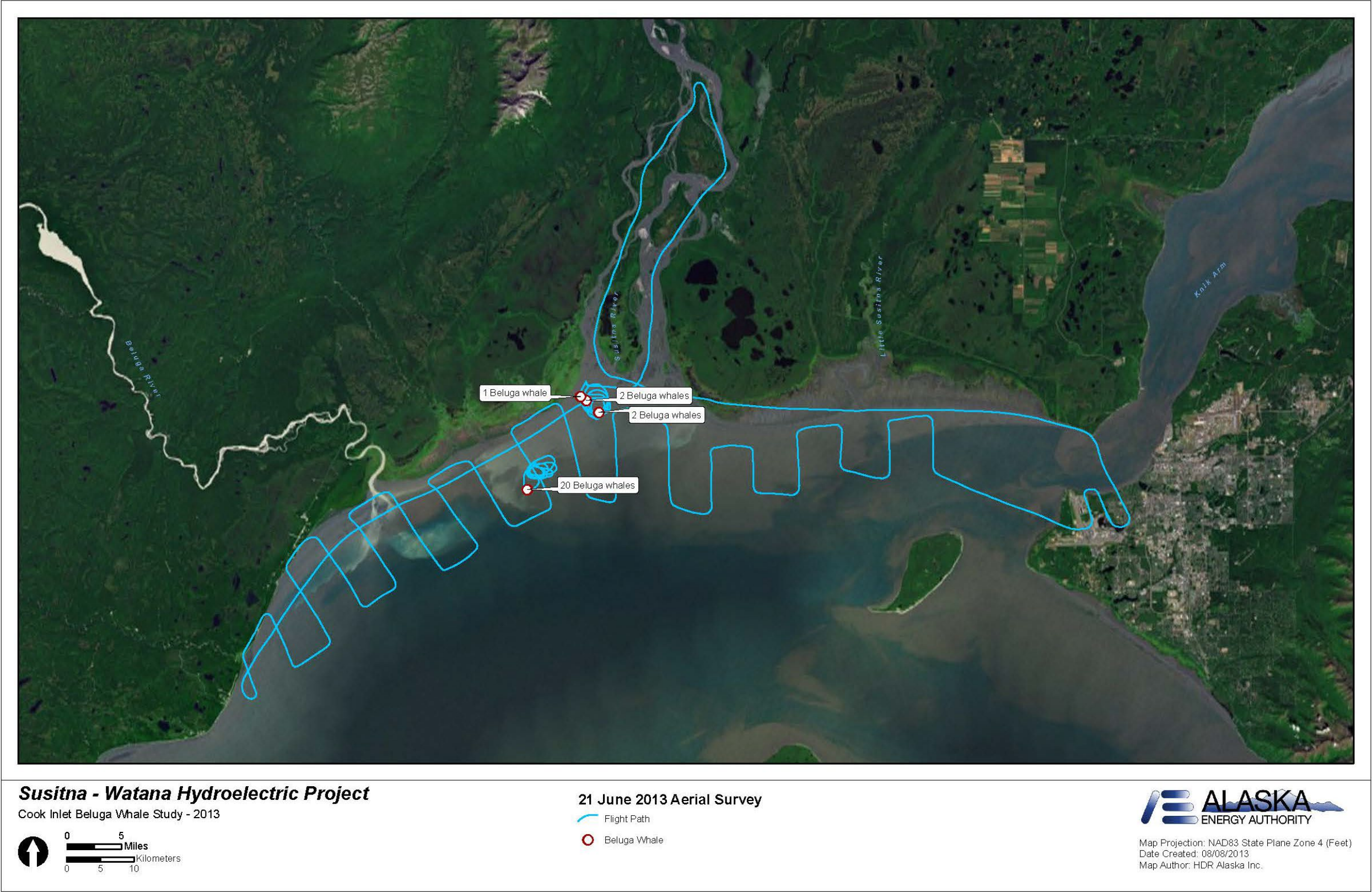


Figure 6. Map of aerial survey flown on June 21, 2013 showing locations of beluga whales. No harbor seals were sighted.

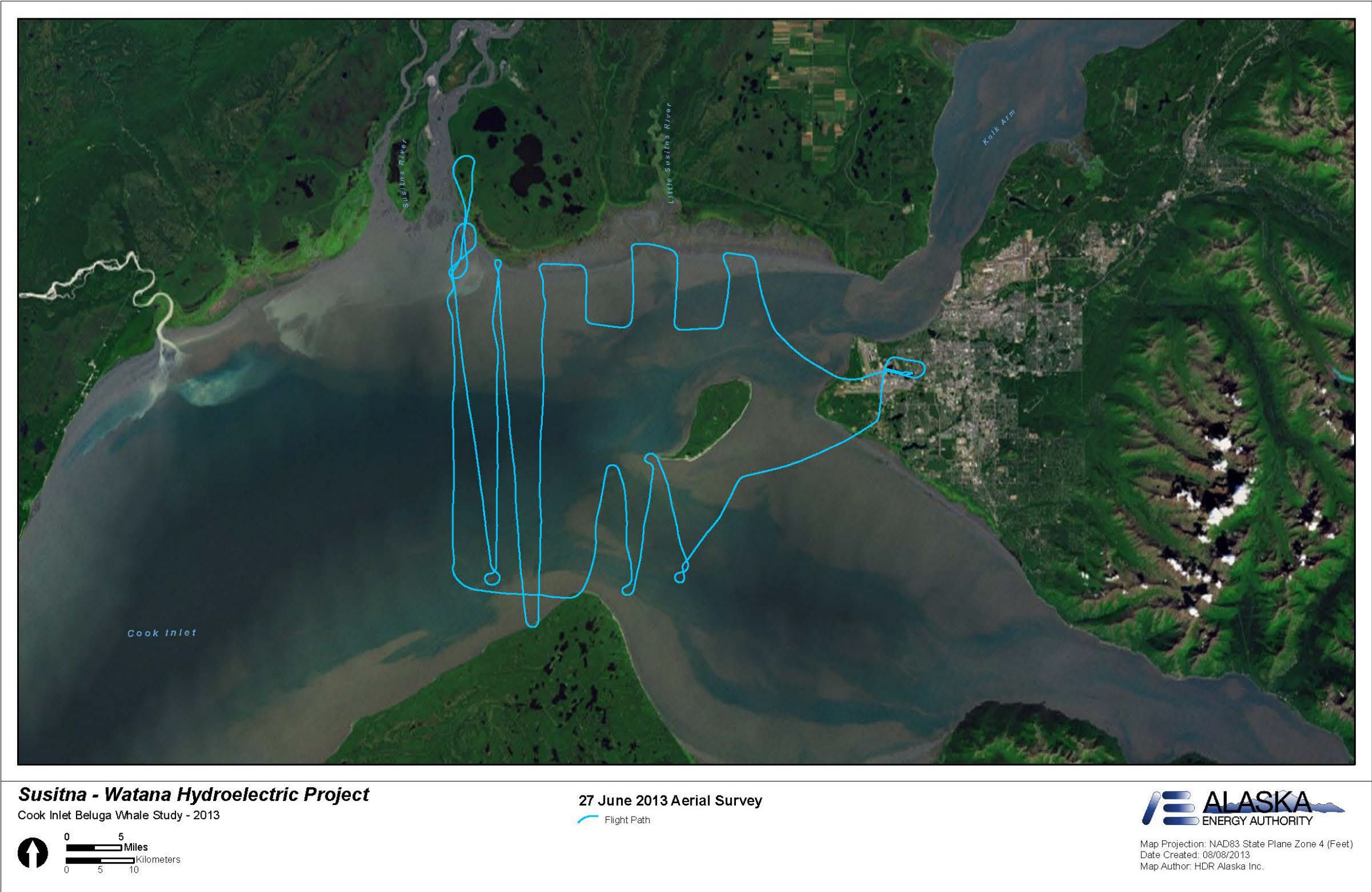


Figure 7. Map of aerial survey flown on June 27, 2013. No beluga whales or harbor seals were sighted.

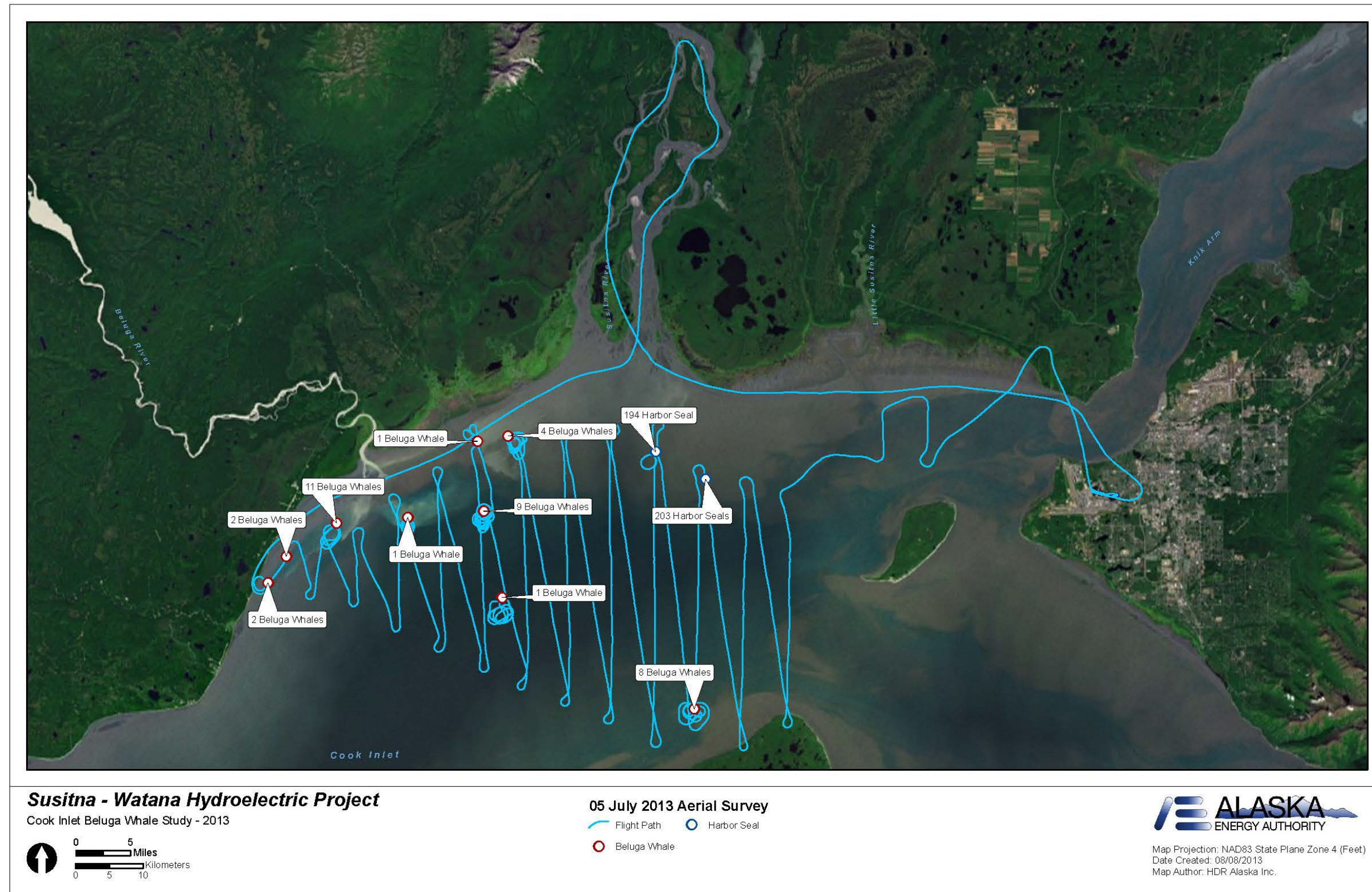


Figure 8. Map of aerial survey flown on July 5, 2013 showing locations of beluga whales and harbor seals.

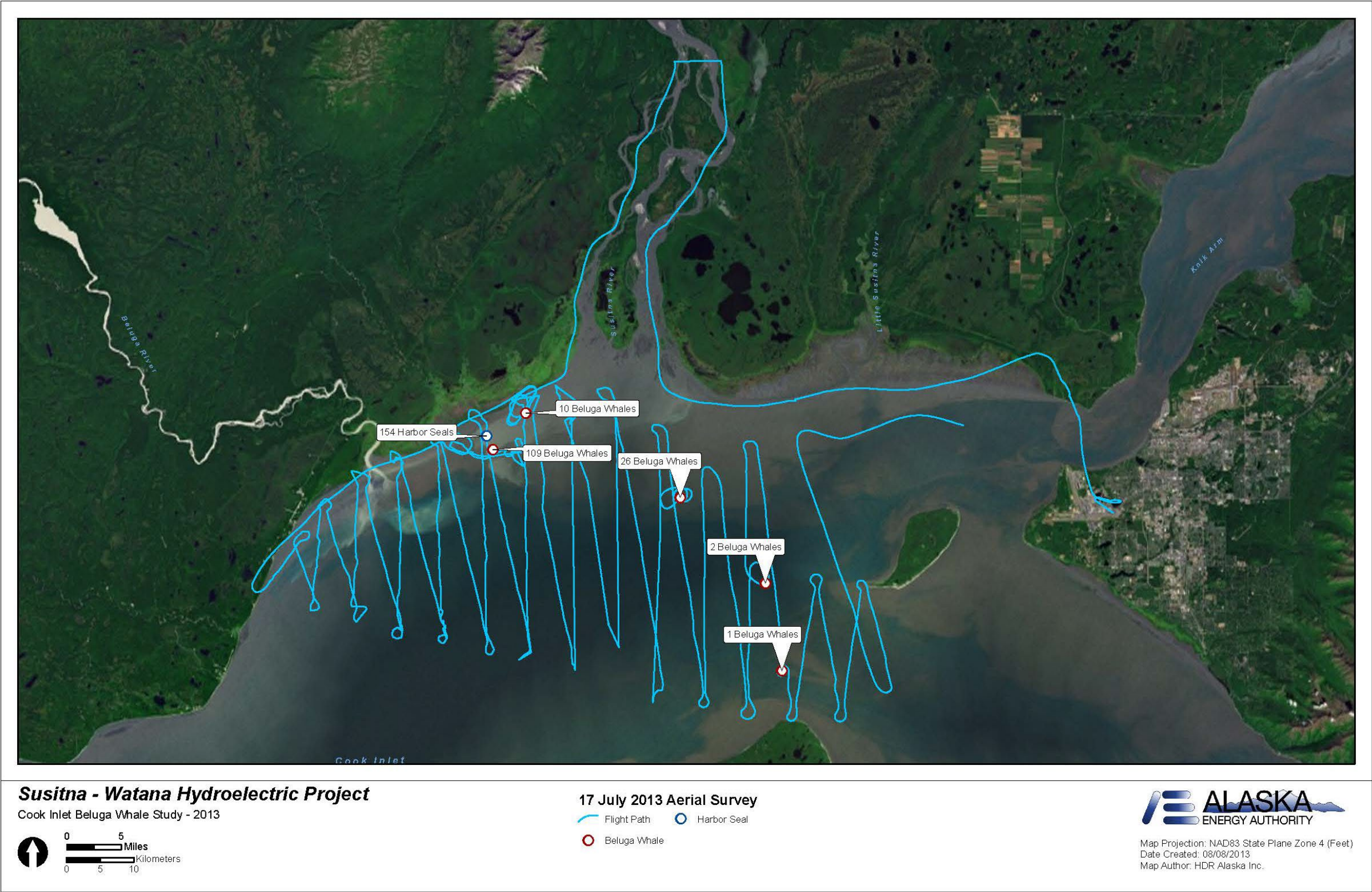


Figure 9. Map of aerial survey flown on July 17, 2013 showing locations of beluga whales and harbor seals.

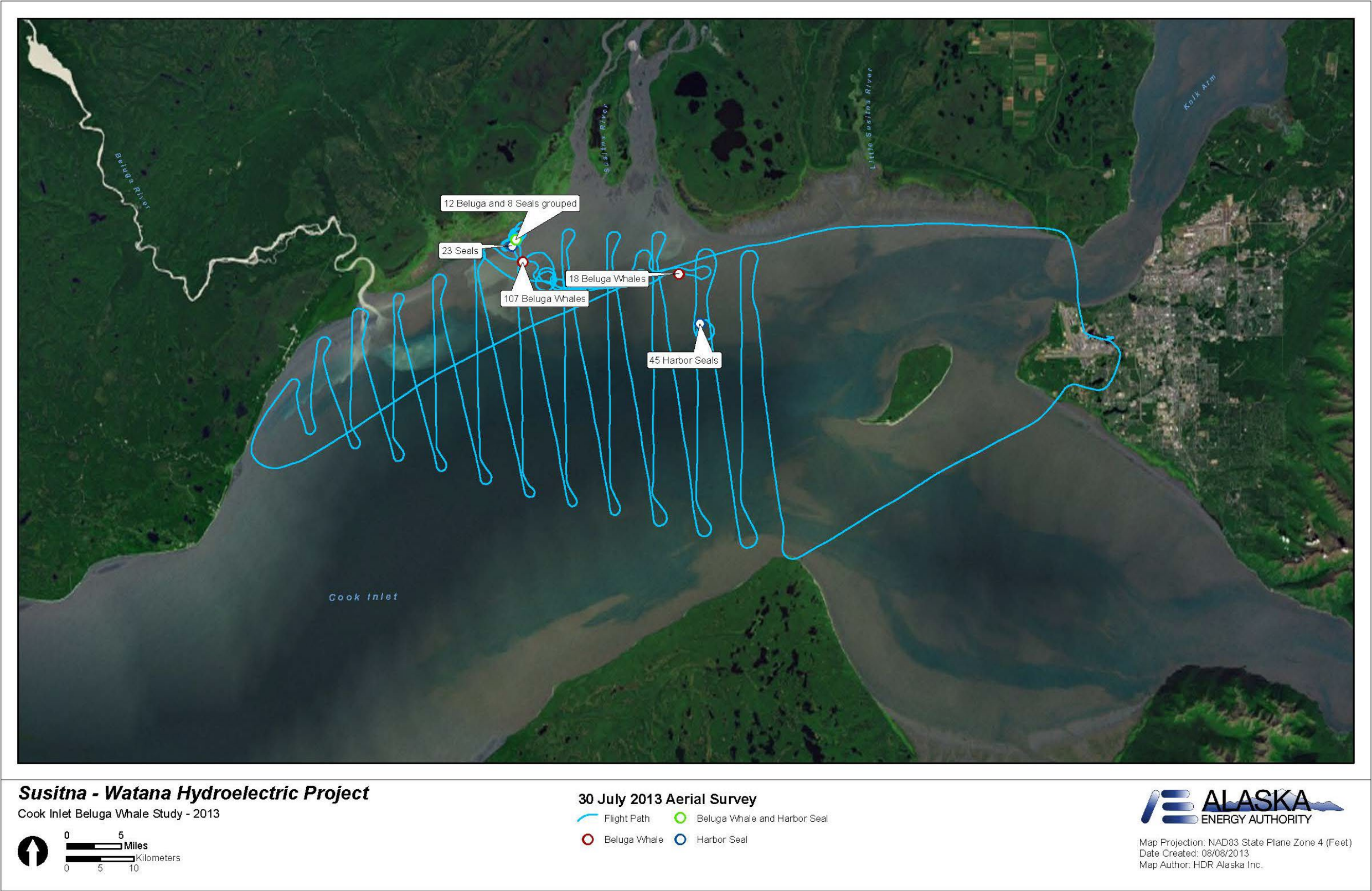


Figure 10. Map of aerial survey flown on July 30, 2013 showing locations of beluga whales and harbor seals.

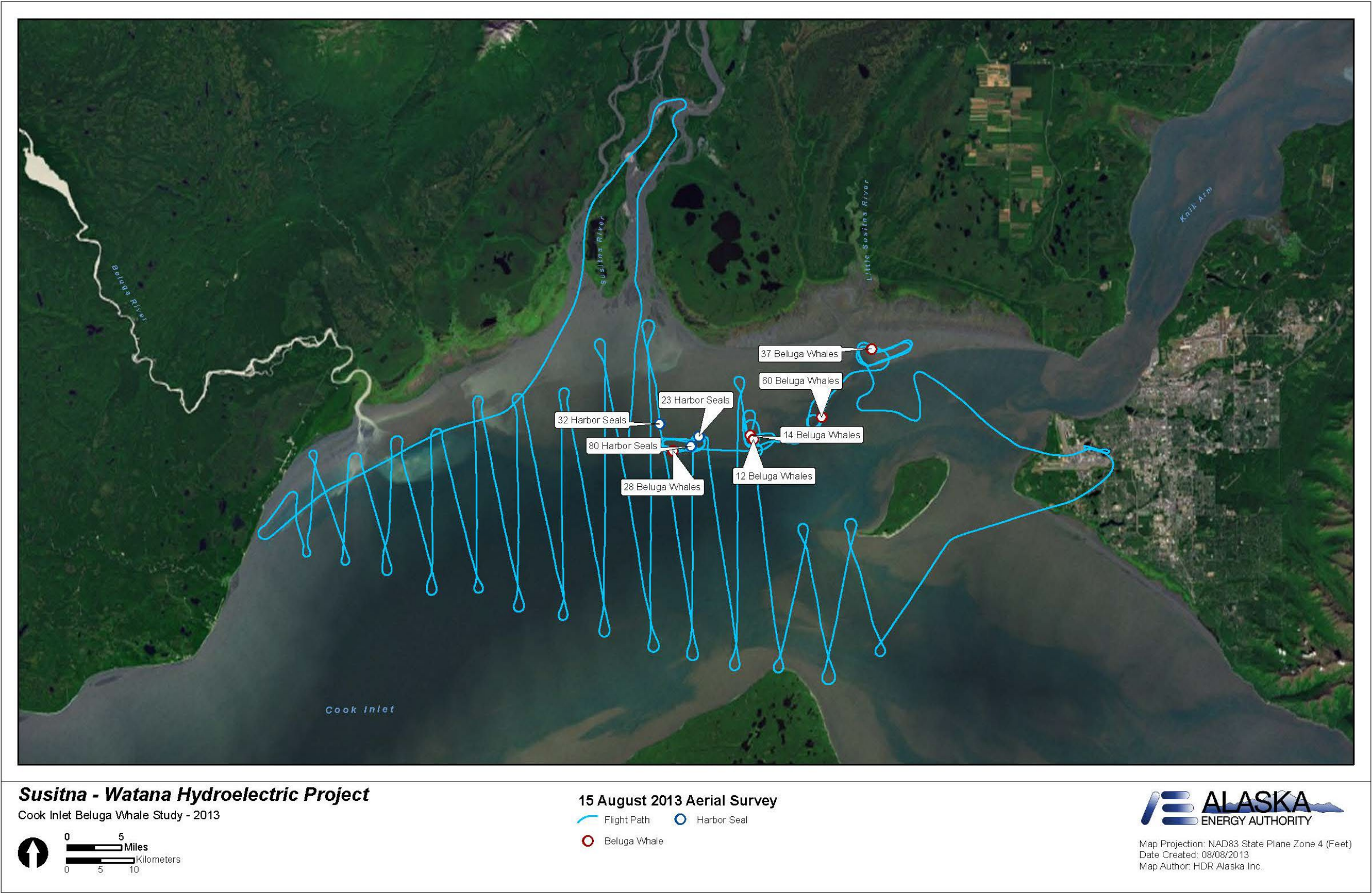


Figure 11. Map of aerial survey flown on August 15, 2013 showing locations of beluga whales and harbor seals.

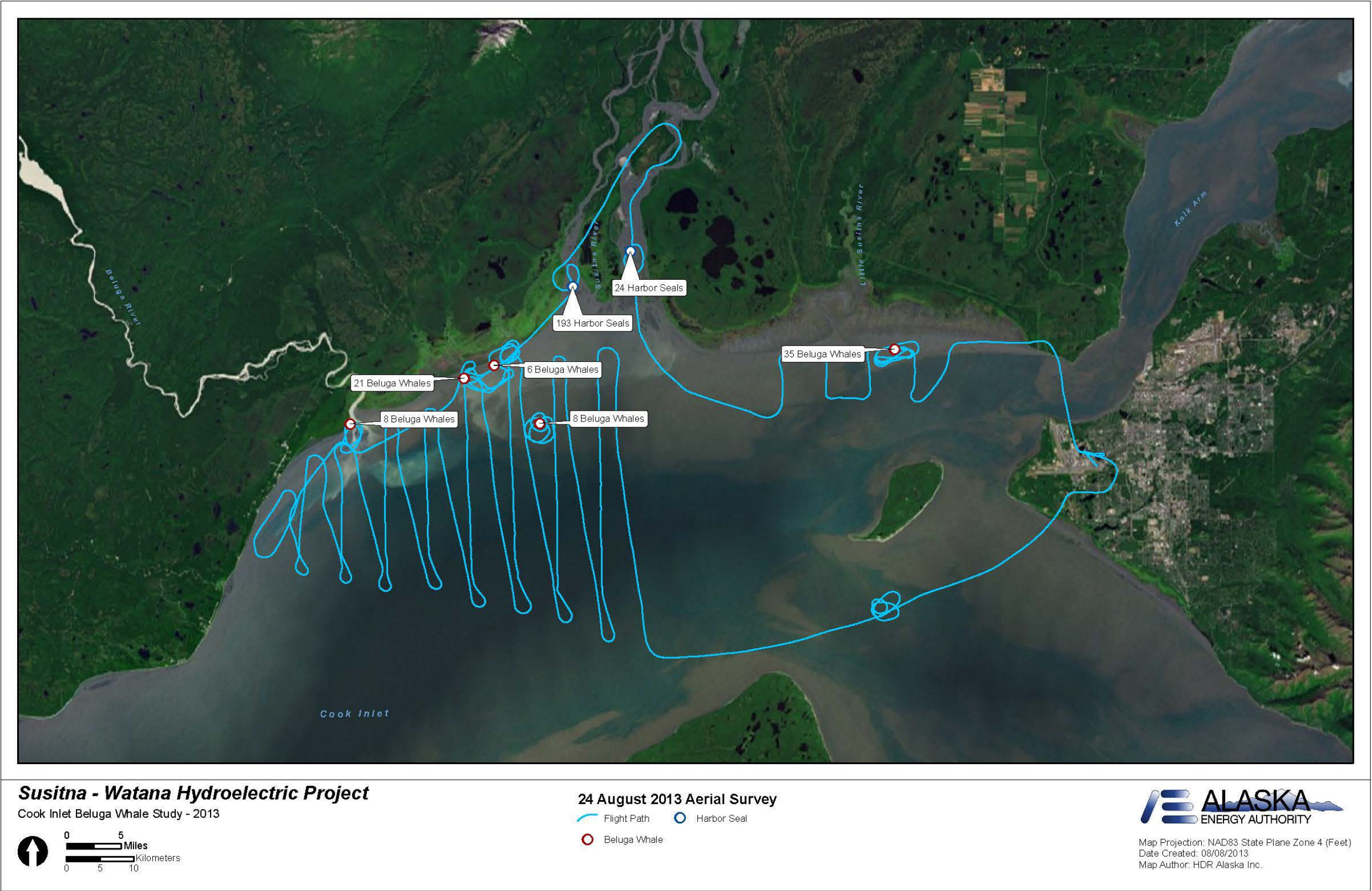


Figure 12. Map of aerial survey flown on August 24, 2013 showing locations of beluga whales and harbor seals.

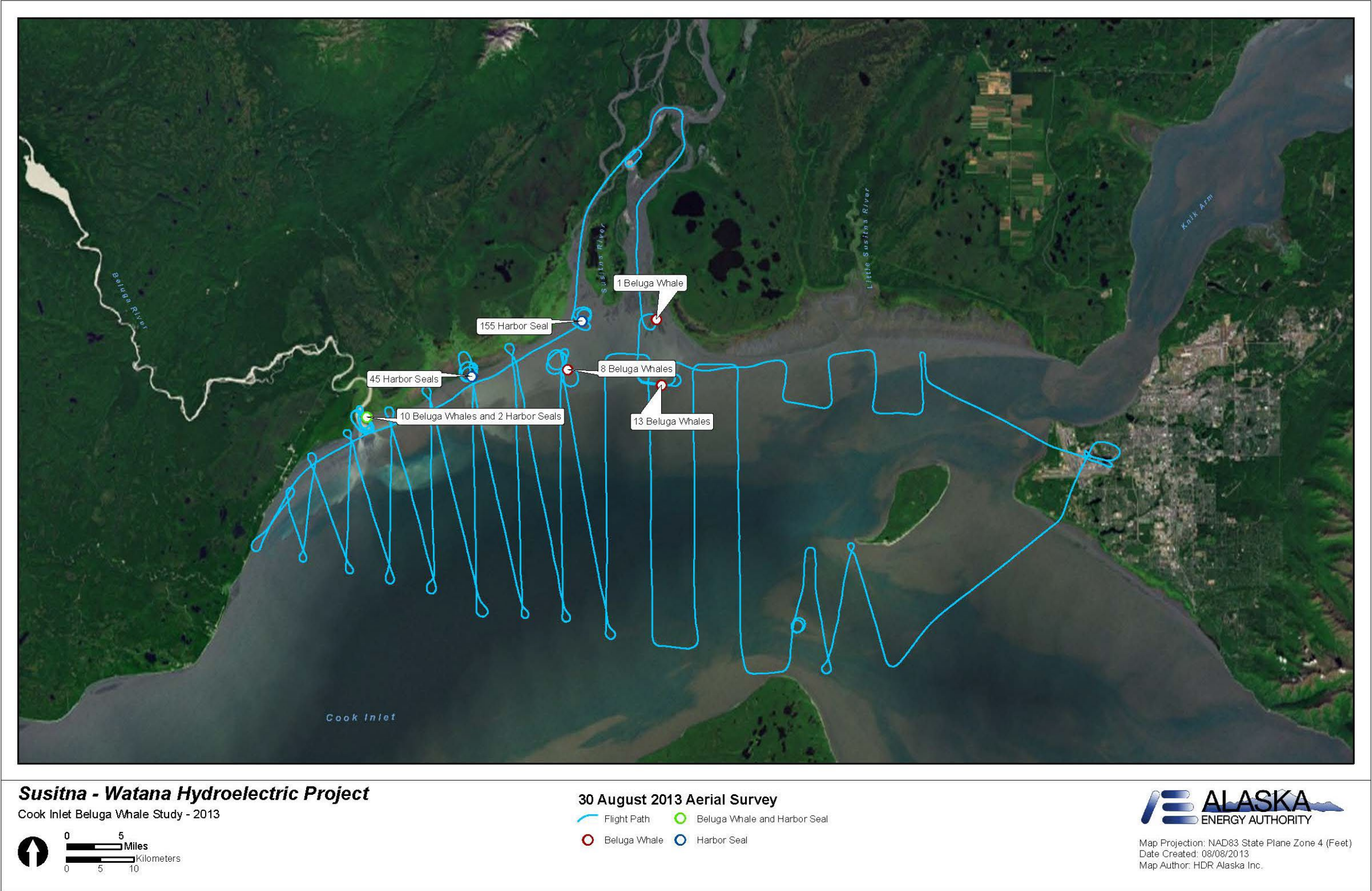


Figure 13. Map of aerial survey flown on August 30, 2013 showing locations of beluga whales and harbor seals.

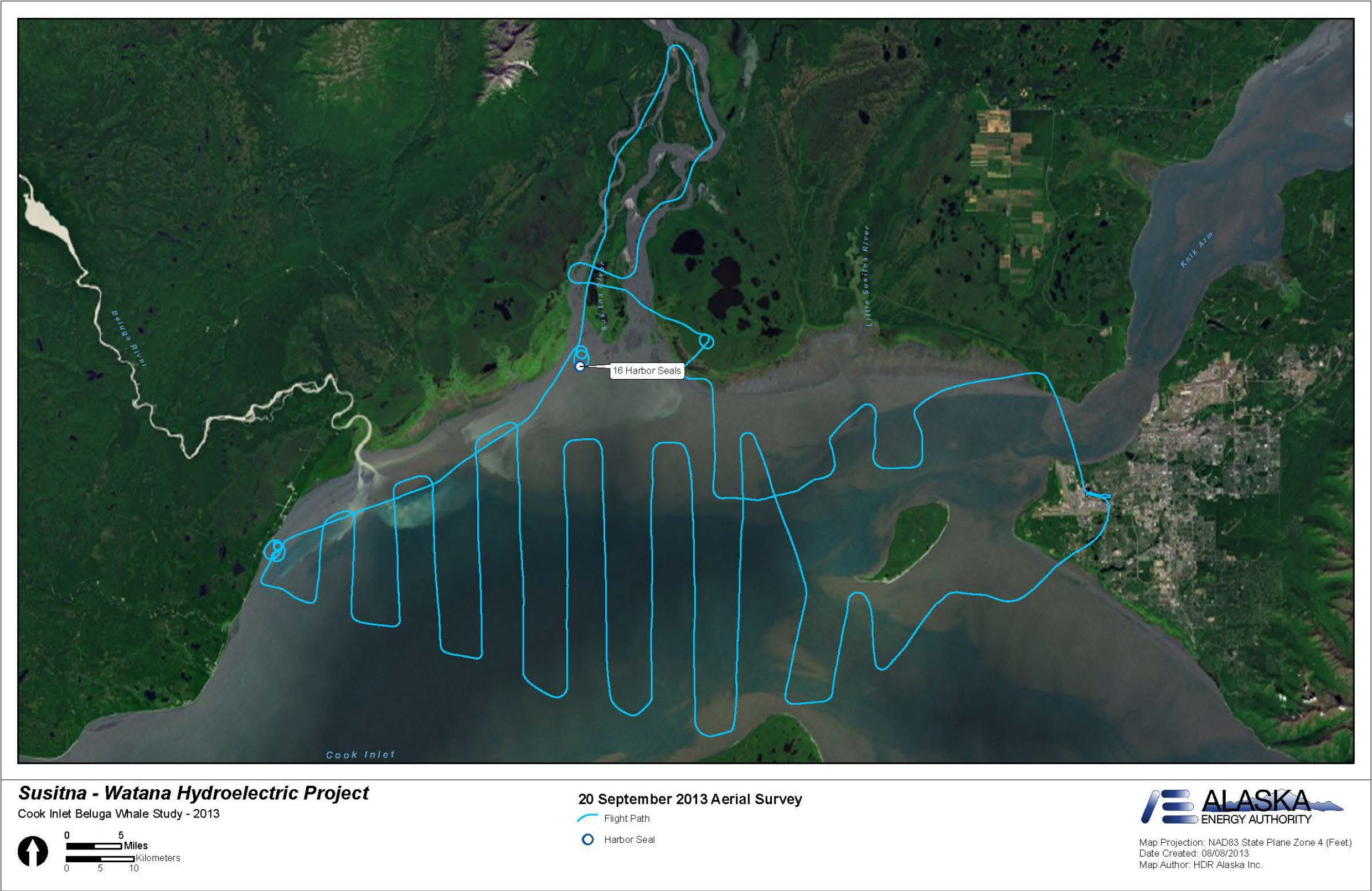


Figure 14. Map of aerial survey flown on September 20, 2013 showing locations of harbor seals. No beluga whales were sighted.

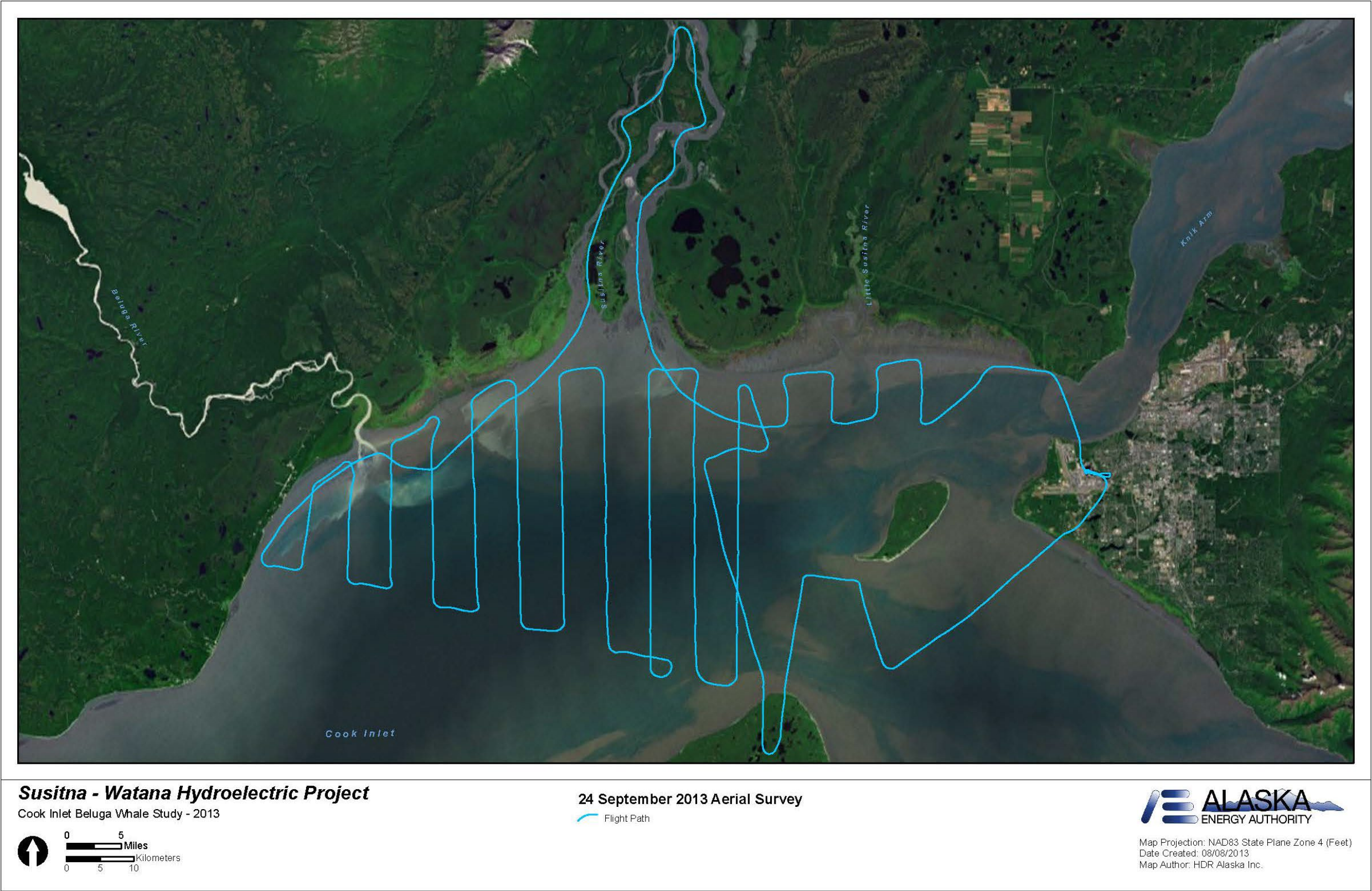


Figure 15. Map of aerial survey flown on September 24, 2013. No beluga whales or harbor seals were sighted.



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

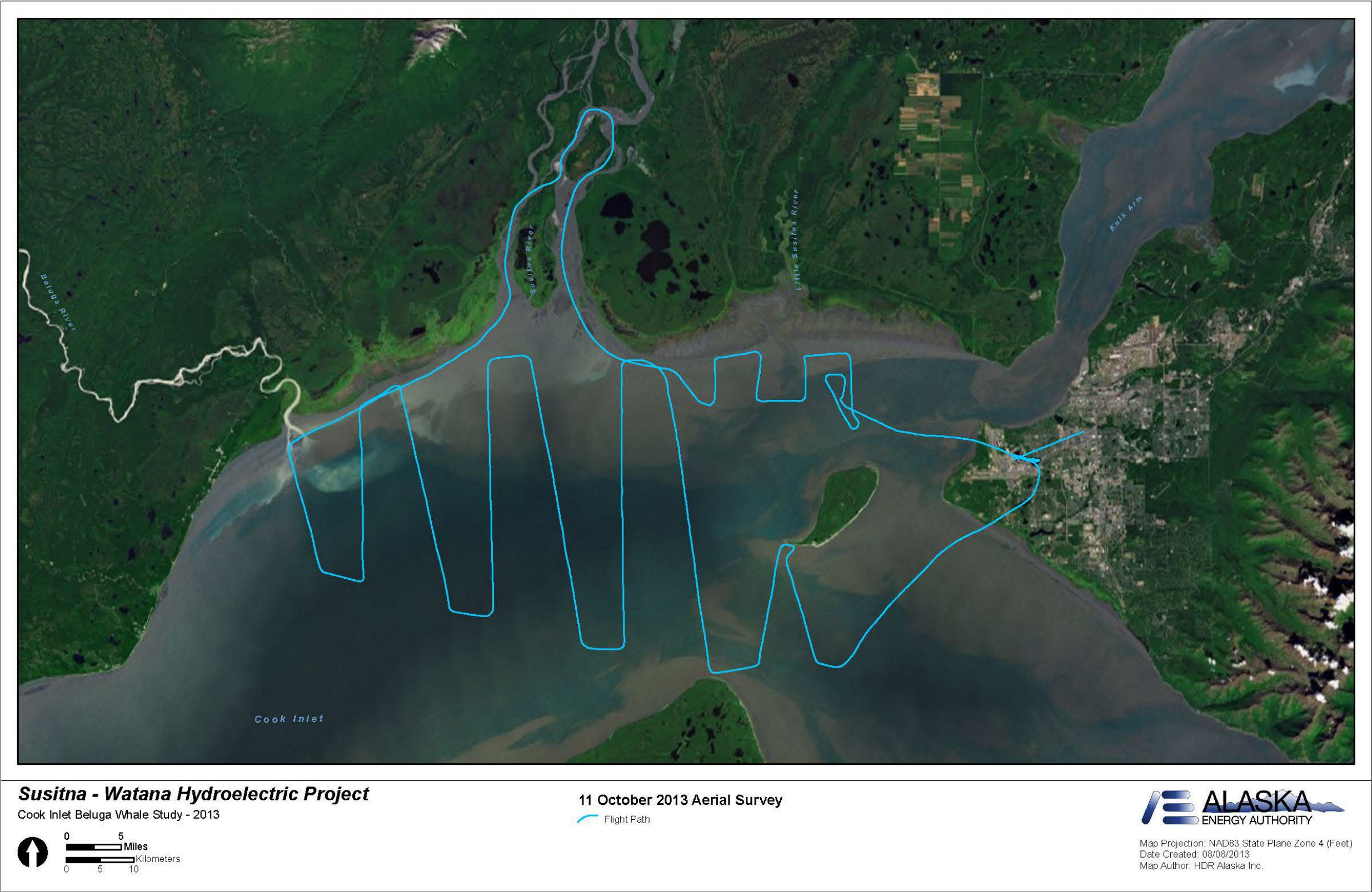


Figure 17. Map of aerial survey flown on October 11, 2013. No beluga whales or harbor seals were sighted.