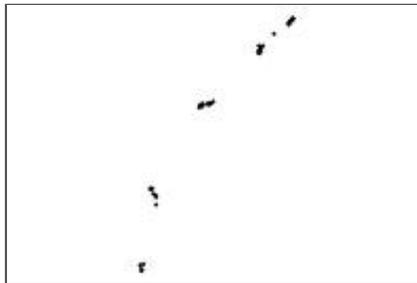


## Focus Area Discharge measurement Locations

### Shapefile



### Tags

Susitna-Watana Hydroelectric Project, Susitna River, Alaska, September 2014

### Summary

This shapefile was developed under the Fluvial Geomorphology Modeling below Watana Dam Study (Revised Study Plan [RSP] 6.6). The overall goal of RSP Study 6.6 is to model the potential effects of the proposed Project on the fluvial geomorphology of the Susitna River and to assist in predicting the magnitude of geomorphic response. More specifically, the purpose of the modeling study, along with the Geomorphology Study (RSP Study 6.5), is to assess the potential impact of the Project on the behavior of the river downstream of the proposed dam, with particular focus on potential changes in instream and riparian habitat. The models in the Fluvial Geomorphology Modeling below Watana Dam Study include hydraulic and sediment transport models of (1) sediment processes at selected tributaries to evaluate sediment supplies and tributary delta effects, (2) reach-scale processes of the Susitna River system below Watana Dam including major tributaries, and (3) local-scale processes at selected Focus Areas in the Middle Susitna River.

### Description

The overall goal of this effort was to collect discharge measurements in areas with the potential to be affected by construction and operation of the proposed Susitna-Watana Hydroelectric Project in Alaska. Over the course of the cumulative field data collection effort (2013 and 2014), all Focus Area Discharge measurements were performed in 2014.

The shapefile is a series of points representing locations of discharge measurements in 7 Focus Areas including FA-104 Whiskers Slough, FA-113 Oxbow I, FA-115 Slough 6A, FA-128 Slough 8A, FA-138 Gold Creek, FA-141 Indian River, and FA-144 Slough 21. The effort supports 2-dimensional modeling performed within the Fluvial Geomorphology Modeling Study and was performed in conjunction with the Fish and Aquatics IFS (Study 8.5). The discharge measurements were collected in the clear water portions of the lateral habitat. The purpose of this effort is quantify the ground water and/or upland water flow into the Focus Areas. The discharge measurements will be performed per the protocols identified in the Fish and Aquatics IFS.

### Credits

Alaska Energy Authority;  
Tetra Tech

### Use limitations

None

### Extent

<b>West</b>	-150.166425	<b>East</b>	-149.574822
<b>North</b>	62.816710	<b>South</b>	62.371080

## Scale Range

**Maximum (zoomed in)** 1:5,000

**Minimum (zoomed out)** 1:150,000,000

## ArcGIS Metadata ▶

### Topics and Keywords ▶

\* CONTENT TYPE Downloadable Data  
EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION No

PLACE KEYWORDS Susitna River, Alaska

TEMPORAL KEYWORDS September 2014

THEME KEYWORDS Susitna-Watana Hydroelectric Project, Susitna River

*Hide Topics and Keywords ▲*

### Citation ▶

TITLE Focus Area Discharge measurement Locations  
ALTERNATE TITLES SuWa\_6\_6\_FocusArea\_Qmeas\_20170630  
PUBLICATION DATE 2017-06-30 00:00:00

PRESENTATION FORMATS \* digital map  
FGDC GEOSPATIAL PRESENTATION FORMAT vector digital data

*Hide Citation ▲*

### Citation Contacts ▶

RESPONSIBLE PARTY  
ORGANIZATION'S NAME Tetra Tech  
CONTACT'S ROLE originator

*Hide Citation Contacts ▲*

### Resource Details ▶

DATASET LANGUAGES \* English (UNITED STATES)  
DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format

STATUS completed  
SPATIAL REPRESENTATION TYPE \* vector

\* PROCESSING ENVIRONMENT Microsoft Windows 7 Version 6.1 (Build 7601) Service Pack 1; Esri ArcGIS 10.4.1.5686

CREDITS  
Alaska Energy Authority;  
Tetra Tech

ARCGIS ITEM PROPERTIES  
\* NAME SuWa\_6\_6\_FocusArea\_Qmeas\_20170630  
\* SIZE 0.001  
\* LOCATION file:///\\DIVD-HK31VR1  
\\H\$\Metadata\Field\_Data\Field\_Data\SuWa\_6\_6\_FocusArea\_Qmeas\_20170630

\\SuWa\_6\_6\_FocusArea\_Qmeas\_20170630\\SuWa\_6\_6\_FocusArea\_Qmeas\_20170630.shp  
 \* ACCESS PROTOCOL Local Area Network

[Hide Resource Details ▲](#)

## Extents ►

### EXTENT

DESCRIPTION  
ground condition

### TEMPORAL EXTENT

BEGINNING DATE 2014-09-23 00:00:00  
 ENDING DATE 2014-09-27 00:00:00

### EXTENT

#### GEOGRAPHIC EXTENT

##### BOUNDING RECTANGLE

WEST LONGITUDE -150.16642529400903  
 EAST LONGITUDE -149.57482193502804  
 SOUTH LATITUDE 62.37107985273932  
 NORTH LATITUDE 62.81670968590773  
 EXTENT CONTAINS THE RESOURCE Yes

### EXTENT

#### GEOGRAPHIC EXTENT

##### BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching  
 \* WEST LONGITUDE -150.166425  
 \* EAST LONGITUDE -149.574822  
 \* NORTH LATITUDE 62.816710  
 \* SOUTH LATITUDE 62.371080  
 \* EXTENT CONTAINS THE RESOURCE Yes

### EXTENT IN THE ITEM'S COORDINATE SYSTEM

\* WEST LONGITUDE 1612578.000000  
 \* EAST LONGITUDE 1711539.000000  
 \* SOUTH LATITUDE 3058879.000000  
 \* NORTH LATITUDE 3221584.000000  
 \* EXTENT CONTAINS THE RESOURCE Yes

[Hide Extents ▲](#)

## Resource Points of Contact ►

### POINT OF CONTACT

ORGANIZATION'S NAME Alaska Energy Authority  
 CONTACT'S ROLE owner

#### CONTACT INFORMATION ►

##### PHONE

VOICE 907-771-3000  
 FAX 907-771-3044

##### ADDRESS

TYPE both  
 DELIVERY POINT 813 West Northern Lights Boulevard  
 CITY Anchorage  
 ADMINISTRATIVE AREA AK  
 POSTAL CODE 99503

COUNTRY US  
E-MAIL ADDRESS [SUWAhelp@aidea.org](mailto:SUWAhelp@aidea.org)

[Hide Contact information ▲](#)

#### POINT OF CONTACT

ORGANIZATION'S NAME Tetra Tech  
CONTACT'S POSITION Principal Investigator for Geomorphology Study  
CONTACT'S ROLE principal investigator

#### CONTACT INFORMATION ►

##### PHONE

VOICE 206.728.9655  
FAX 206.728.9670

##### ADDRESS

TYPE both  
DELIVERY POINT 1420 5th Ave., Suite 550  
CITY Seattle  
ADMINISTRATIVE AREA WA  
POSTAL CODE 98101  
COUNTRY US  
E-MAIL ADDRESS [info@tetrattech.com](mailto:info@tetrattech.com)

[Hide Contact information ▲](#)

[Hide Resource Points of Contact ▲](#)

## Resource Maintenance ►

#### RESOURCE MAINTENANCE

UPDATE FREQUENCY not planned

[Hide Resource Maintenance ▲](#)

## Resource Constraints ►

#### LEGAL CONSTRAINTS

##### LIMITATIONS OF USE

THE ELECTRONIC SERVICES OR PRODUCTS ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE ALASKA ENERGY AUTHORITY, THE STATE OF ALASKA, OR THEIR RESPECTIVE EMPLOYEES OR AGENTS, BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH USE OF THE ELECTRONIC SERVICES OR PRODUCTS, ANY FAILURE THEREOF OR OTHERWISE, AND IN NO EVENT WILL THE STATE OF ALASKA'S LIABILITY TO THE REQUESTOR OR ANYONE ELSE EXCEED THE FEE PAID FOR THE ELECTRONIC SERVICE OR PRODUCT.

#### CONSTRAINTS

##### LIMITATIONS OF USE

None

[Hide Resource Constraints ▲](#)

## Spatial Reference ►

## ARCGIS COORDINATE SYSTEM

- \* TYPE Projected
- \* GEOGRAPHIC COORDINATE REFERENCE GCS\_North\_American\_1983
- \* PROJECTION NAD\_1983\_StatePlane\_Alaska\_4\_FIPS\_5004\_Feet
- \* COORDINATE REFERENCE DETAILS
  - PROJECTED COORDINATE SYSTEM
    - WELL-KNOWN IDENTIFIER 102634
    - X ORIGIN -16806300
    - Y ORIGIN -52448700
    - XY SCALE 137255069.87923574
    - Z ORIGIN -100000
    - Z SCALE 10000
    - M ORIGIN -100000
    - M SCALE 10000
    - XY TOLERANCE 0.0032808333333333331
    - Z TOLERANCE 0.001
    - M TOLERANCE 0.001
    - HIGH PRECISION true
    - LATEST WELL-KNOWN IDENTIFIER 102634
    - WELL-KNOWN TEXT PROJCS["NAD\_1983\_StatePlane\_Alaska\_4\_FIPS\_5004\_Feet",GEOGCS["GCS\_North\_American\_1983",DATUM["D\_North\_American\_1983",SPHEROID["GRS\_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Transverse\_Mercator"],PARAMETER["False\_Easting",1640416.666666667],PARAMETER["False\_Northing",0.0],PARAMETER["Central\_Meridian",-150.0],PARAMETER["Scale\_Factor",0.9999],PARAMETER["Latitude\_Of\_Origin",54.0],UNIT["Foot\_US",0.3048006096012192],AUTHORITY["Esri",102634]]

## REFERENCE SYSTEM IDENTIFIER

- \* VALUE 102634
- \* CODESPACE Esri
- \* VERSION 8.0.1

[Hide Spatial Reference ▲](#)**Spatial Data Properties ►**

## VECTOR ►

- \* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

## GEOMETRIC OBJECTS

FEATURE CLASS NAME SuWa\_6\_6\_FocusArea\_Qmeas\_20170630

- \* OBJECT TYPE point
- \* OBJECT COUNT 52

[Hide Vector ▲](#)

## ARCGIS FEATURE CLASS PROPERTIES ►

FEATURE CLASS NAME SuWa\_6\_6\_FocusArea\_Qmeas\_20170630

- \* FEATURE TYPE Simple
- \* GEOMETRY TYPE Point
- \* HAS TOPOLOGY FALSE
- \* FEATURE COUNT 52
- \* SPATIAL INDEX FALSE
- \* LINEAR REFERENCING FALSE

[Hide ArcGIS Feature Class Properties ▲](#)[Hide Spatial Data Properties ▲](#)

## Geoprocessing history ►

*Hide Geoprocessing history ▲*

## Distribution ►

### DISTRIBUTOR ►

#### CONTACT INFORMATION

ORGANIZATION'S NAME Alaska Energy Authority  
CONTACT'S ROLE distributor

#### CONTACT INFORMATION ►

##### PHONE

VOICE 907-771-3000  
FAX 907-771-3044

##### ADDRESS

TYPE both  
DELIVERY POINT 813 West Northern Lights Boulevard  
CITY Anchorage  
ADMINISTRATIVE AREA AK  
POSTAL CODE 99503  
COUNTRY US  
E-MAIL ADDRESS [SUWAhelp@aidea.org](mailto:SUWAhelp@aidea.org)

*Hide Contact information ▲*

#### ORDERING PROCESS

TERMS AND FEES None

*Hide Distributor ▲*

### DISTRIBUTION FORMAT

\* NAME Shapefile

### TRANSFER OPTIONS

\* TRANSFER SIZE 0.001

#### ONLINE SOURCE

LOCATION [http://gis.suhydro.org/SuWa/06-GEO/6.06-GEOMOD/GIS/Field\\_Data](http://gis.suhydro.org/SuWa/06-GEO/6.06-GEOMOD/GIS/Field_Data)

#### ONLINE SOURCE

LOCATION <http://www.susitna-watanahydro.org/type/documents/>  
NAME "06.06 Fluvial Geomorphology Modeling below Watana Dam - 2014-2015 Study Implementation Report (Part 1 of 4)" under "November 2015; Study Completion and 2014/2015 Implementation Reports"

*Hide Distribution ▲*

## Fields ►

### DETAILS FOR OBJECT [SuWa\\_6\\_6\\_FocusArea\\_Qmeas\\_20170630](#) ►

\* TYPE Feature Class  
\* ROW COUNT 52

#### DEFINITION

2014 Focus Area Discharge Measurements

#### DEFINITION SOURCE

## Tetra Tech

## FIELD FID ▶

- \* ALIAS FID
- \* DATA TYPE OID
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0
- \* FIELD DESCRIPTION  
Internal feature number.
  
- \* DESCRIPTION SOURCE  
Esri
  
- \* DESCRIPTION OF VALUES  
Sequential unique whole numbers that are automatically generated.

*Hide Field FID ▲*

## FIELD Shape ▶

- \* ALIAS Shape
- \* DATA TYPE Geometry
- \* WIDTH 0
- \* PRECISION 0
- \* SCALE 0
- \* FIELD DESCRIPTION  
Feature geometry.
  
- \* DESCRIPTION SOURCE  
Esri
  
- \* DESCRIPTION OF VALUES  
Coordinates defining the features.

*Hide Field Shape ▲*

## FIELD Date ▶

- \* ALIAS Date
- \* DATA TYPE Date
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0
- FIELD DESCRIPTION  
The date on which the sample point was collected
  
- DESCRIPTION SOURCE  
Tetra Tech
  
- DESCRIPTION OF VALUES  
Date

*Hide Field Date ▲*

**FIELD Flow\_cfs** ▶

- \* ALIAS Flow\_cfs
- \* DATA TYPE Double
- \* WIDTH 16
- \* PRECISION 15
- \* SCALE 6

## FIELD DESCRIPTION

Measurement or estimation of discharge in cubic feet per second

## DESCRIPTION SOURCE

Tetra Tech

## DESCRIPTION OF VALUES

Discharge measurement or estimation

*Hide Field Flow\_cfs* ▲

**FIELD Note** ▶

- \* ALIAS Note
- \* DATA TYPE String
- \* WIDTH 254
- \* PRECISION 0
- \* SCALE 0

## FIELD DESCRIPTION

Note on how discharge value was acquired - measurement with velocity metor or headphones vs estimation

## DESCRIPTION SOURCE

Tetra Tech

## DESCRIPTION OF VALUES

Note on Discharge

*Hide Field Note* ▲

**FIELD Location** ▶

- \* ALIAS Location
- \* DATA TYPE String
- \* WIDTH 254
- \* PRECISION 0
- \* SCALE 0

## FIELD DESCRIPTION

Description of location where sample point was collected

## DESCRIPTION SOURCE

Tetra Tech

## DESCRIPTION OF VALUES

Location

*Hide Field Location* ▲

## FIELD PRM ►

- \* ALIAS PRM
- \* DATA TYPE Double
- \* WIDTH 16
- \* PRECISION 15
- \* SCALE 6

## FIELD DESCRIPTION

Project River Mile of sample location

## DESCRIPTION SOURCE

Tetra Tech

## DESCRIPTION OF VALUES

Project River Mile

*Hide Field PRM ▲*

## FIELD Northingft ►

- \* ALIAS Northingft
- \* DATA TYPE Double
- \* WIDTH 16
- \* PRECISION 15
- \* SCALE 6

## FIELD DESCRIPTION

Sample location coordinate Northing in Alaska State Plane Zone 4 (5004) feet

## DESCRIPTION SOURCE

Tetra Tech

## DESCRIPTION OF VALUES

Sample location northing (in feet)

*Hide Field Northingft ▲*

## FIELD Eastingft ►

- \* ALIAS Eastingft
- \* DATA TYPE Double
- \* WIDTH 16
- \* PRECISION 15
- \* SCALE 6

## FIELD DESCRIPTION

Sample location coordinate Easting in Alaska State Plane Zone 4 (5004) feet.

## DESCRIPTION SOURCE

Tetra Tech

## DESCRIPTION OF VALUES

Sample location easting (in feet)

*Hide Field Eastingft ▲*

## FIELD FA ►

- \* ALIAS FA
- \* DATA TYPE String
- \* WIDTH 254
- \* PRECISION 0
- \* SCALE 0

## FIELD DESCRIPTION

Focus Area where sample point was collected

## DESCRIPTION SOURCE

Tetra Tech

## DESCRIPTION OF VALUES

Focus Area

*Hide Field FA ▲*

## FIELD DataLink ►

- \* ALIAS DataLink
- \* DATA TYPE String
- \* WIDTH 250
- \* PRECISION 0
- \* SCALE 0

## FIELD DESCRIPTION

Hyperlink to downloadable dataset on AEA server

## DESCRIPTION SOURCE

Tetra Tech/AEA

## DESCRIPTION OF VALUES

Hyperlink to downloadable dataset on AEA server: [http://gis.suhydro.org/SuWa/06-GEO/6.06-GEOMOD/GIS/Field\\_Data](http://gis.suhydro.org/SuWa/06-GEO/6.06-GEOMOD/GIS/Field_Data)

*Hide Field DataLink ▲*

## FIELD DocLink ►

- \* ALIAS DocLink
- \* DATA TYPE String
- \* WIDTH 254
- \* PRECISION 0
- \* SCALE 0

## FIELD DESCRIPTION

Link to associated downloadable report on AEA server

## DESCRIPTION SOURCE

Tetra Tech/AEA

## DESCRIPTION OF VALUES

Link to associated downloadable reports on AEA server: "06.06 Fluvial Geomorphology Modeling below Watana Dam - 2014-2015 Study Implementation Report (Part 1 of 4)" under "November 2015; Study Completion and 2014/2015 Implementation Reports"

*Hide Field DocLink ▲*

[Hide Details for object SuWa\\_6\\_6\\_FocusArea\\_Qmeas\\_20170630 ▲](#)

[Hide Fields ▲](#)

## Metadata Details ►

- \* METADATA LANGUAGE English (UNITED STATES)
- \* METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

SCOPE OF THE DATA DESCRIBED BY THE METADATA \* dataset  
SCOPE NAME \* dataset

\* LAST UPDATE 2017-06-29

### ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0  
METADATA STYLE FGDC CSDGM Metadata  
STANDARD OR PROFILE USED TO EDIT METADATA FGDC

CREATED IN ARCGIS FOR THE ITEM 2015-10-09 11:08:57  
LAST MODIFIED IN ARCGIS FOR THE ITEM 2017-06-29 18:12:45

### AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes  
LAST UPDATE 2017-06-29 18:12:45

[Hide Metadata Details ▲](#)

## Metadata Contacts ►

### METADATA CONTACT

ORGANIZATION'S NAME Alaska Energy Authority  
CONTACT'S ROLE owner

### CONTACT INFORMATION ►

#### PHONE

VOICE 907-771-3000  
FAX 907-771-3044

#### ADDRESS

TYPE both  
DELIVERY POINT 813 West Northern Lights Boulevard  
CITY Anchorage  
ADMINISTRATIVE AREA AK  
POSTAL CODE 99503  
COUNTRY US  
E-MAIL ADDRESS SUWAhelp@aidea.org

[Hide Contact information ▲](#)

[Hide Metadata Contacts ▲](#)

## Metadata Maintenance ►

### MAINTENANCE

UPDATE FREQUENCY not planned

*Hide Metadata Maintenance ▲*

## **Thumbnail and Enclosures ▶**

THUMBNAIL

THUMBNAIL TYPE    JPG

*Hide Thumbnail and Enclosures ▲*

## **FGDC Metadata (read-only) ▼**