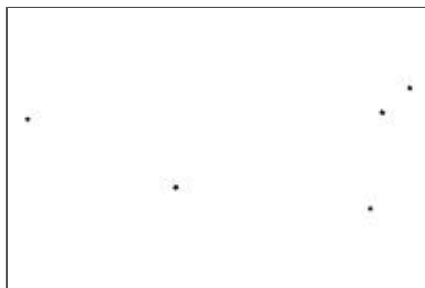


Upper Susitna River Segment Cross-Sections

Shapefile



Tags

Susitna-Watana Hydroelectric Project, Susitna River, Upper River, UR, Alaska, August 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 cross-section data in areas with the potential to be affected by construction and operation of the proposed Susitna-Watana Hydroelectric Project in Alaska.

The shapefile is a series of points representing locations of depth data in the Upper Susitna River Segment. Each point was collected using a Trimble GeoExplorer 6000 GeoXH GPS unit loaded with TerraSync version 5.4.1 and the Geomorphology Study data dictionary. Raw surveyed GPS points from the Trimble GeoExplorer 6000 were imported into GPS Pathfinder Office v5.30 using the Data Transfer utility. The horizontal coordinates were then corrected using the Differential Correction Wizard with the CORS, TALKEETNA (TLKA), ALASKA (derived from IGS08) base provider. Each set of corrected points were then exported to ESRI shapefile format in Alaska State Plane 5004 referenced to the NAD 1983 datum. All units were exported in feet. Depth data is approximated and was collected using a Garmin Fathometer.

Credits

Alaska Energy Authority;
Tetra Tech

Use limitations

None

Extent

West	-147.996044	East	-147.147401
North	62.817764	South	62.681077

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 August 2014

THEME KEYWORDS Susitna-Watana Hydroelectric Project, UR, Susitna River, Upper River

Hide Topics and Keywords ▲

Citation ►

TITLE Upper Susitna River Segment Cross-Sections
ALTERNATE TITLES SuWa_6_6_UpperRiver_Xsecs_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_UpperRiver_Xsecs_20170630
 * **SIZE** 0.003
 * **LOCATION** file:///\\DIVD-HK31VR1
 \\H\$\Metadata\Field_Data\Field_Data\SuWa_6_6_UpperRiver_Xsecs_20170630

\\SuWa_6_6_UpperRiver_Xsecs_20170630\\SuWa_6_6_UpperRiver_Xsecs_20170630.shp
 * ACCESS PROTOCOL Local Area Network

[Hide Resource Details ▲](#)

Extents ►

EXTENT

DESCRIPTION

ground condition

TEMPORAL EXTENT

BEGINNING DATE 2014-08-10 00:00:00

ENDING DATE 2014-08-15 00:00:00

EXTENT

GEOGRAPHIC EXTENT

BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

* WEST LONGITUDE -147.996044

* EAST LONGITUDE -147.147401

* NORTH LATITUDE 62.817764

* SOUTH LATITUDE 62.681077

* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM

* WEST LONGITUDE 1976964.083642

* EAST LONGITUDE 2117685.202630

* SOUTH LATITUDE 3182506.787750

* NORTH LATITUDE 3227227.586516

* 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

[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

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TYPE both

DELIVERY POINT 1420 5th Ave., Suite 550

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ADMINISTRATIVE AREA WA

POSTAL CODE 98101

COUNTRY US

E-MAIL ADDRESS 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",1640416.6666666667],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_UpperRiver_Xsecs_20170630

* OBJECT TYPE point
 * OBJECT COUNT 125

Hide Vector ▲

ARCGIS FEATURE CLASS PROPERTIES ►

FEATURE CLASS NAME SuWa_6_6_UpperRiver_Xsecs_20170630

* FEATURE TYPE Simple
 * GEOMETRY TYPE Point
 * HAS TOPOLOGY FALSE
 * FEATURE COUNT 125
 * 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

Hide Contact information ▲

ORDERING PROCESS

TERMS AND FEES None

Hide Distributor ▲

DISTRIBUTION FORMAT

* NAME Shapefile

TRANSFER OPTIONS

* TRANSFER SIZE 0.003

ONLINE SOURCE

LOCATION http://gis.suhydro.org/SuWa/06-GEO/6.06-GEOMOD/GIS/Field_Data

ONLINE SOURCE

LOCATION <http://www.susitna-watanahydro.org/type/documents/>
 NAME "06.05 Geomorphology Study - 2014-2015 Study Implementation Report" under "November 2015; Study Completion and 2014/2015 Implementation Reports". This report has 3 relevant links to this data: (1) Report [Part 1 of 3] and (2) Appendix A (Part 2 of 3).

Hide Distribution ▲

Fields ►DETAILS FOR OBJECT [SuWa_6_6_UpperRiver_Xsecs_20170630](#) ►

* TYPE Feature Class

* ROW COUNT 125

DEFINITION

2014 Upper River Cross-sections

DEFINITION SOURCE

Tetra Tech

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 Point_ID ►

* ALIAS Point_ID
* DATA TYPE Integer
* WIDTH 9
* PRECISION 9
* SCALE 0

FIELD DESCRIPTION
Trimble assigned numerical value

DESCRIPTION SOURCE
Watershed GeoDynamics

DESCRIPTION OF VALUES
Integer.

Hide Field Point_ID ▲

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 Latitude ►

* ALIAS Latitude
* DATA TYPE Double
* WIDTH 10
* PRECISION 9

* SCALE 5

FIELD DESCRIPTION

Cross-section pin coordinate latitude in WGS84.

DESCRIPTION SOURCE

Tetra Tech

DESCRIPTION OF VALUES

Latitude of sample location in WGS84

Hide Field Latitude ▲

FIELD Longitude ►

* ALIAS Longitude

* DATA TYPE Double

* WIDTH 10

* PRECISION 9

* SCALE 5

FIELD DESCRIPTION

Cross-section pin coordinate longitude in WGS84.

DESCRIPTION SOURCE

Tetra Tech

DESCRIPTION OF VALUES

Longitude of sample location in WGS84

Hide Field Longitude ▲

FIELD notes ►

* ALIAS notes

* DATA TYPE String

* WIDTH 25

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Cross-section name [UR-A.B] and PRM location of cross-section where "A" denotes the geomorphic value and "B" denotes the number of the cross-section

DESCRIPTION SOURCE

Tetra Tech

DESCRIPTION OF VALUES

UR-A.B near PRM CCC

Hide Field notes ▲

FIELD Depth_ft ►

* ALIAS Depth_ft

* DATA TYPE Double

* WIDTH 19

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Depth of channel at sample location

DESCRIPTION SOURCE

Tetra Tech

DESCRIPTION OF VALUES

Number in feet

Hide Field Depth_ft ▲

FIELD Date ►

* ALIAS Date

* DATA TYPE String

* 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 Time ►

* ALIAS Time

* DATA TYPE String

* WIDTH 10

* PRECISION 0

* SCALE 0

FIELD DESCRIPTION

Time of day the sample pin was collected

DESCRIPTION SOURCE

Tetra Tech

DESCRIPTION OF VALUES

Time

Hide Field Time ▲

FIELD Easting ►

* ALIAS Easting

* DATA TYPE Double

* WIDTH 12

* PRECISION 11

* SCALE 2

FIELD DESCRIPTION

Cross-section pin coordinate Easting in Alaska State Plane Zone 4 (5004) feet.

DESCRIPTION SOURCE

Tetra Tech

DESCRIPTION OF VALUES

Sample location easting (in feet)

Hide Field Easting ▲

FIELD Northing ►

- * ALIAS Northing
- * DATA TYPE Double
- * WIDTH 12
- * PRECISION 11
- * SCALE 2

FIELD DESCRIPTION

Cross-section pin coordinate Northing in Alaska State Plane Zone 4 (5004) feet.

DESCRIPTION SOURCE

Tetra Tech

DESCRIPTION OF VALUES

Sample location northing (in feet)

Hide Field Northing ▲

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*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: "06.05 Geomorphology Study - 2014-2015 Study Implementation Report" under "November 2015; Study Completion and 2014/2015 Implementation Reports". This report has 3 relevant links to this data: (1) Report [Part 1 of 3] and (2) Appendix A (Part 2 of 3).

[Hide Field DocLink ▲](#)

[Hide Details for object SuWa_6_6_UpperRiver_Xsecs_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 2014-12-12 12:12:07
LAST MODIFIED IN ARCGIS FOR THE ITEM 2017-06-29 18:14:01

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes
LAST UPDATE 2017-06-29 18:14:01

[Hide Metadata Details ▲](#)

Metadata Contacts ►

METADATA CONTACT

INDIVIDUAL'S NAME Bill Fullerton
ORGANIZATION'S NAME Tetra Tech
CONTACT'S POSITION Point of Contact
CONTACT'S ROLE point of contact

CONTACT INFORMATION ►

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TYPE both
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ADMINISTRATIVE AREA WA
POSTAL CODE 98101
COUNTRY US
E-MAIL ADDRESS bill.fullerton@tetrattech.com

[Hide Contact information ▲](#)

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) ▼