

APPENDIX L. 1980s TO 2012 MIDDLE SUSITNA RIVER SEGMENT TURNOVER

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

Geomorphology Study (6.5)

**Mapping of Geomorphic Features and Turnover
within the Middle and Lower Susitna River Segments
from 1950s, 1980s, and Current Aerials
Technical Memorandum**

Prepared for

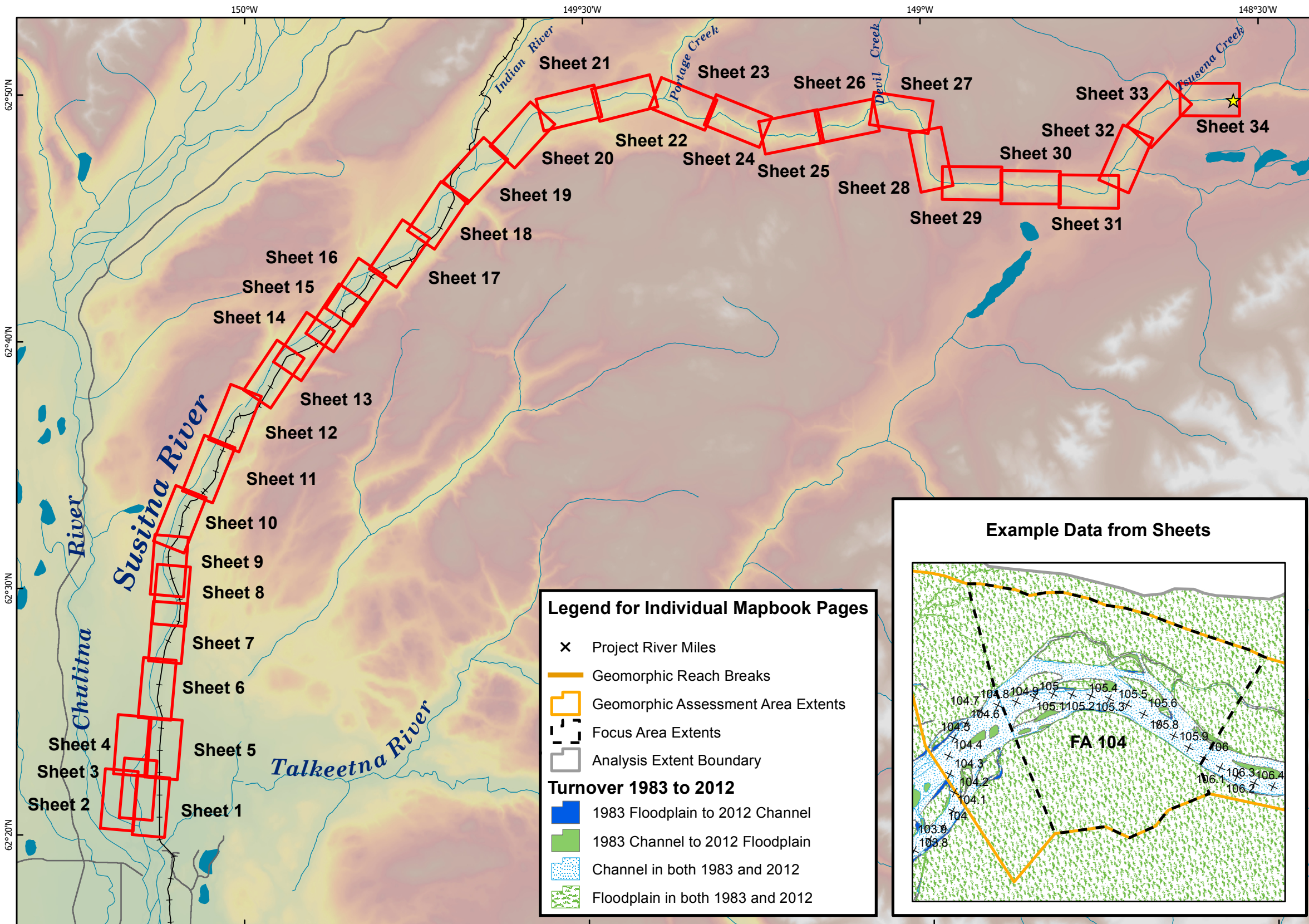
Alaska Energy Authority



Prepared by

Tetra Tech Inc.

September 2014



MIDDLE SUSITNA RIVER SEGMENT TURNOVER ANALYSIS 1983 to 2012

Legend

- ★ Proposed Watana Dam Site
- Sheet Extents
- Roads
- + Railroads
- ~ Rivers and Streams
- Waterbodies

Data Sources: See Map References

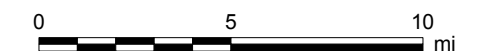
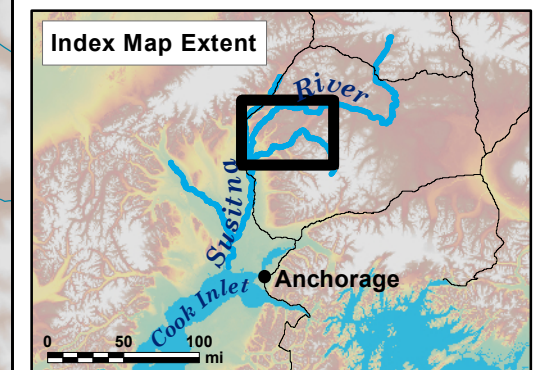
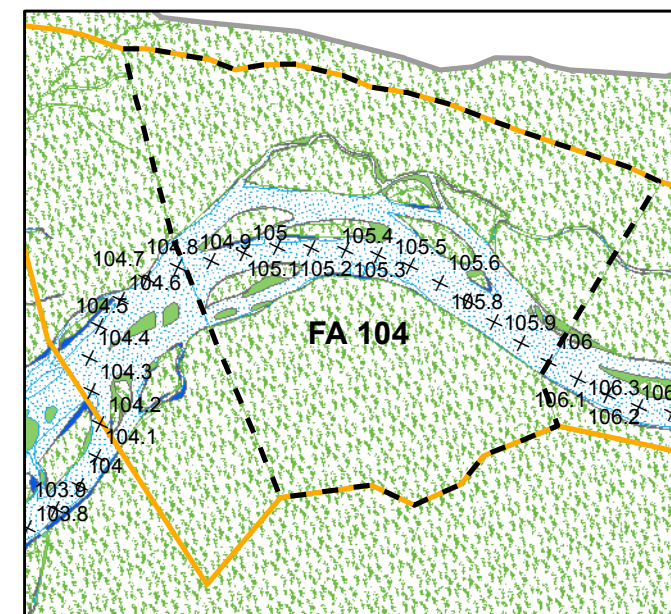
Legend for Individual Mapbook Pages

- × Project River Miles
- Geomorphic Reach Breaks
- Geomorphic Assessment Area Extents
- - - Focus Area Extents
- Analysis Extent Boundary

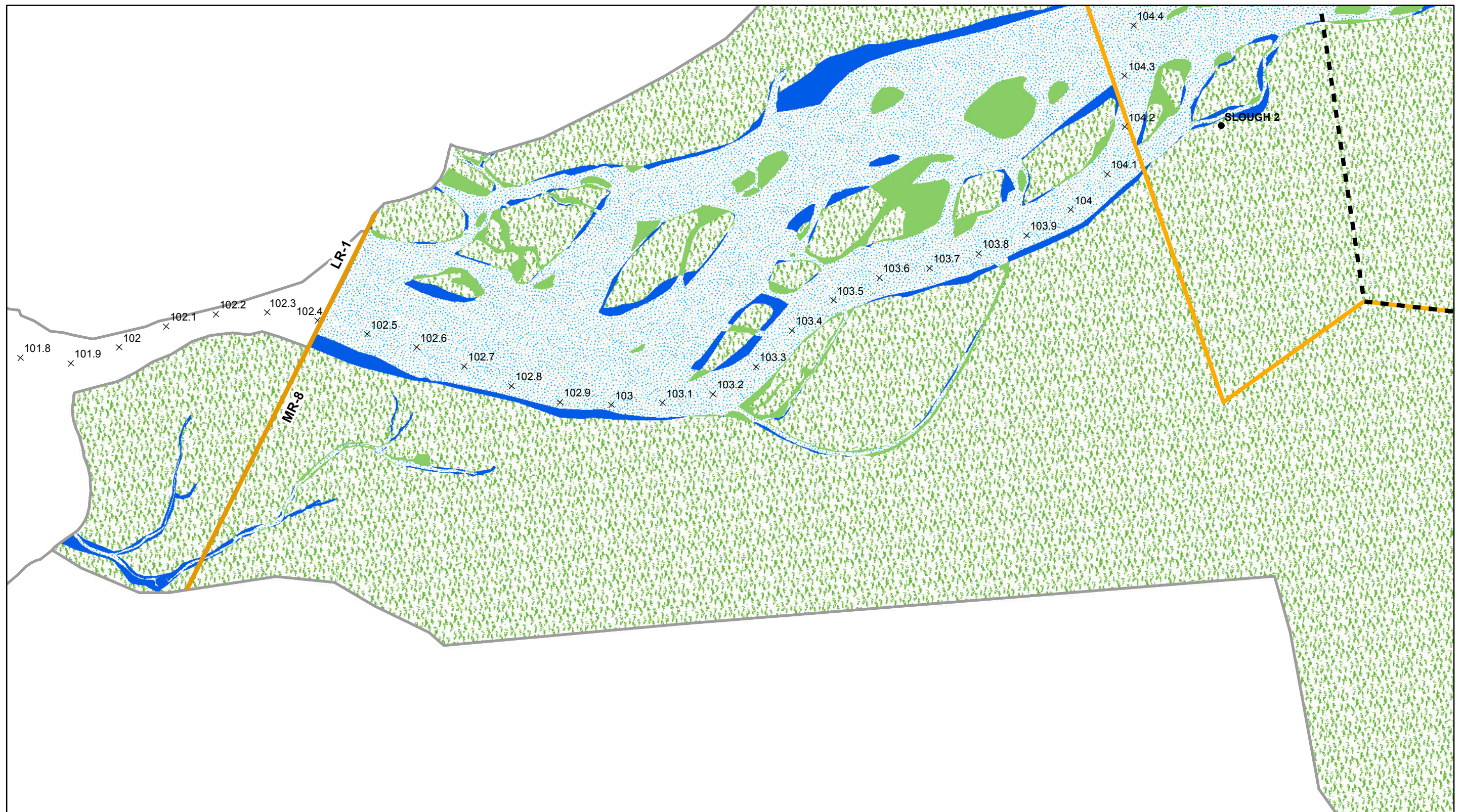
Turnover 1983 to 2012

- 1983 Floodplain to 2012 Channel
- 1983 Channel to 2012 Floodplain
- Channel in both 1983 and 2012
- Floodplain in both 1983 and 2012

Example Data from Sheets



Projection: NAD83 State Plane Alaska 4 FIPS 5004 (ft)
Date Created: 9/18/2014
Map Author: Tetra Tech
File: MR_1980sto2012_v2_20140204_Turnover_Cover.mxd

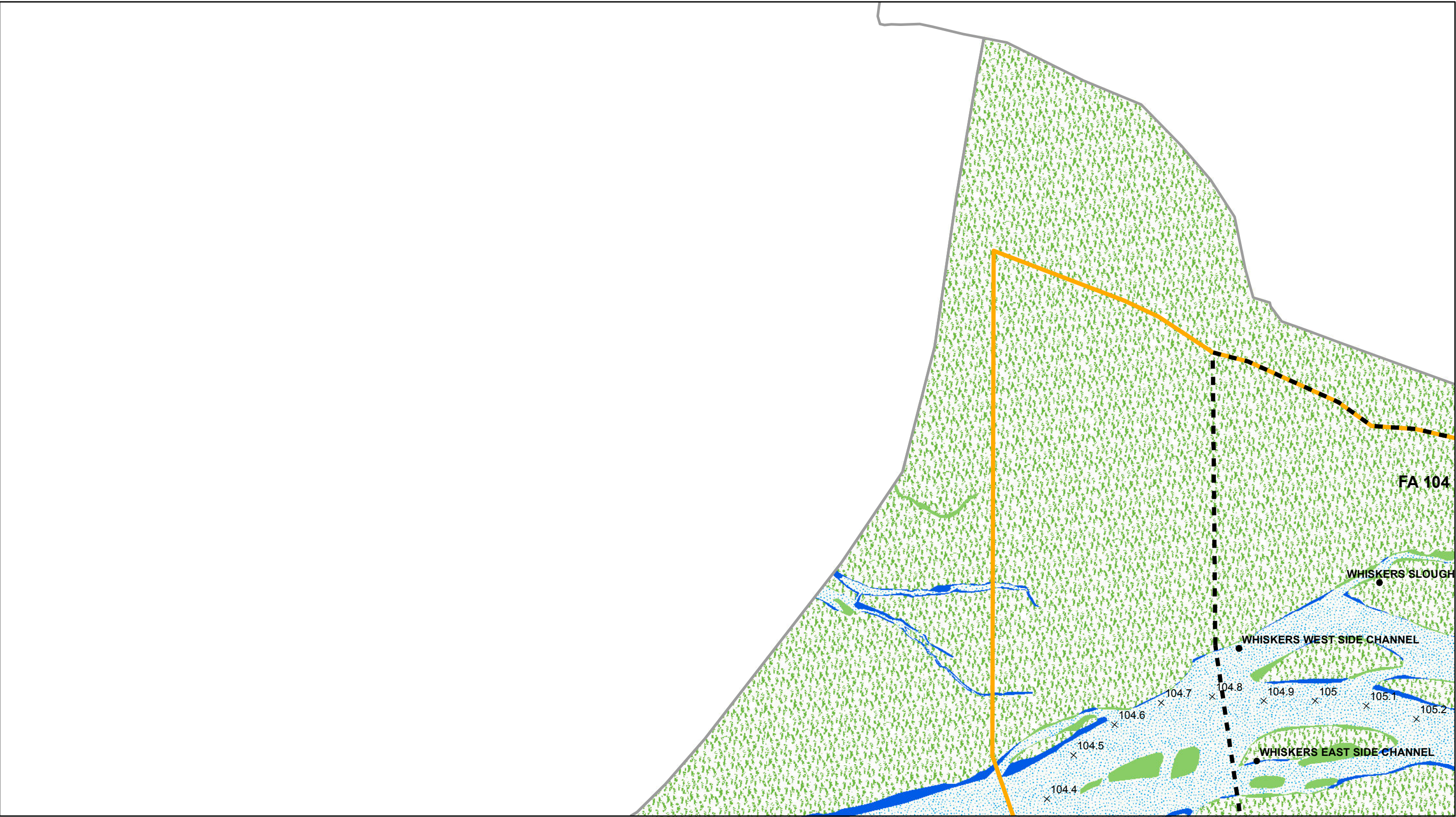


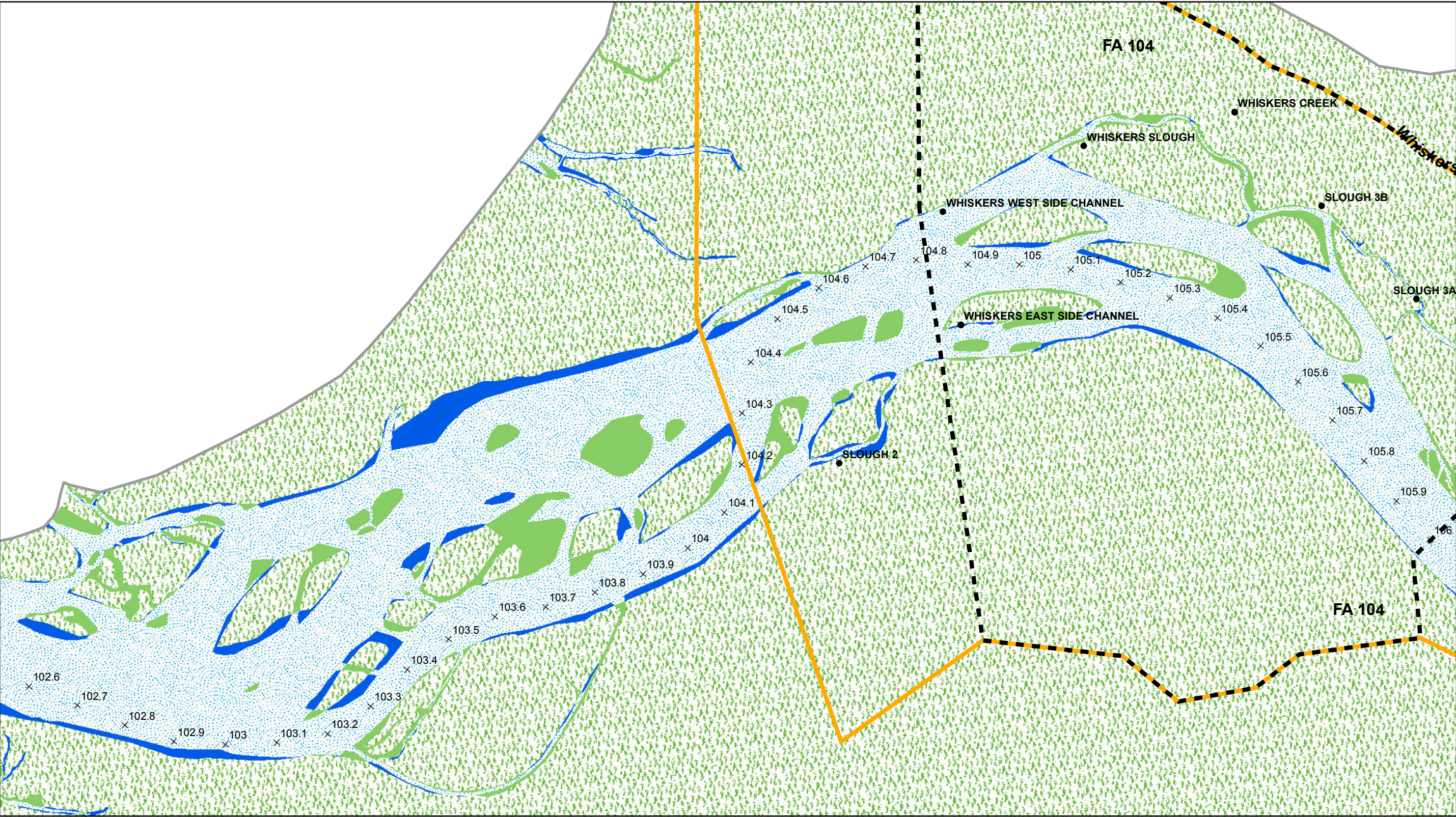
0 1,000 2,000 Feet
See index page for legend and additional data information.

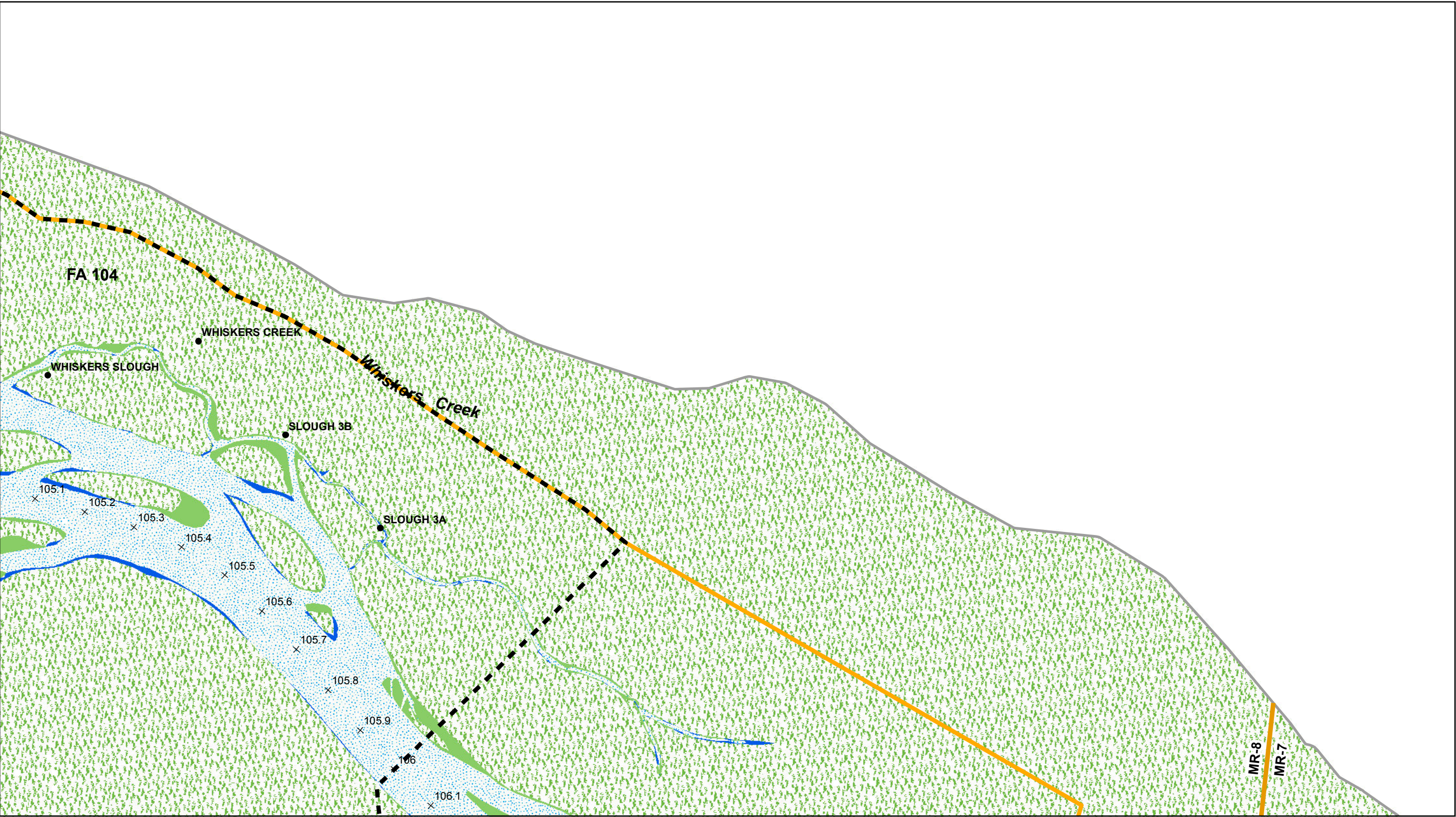
1 inch = 1,000 feet
Sheet 1 of 34

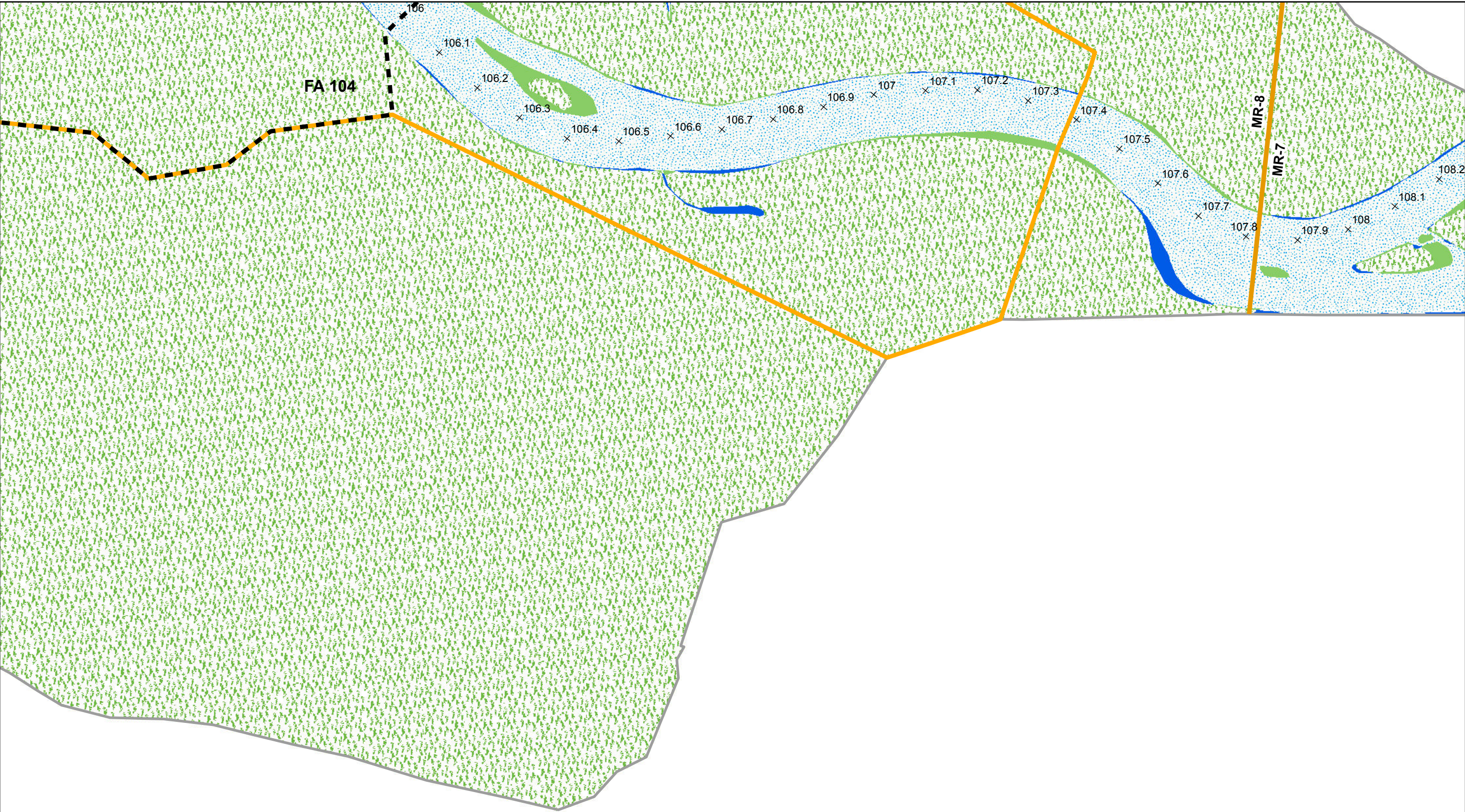
**MIDDLE SUSITNA RIVER SEGMENT
1983 to 2012 TURNOVER ANALYSIS**

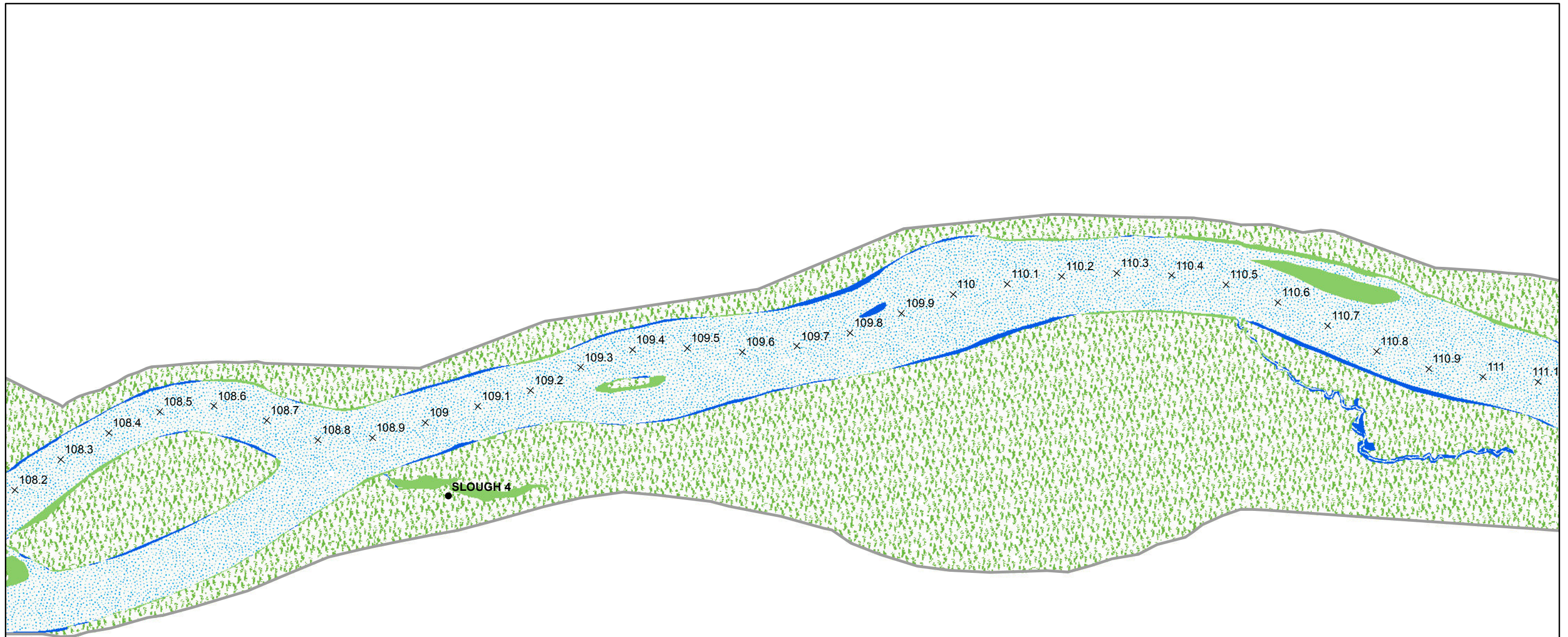


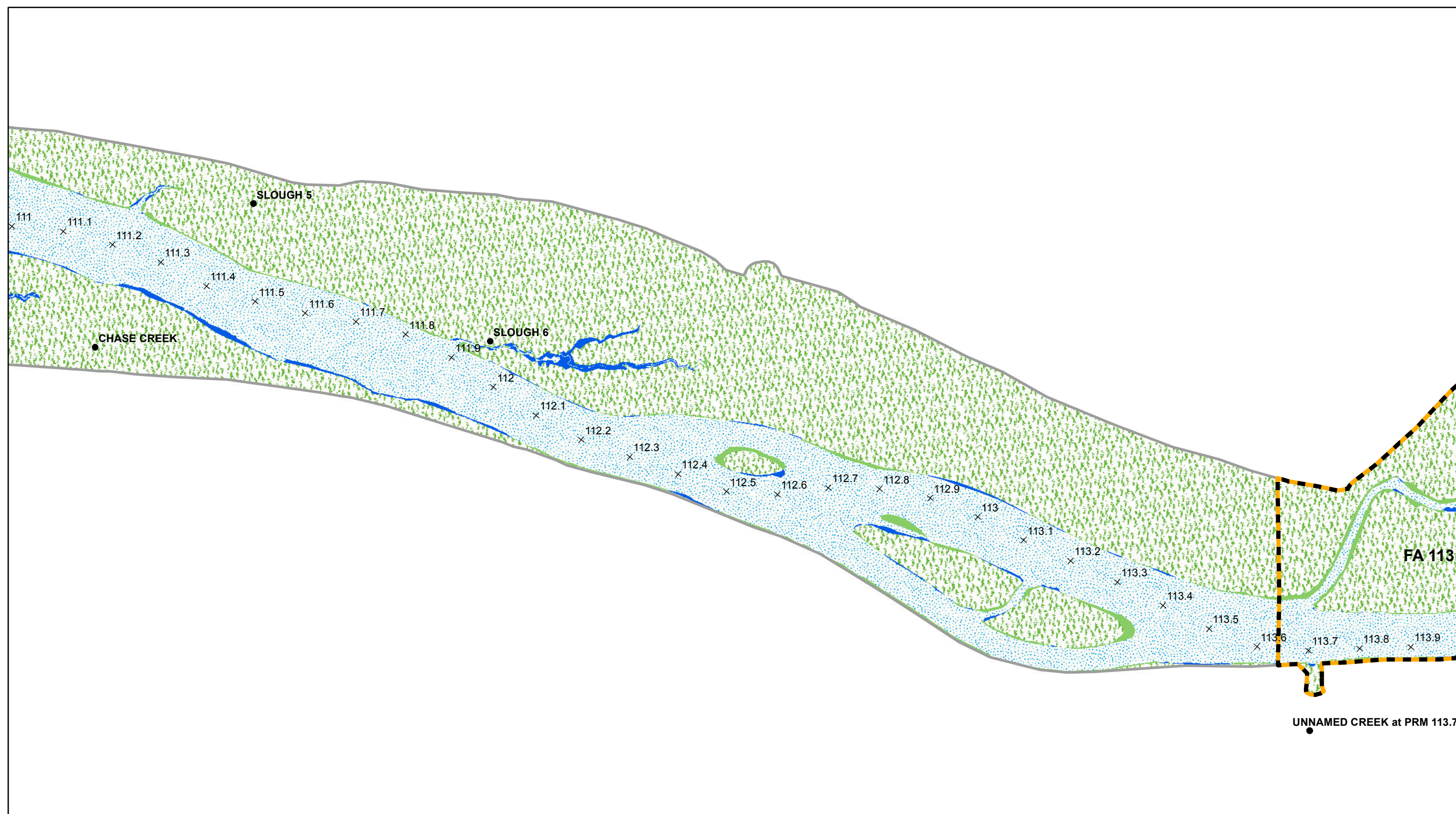


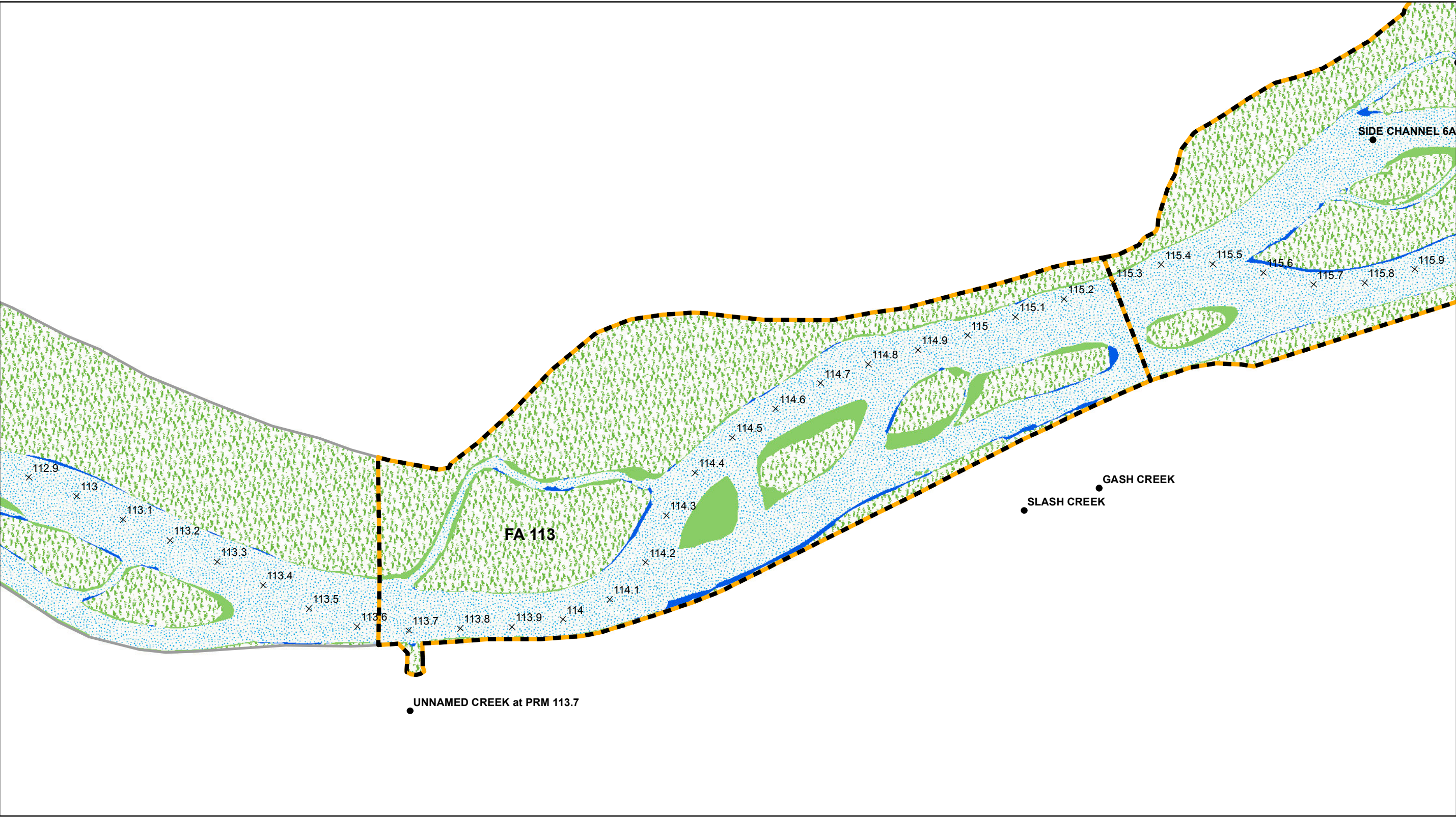


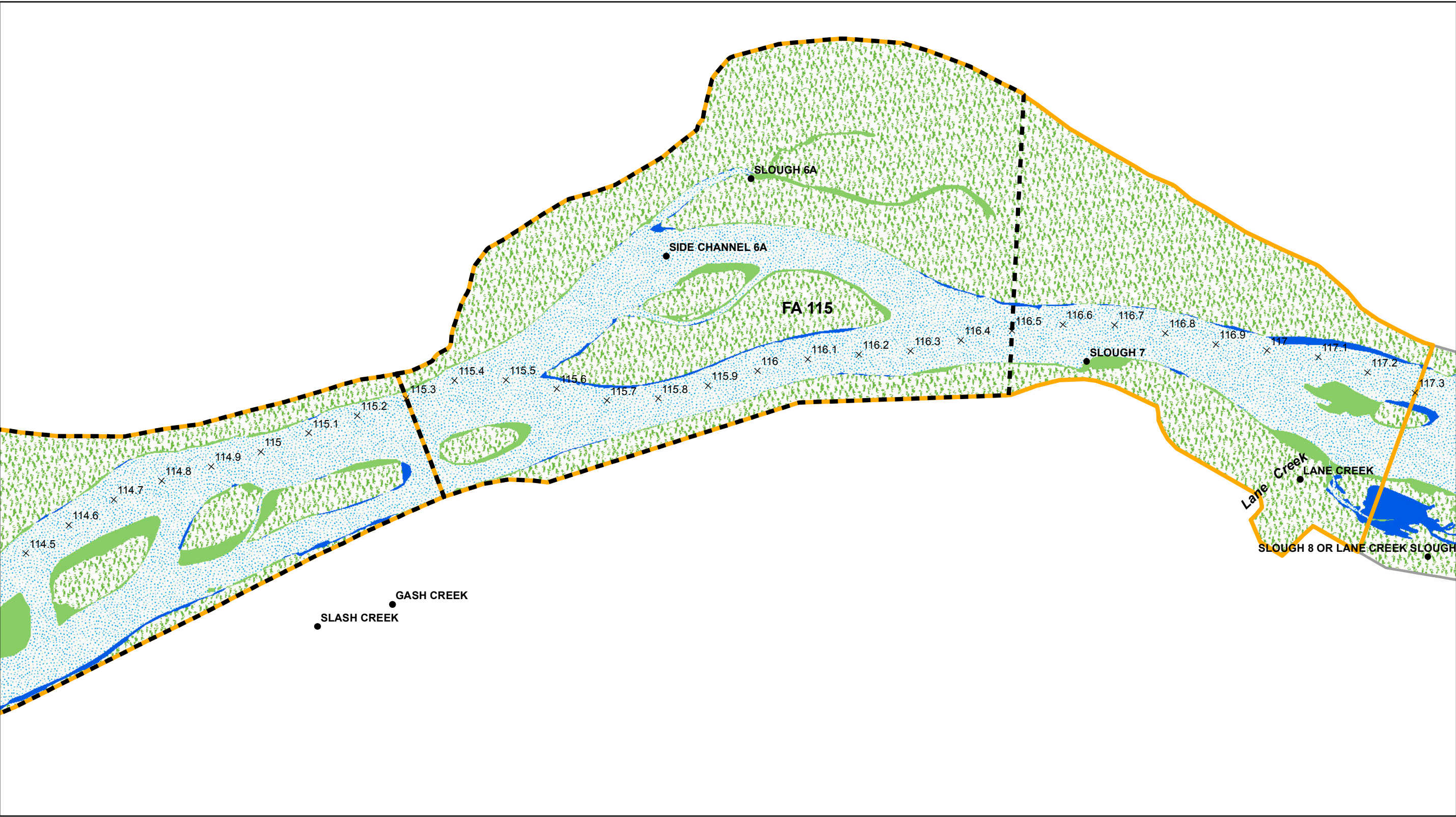












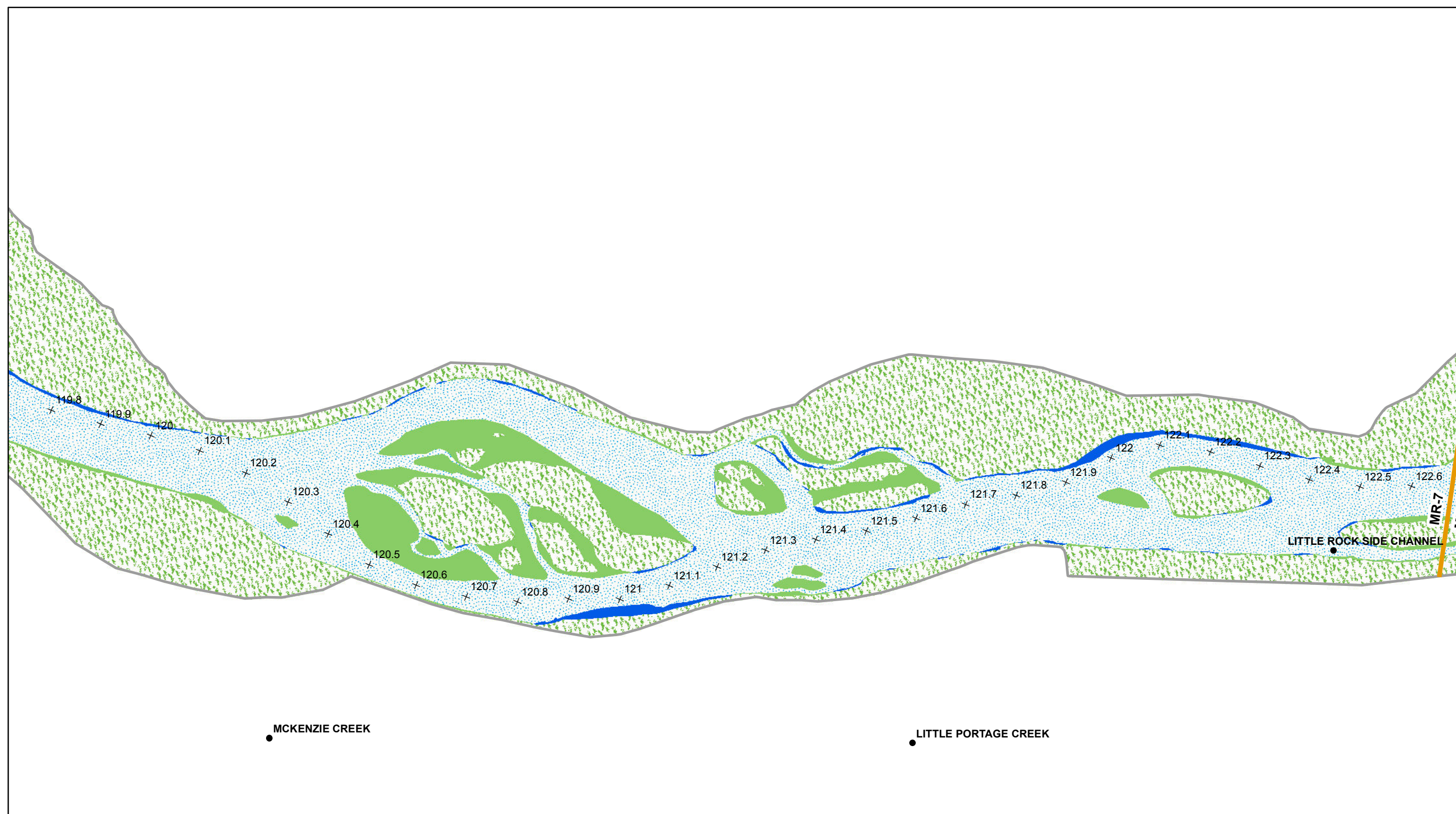


0 1,000 2,000 Feet
See index page for legend and additional data information.

1 inch = 1,000 feet
Sheet 10 of 34

**MIDDLE SUSITNA RIVER SEGMENT
1983 to 2012 TURNOVER ANALYSIS**



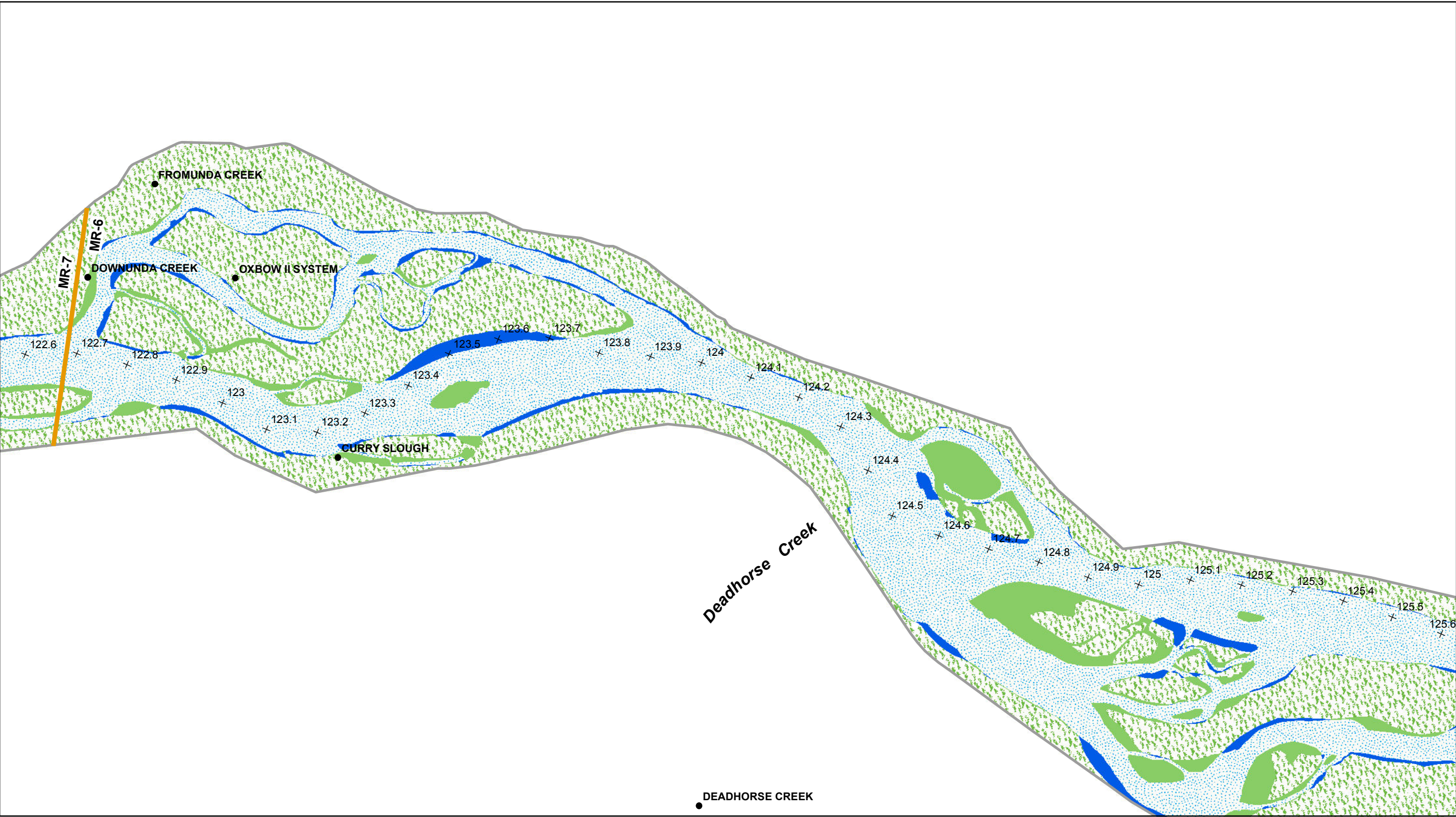


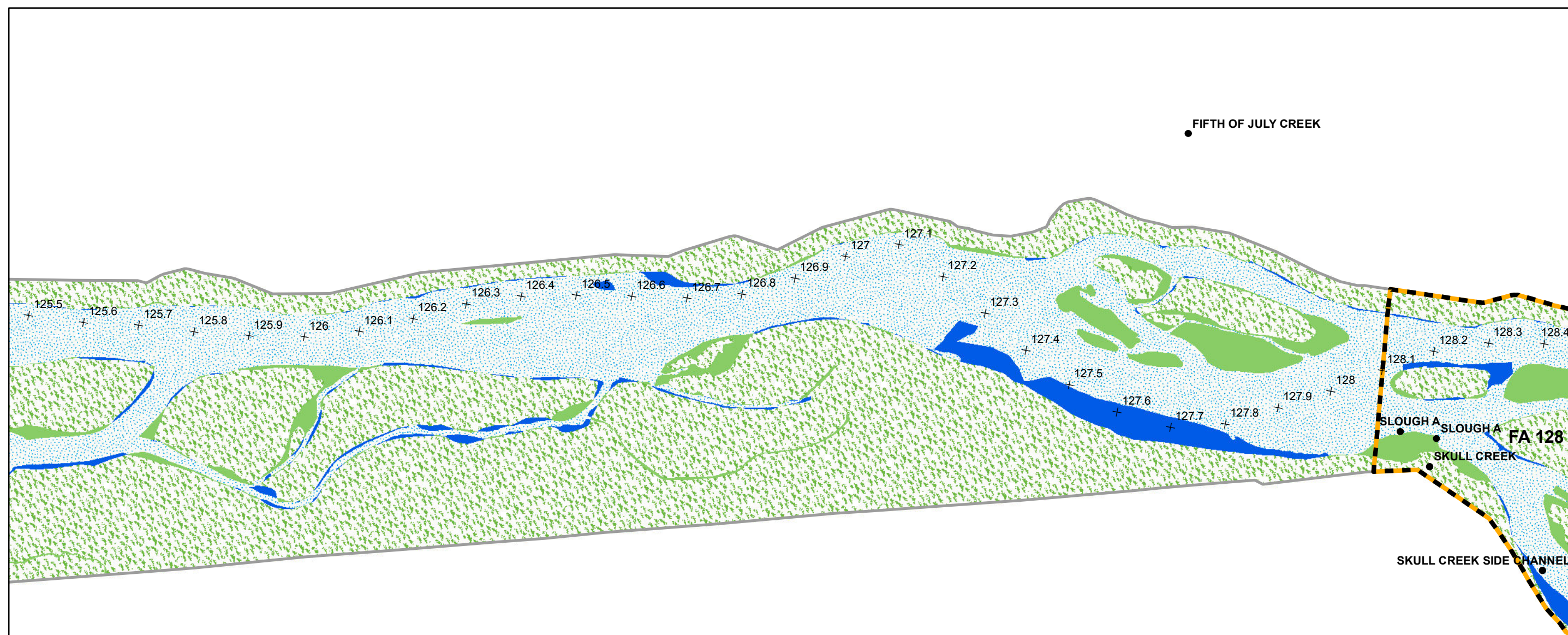
0 1,000 2,000 Feet
See index page for legend and additional data information.

1 inch = 1,000 feet
Sheet 11 of 34

MIDDLE SUSITNA RIVER SEGMENT
1983 to 2012 TURNOVER ANALYSIS





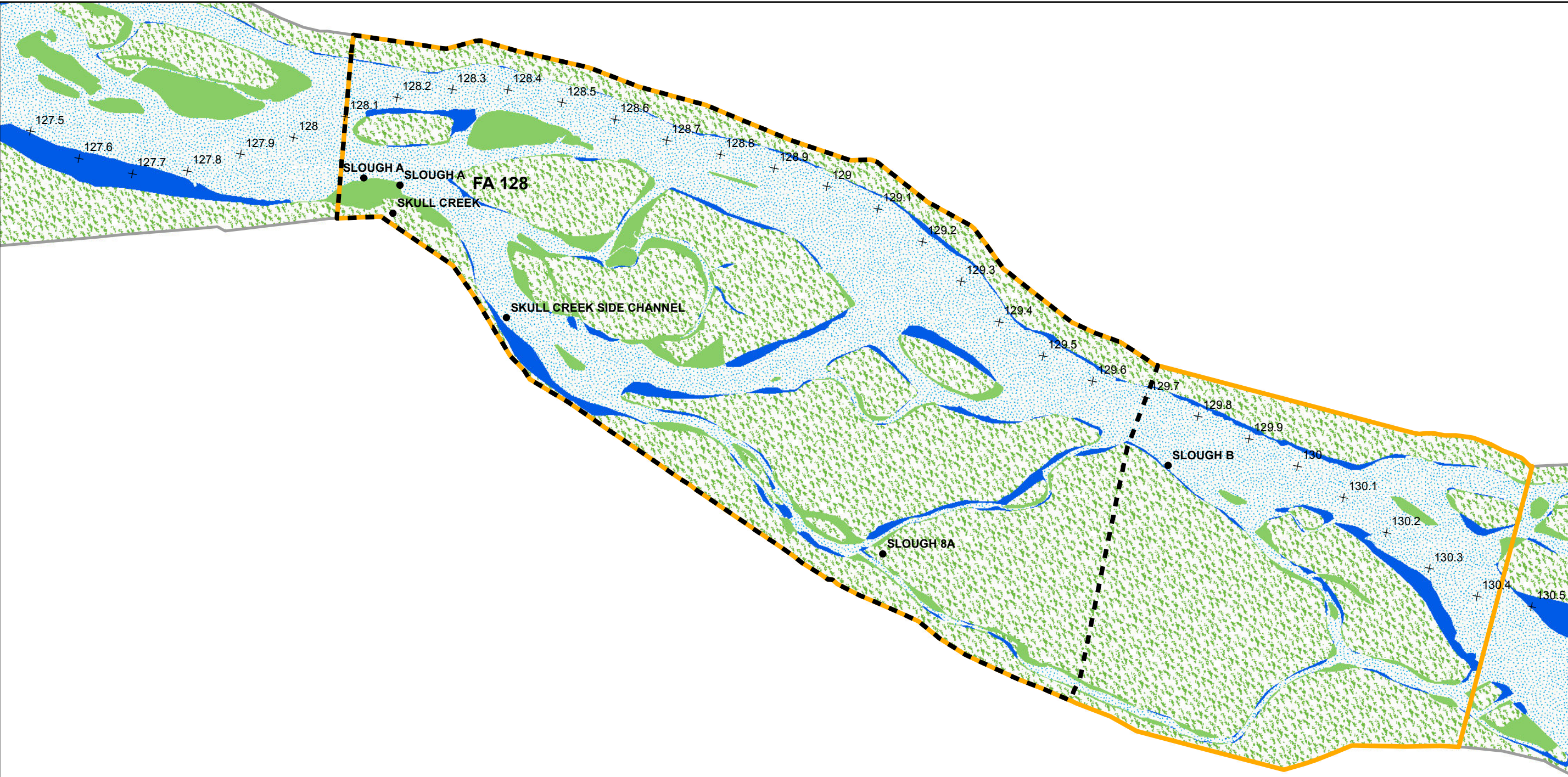


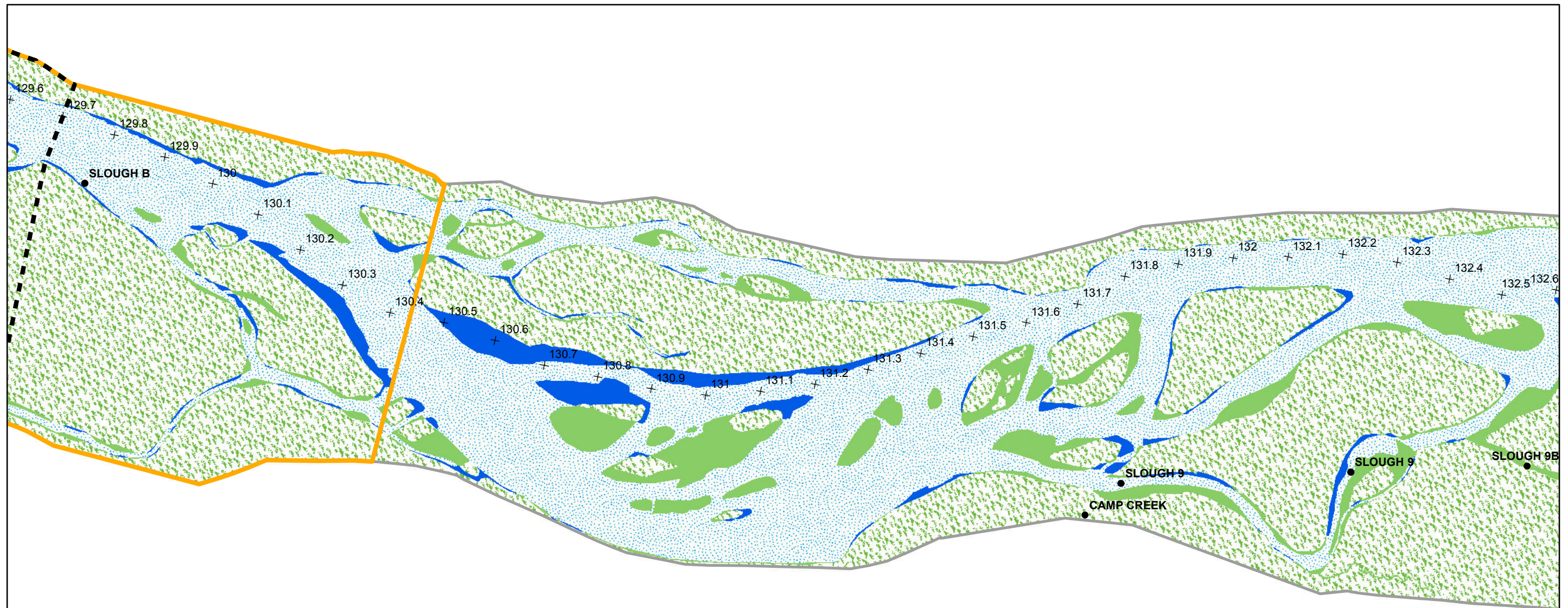
0 1,000 2,000 Feet
See index page for legend and additional data information.

1 inch = 1,000 feet
Sheet 13 of 34

MIDDLE SUSITNA RIVER SEGMENT
1983 to 2012 TURNOVER ANALYSIS





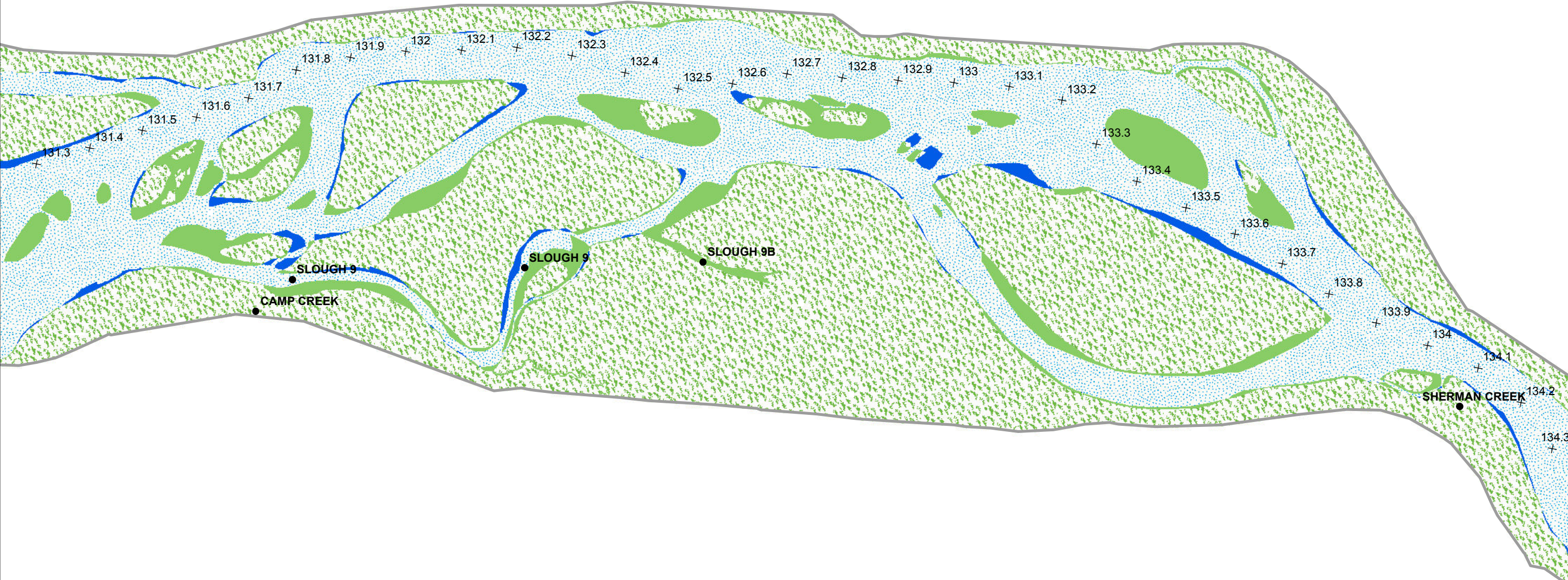


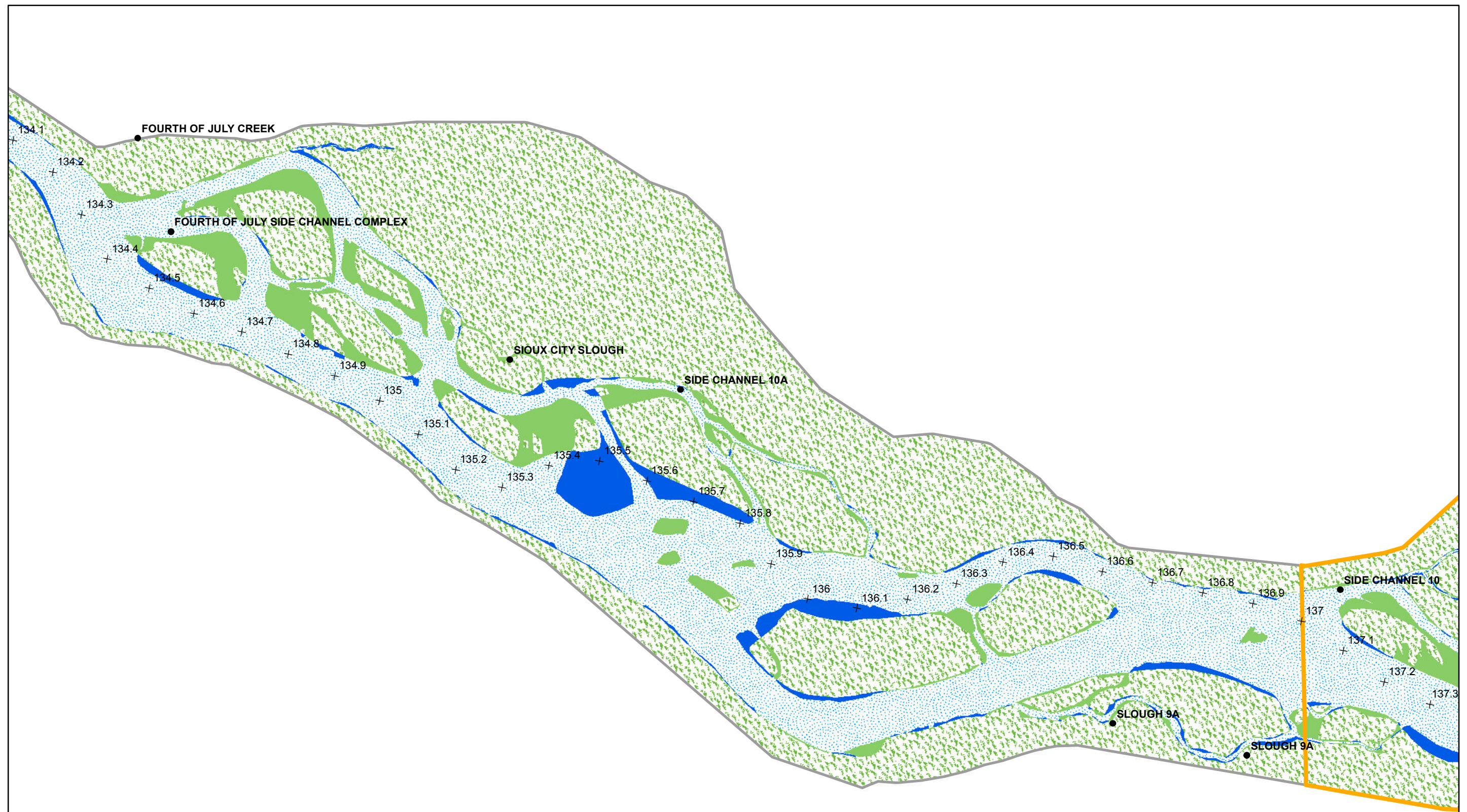
0 1,000 2,000 Feet
See index page for legend and additional data information.

1 inch = 1,000 feet
Sheet 15 of 34

MIDDLE SUSITNA RIVER SEGMENT
1983 to 2012 TURNOVER ANALYSIS





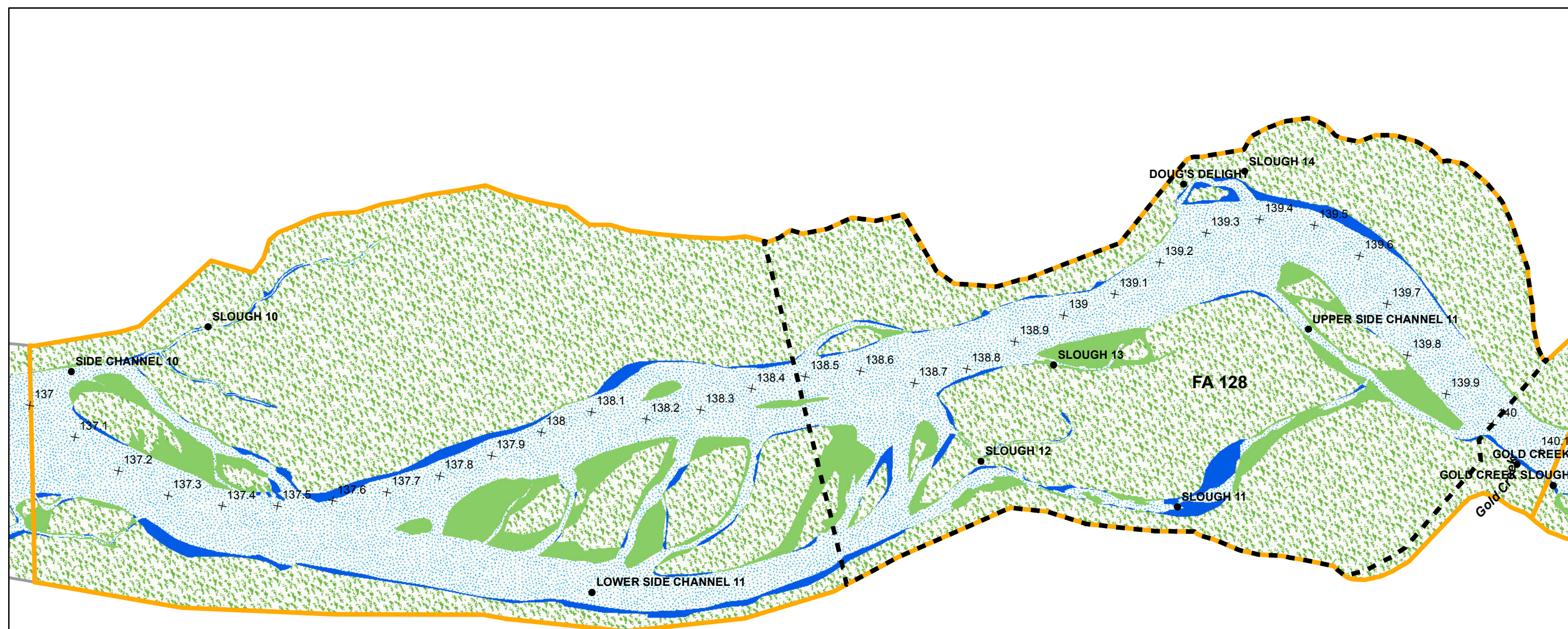


0 1,000 2,000 Feet
See index page for legend and additional data information.

1 inch = 1,000 feet
Sheet 17 of 34

**MIDDLE SUSITNA RIVER SEGMENT
1983 to 2012 TURNOVER ANALYSIS**



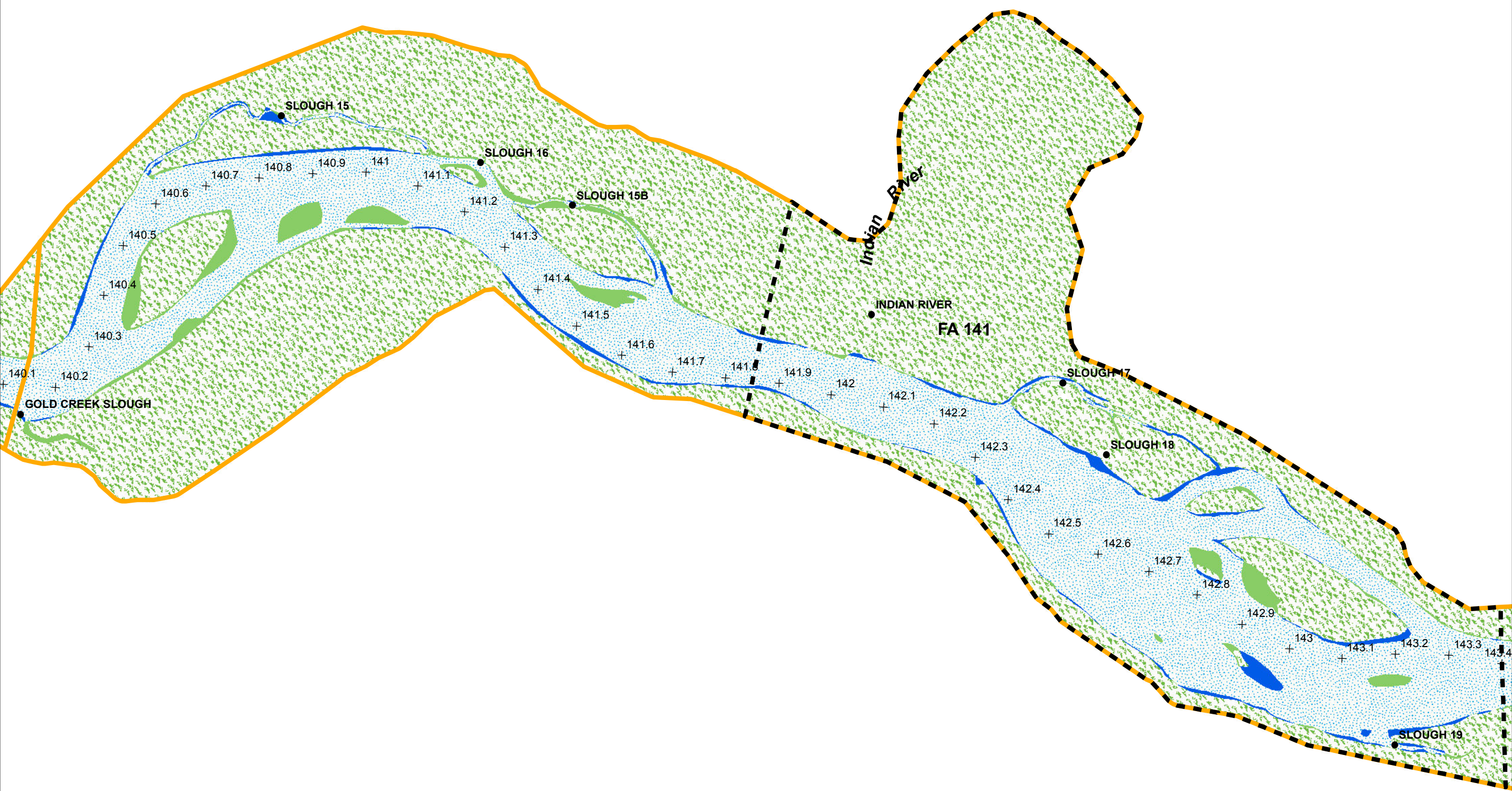


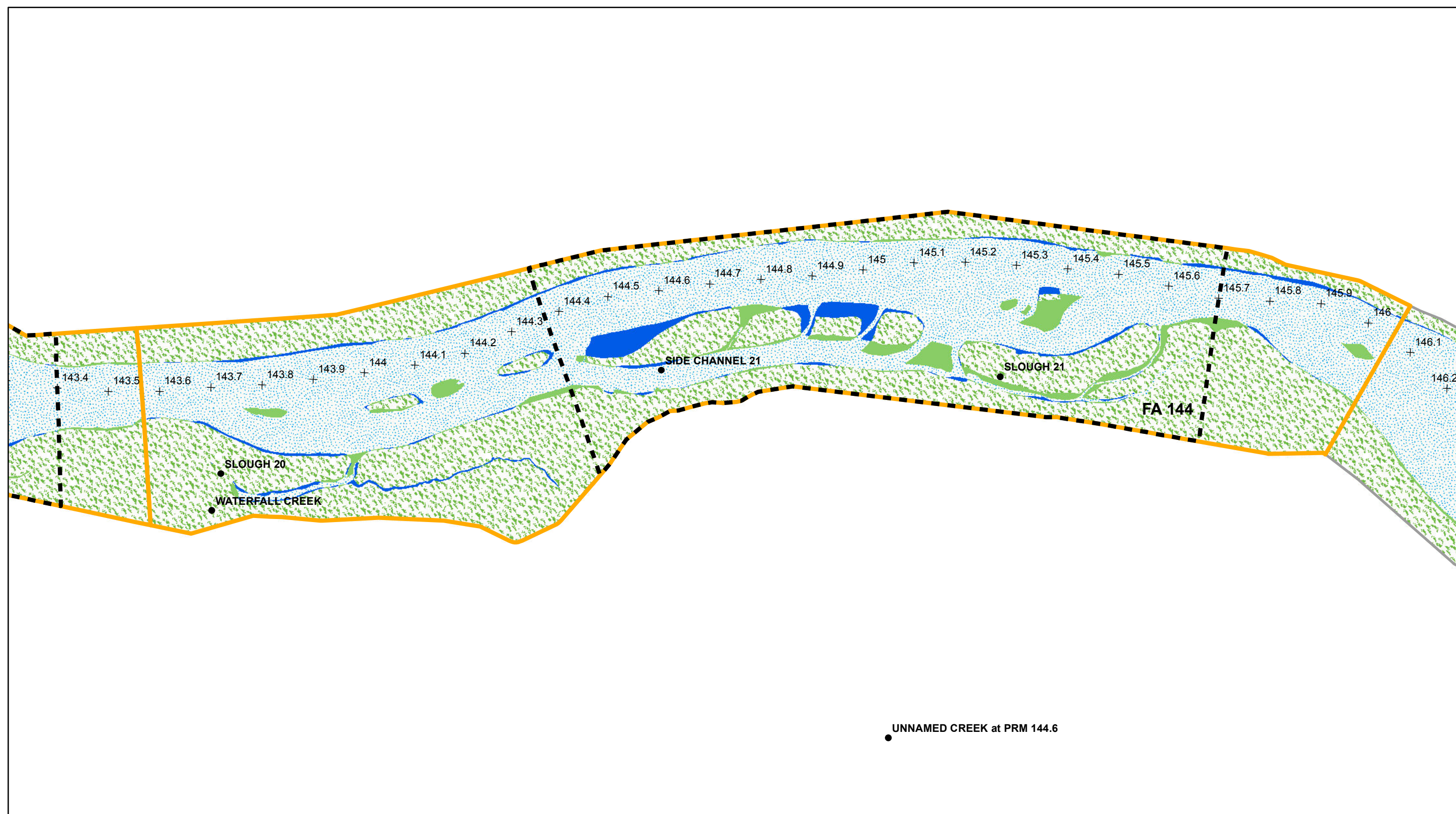
0 1,000 2,000 Feet
See index page for legend and additional data information.

1 inch = 1,000 feet
Sheet 18 of 34

**MIDDLE SUSITNA RIVER SEGMENT
1983 to 2012 TURNOVER ANALYSIS**







● UNNAMED CREEK at PRM 144.6

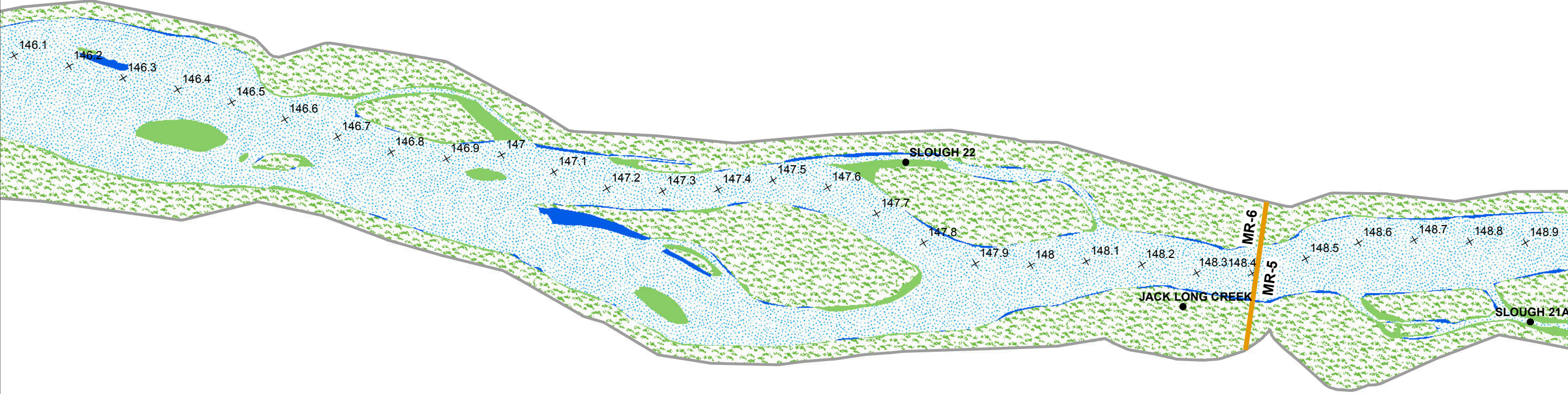


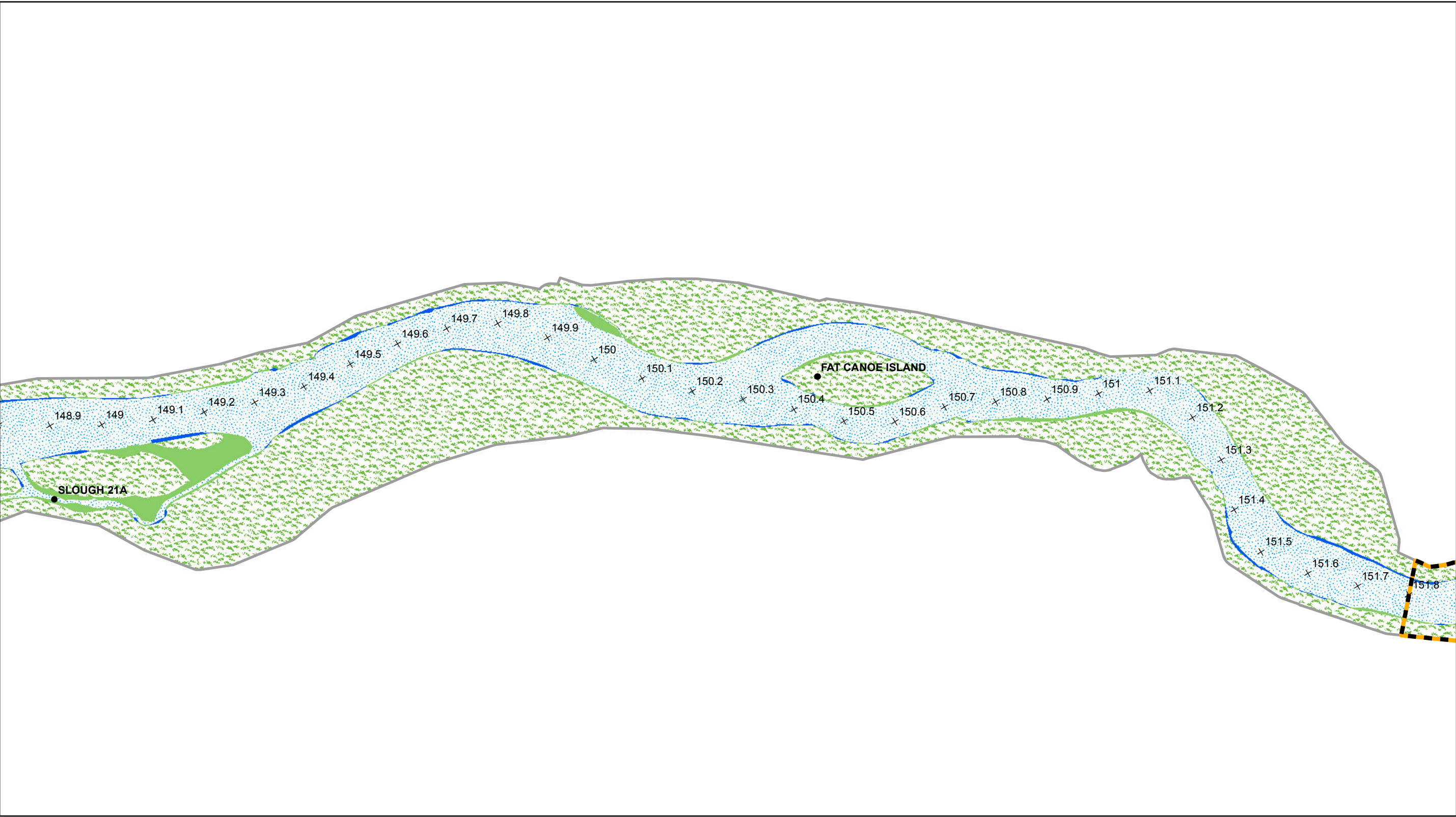
0 1,000 2,000 Feet
See index page for legend and additional data information.

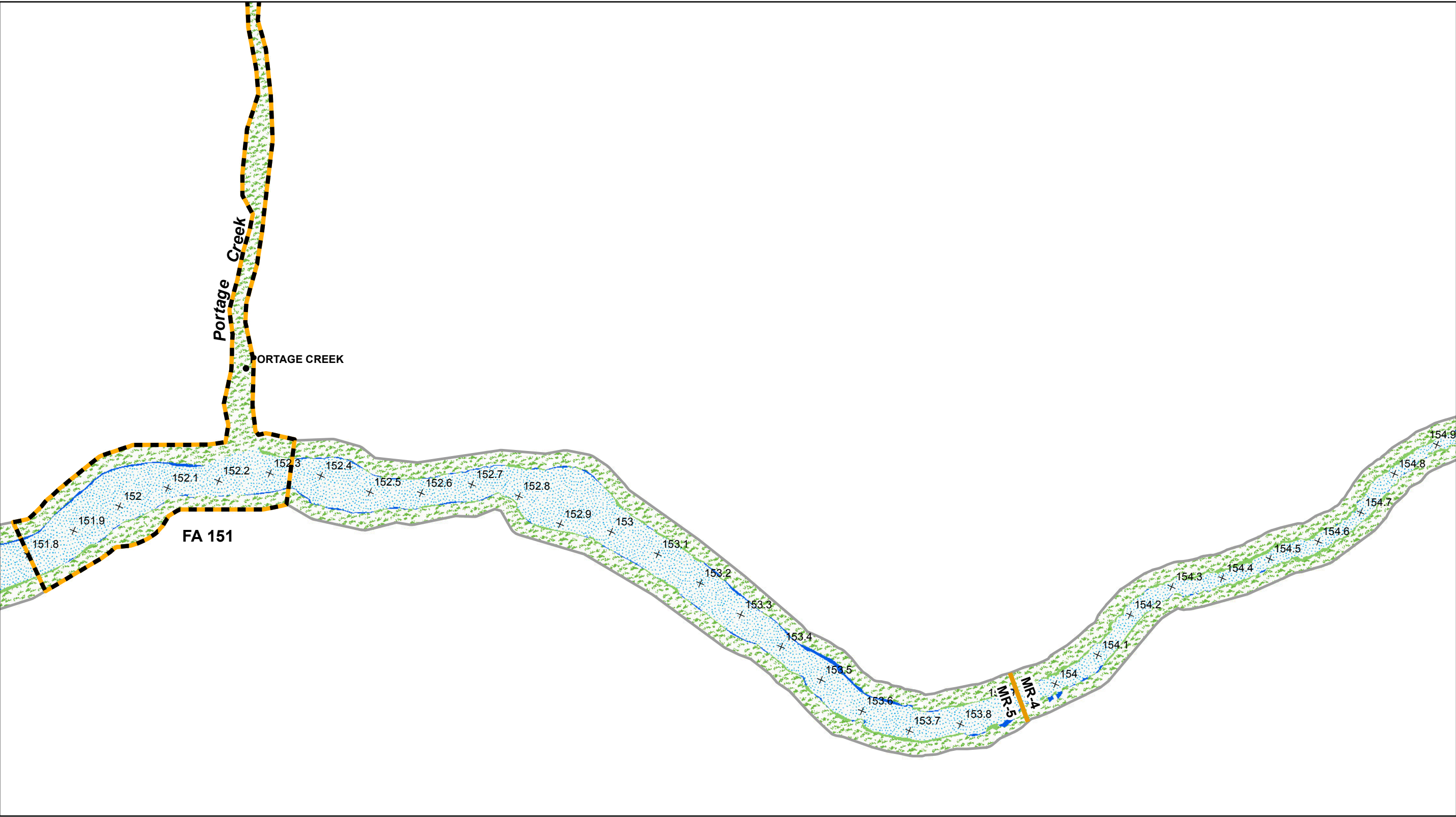
1 inch = 1,000 feet
Sheet 20 of 34

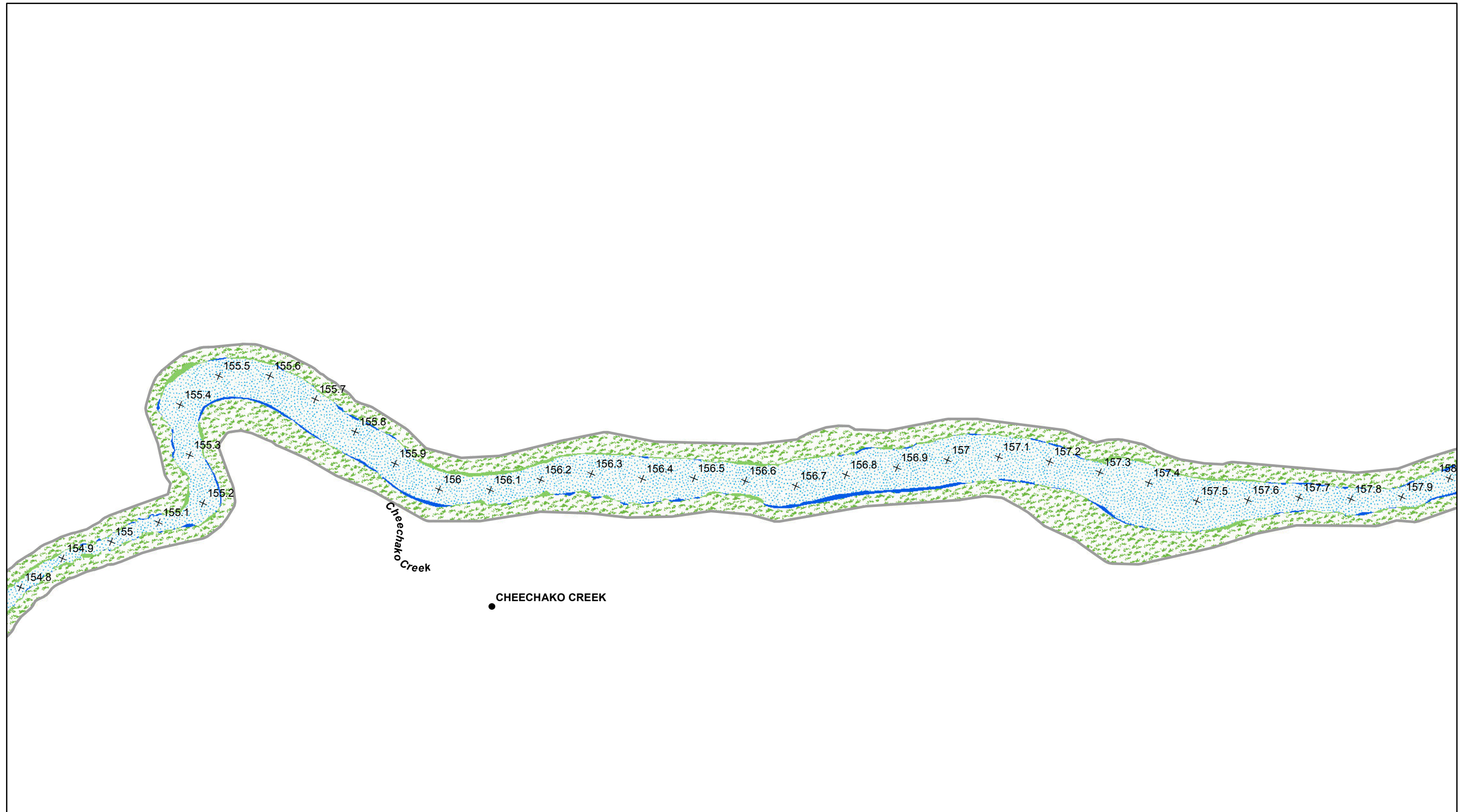
MIDDLE SUSITNA RIVER SEGMENT
1983 to 2012 TURNOVER ANALYSIS









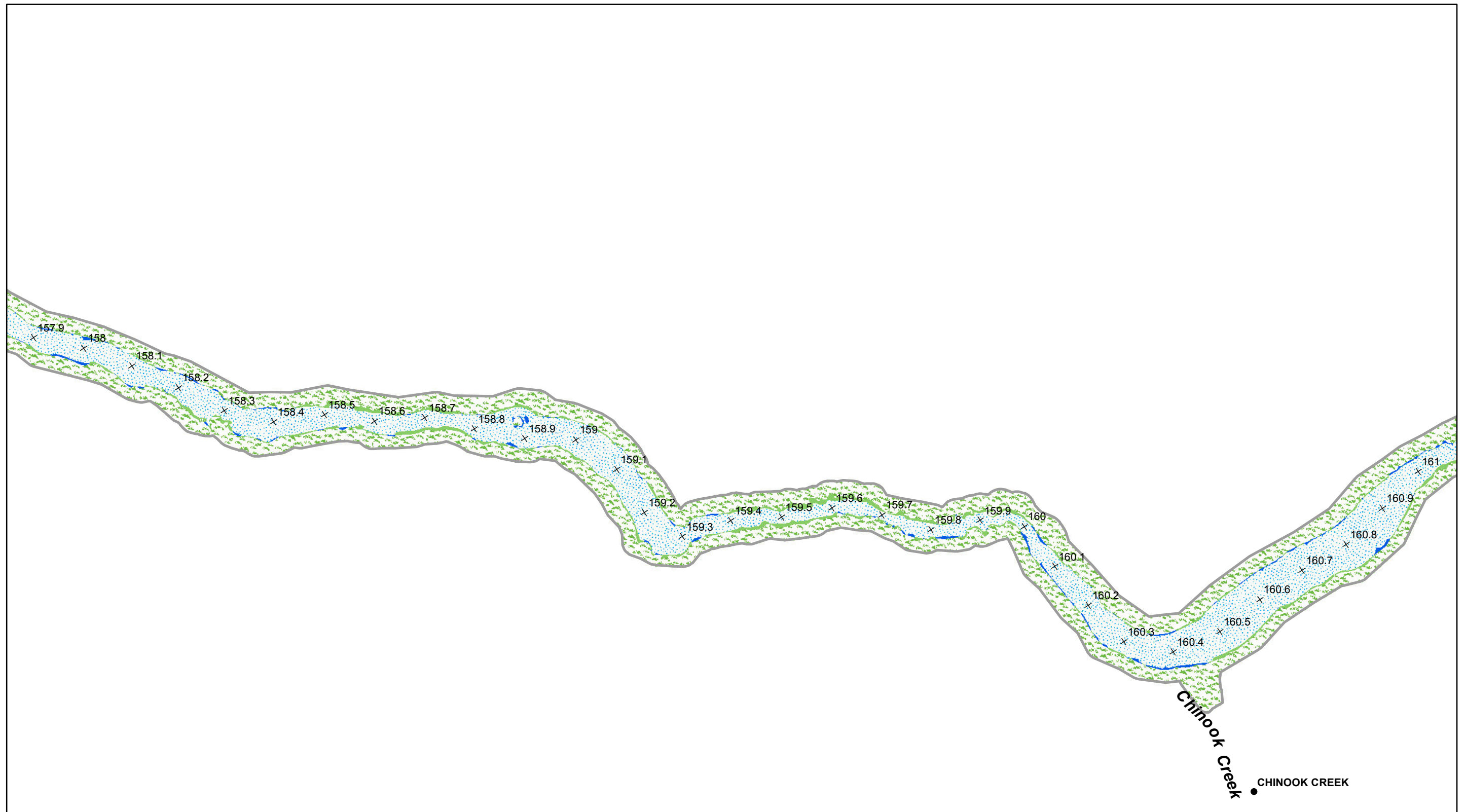


0 1,000 2,000 Feet
See index page for legend and additional data information.

1 inch = 1,000 feet
Sheet 24 of 34

MIDDLE SUSITNA RIVER SEGMENT
1983 to 2012 TURNOVER ANALYSIS



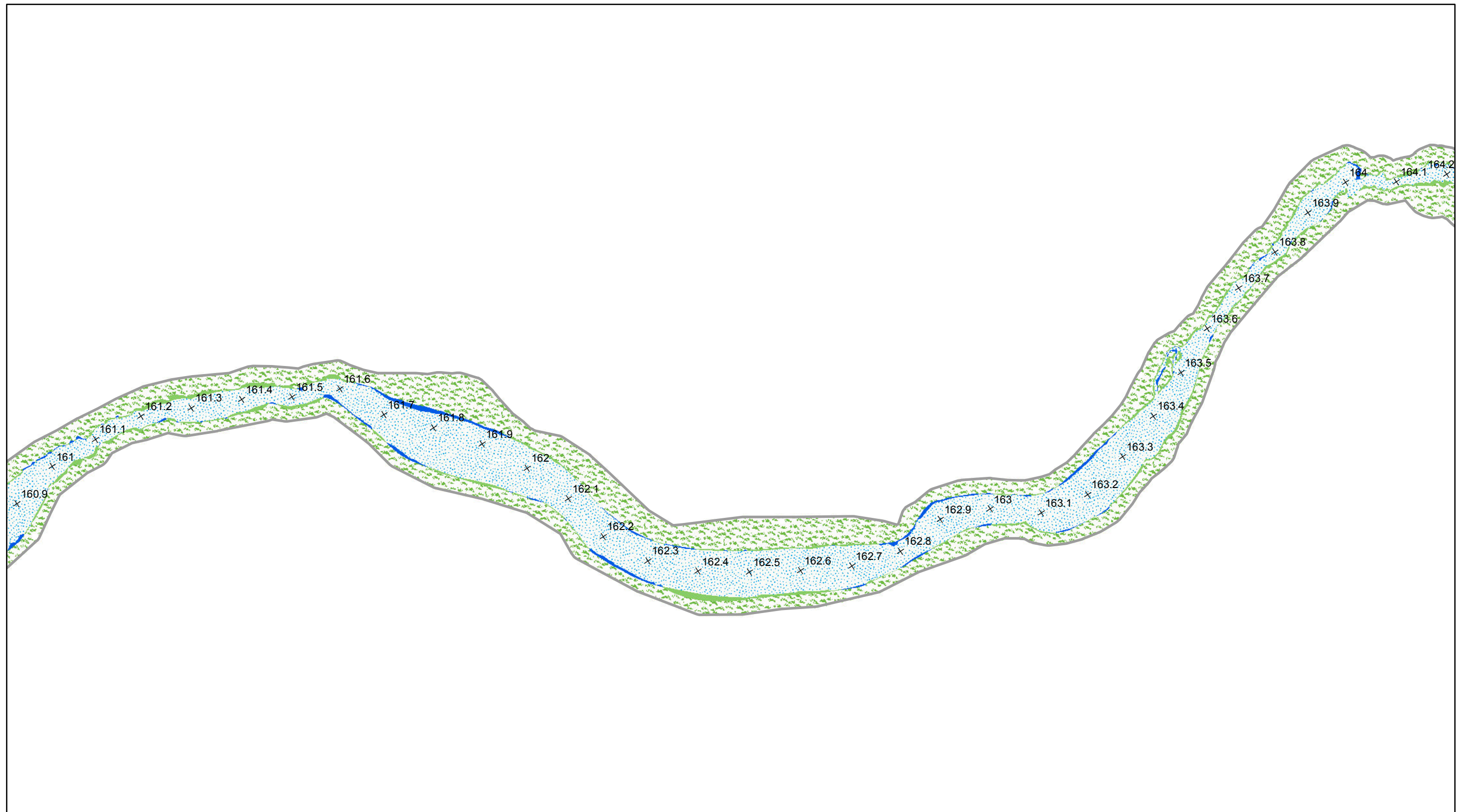


0 1,000 2,000 Feet
See index page for legend and additional data information.

1 inch = 1,000 feet
Sheet 25 of 34

MIDDLE SUSITNA RIVER SEGMENT
1983 to 2012 TURNOVER ANALYSIS



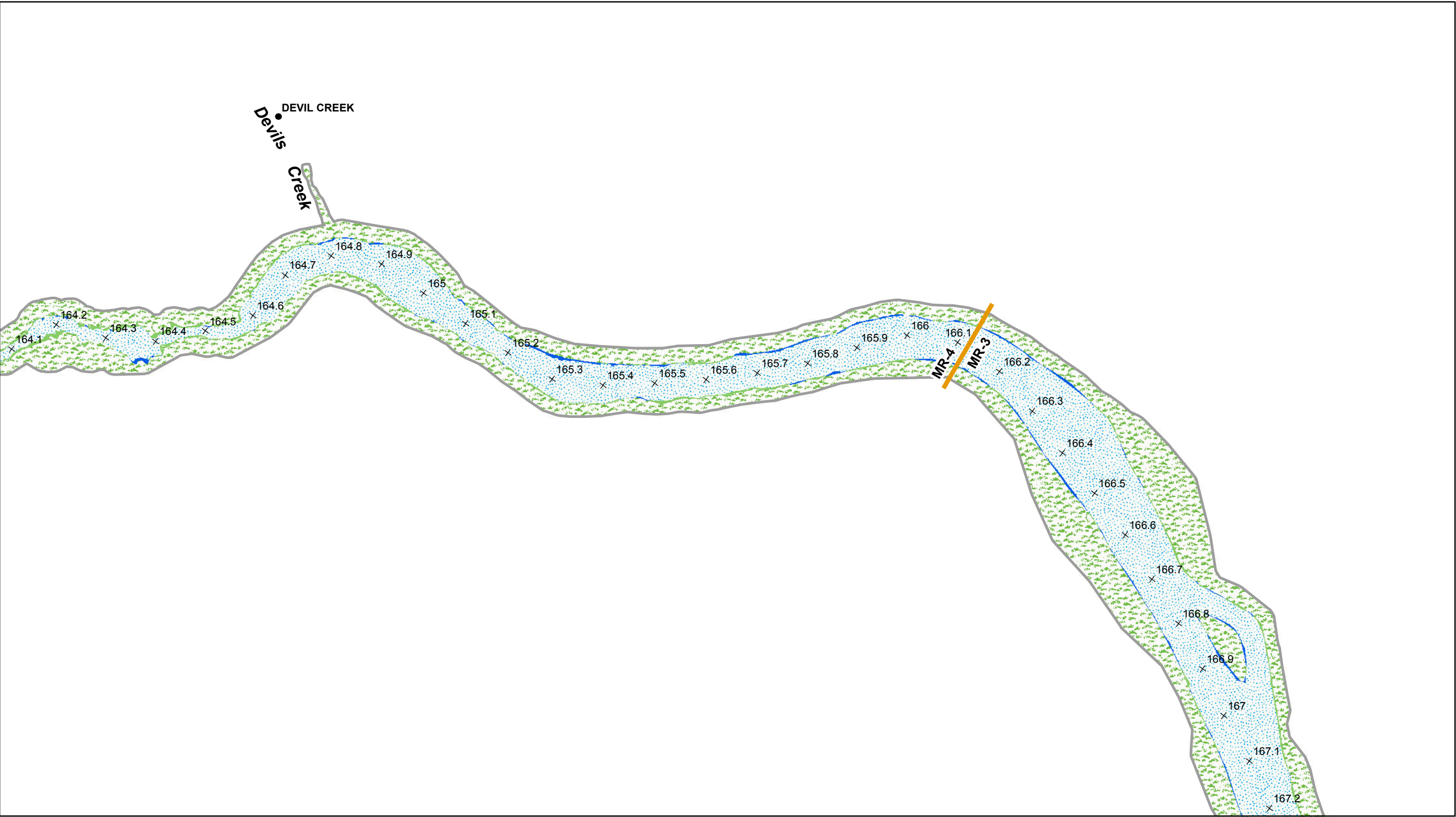


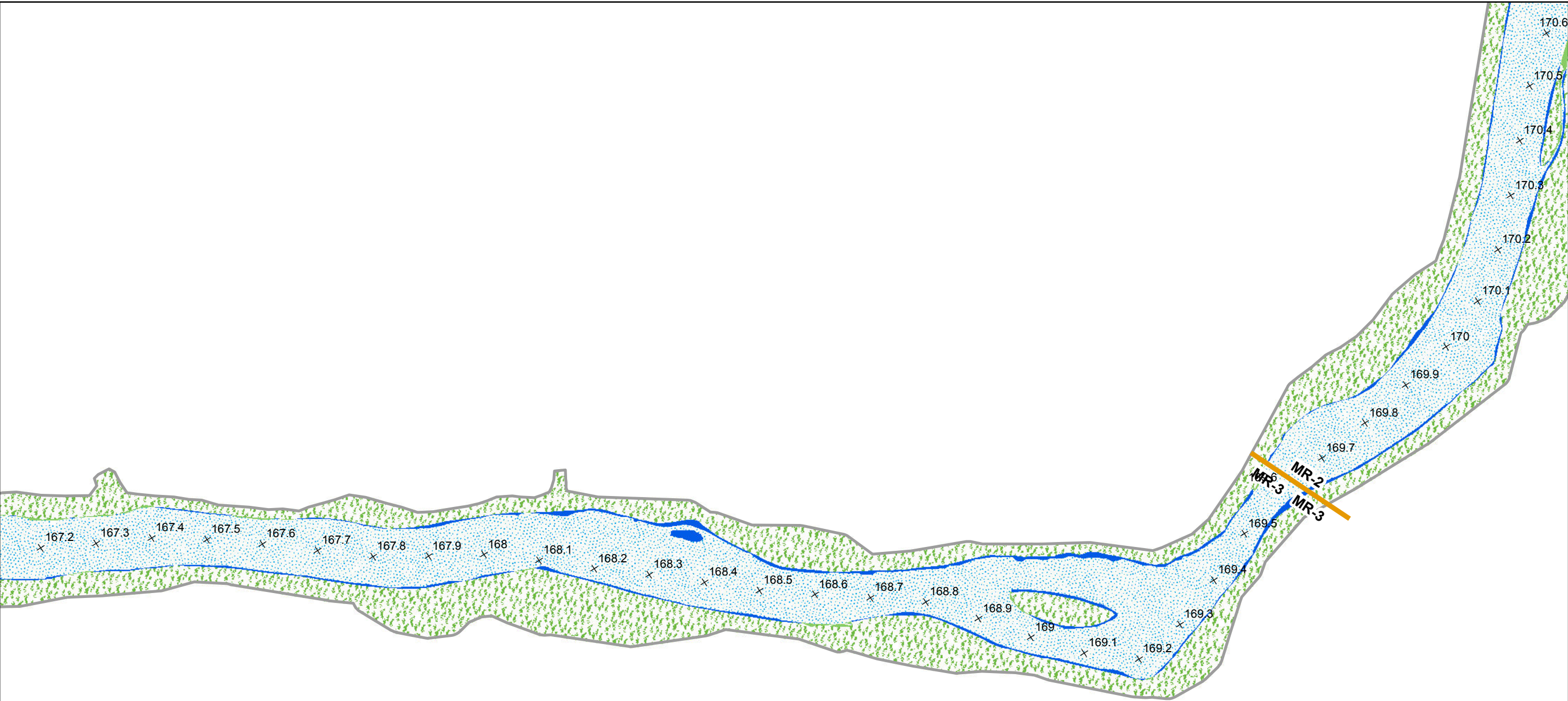
0 1,000 2,000 Feet
See index page for legend and additional data information.

1 inch = 1,000 feet
Sheet 26 of 34

MIDDLE SUSITNA RIVER SEGMENT
1983 to 2012 TURNOVER ANALYSIS







0 1,000 2,000 Feet
See index page for legend and additional data information.

1 inch = 1,000 feet
Sheet 28 of 34

MIDDLE SUSITNA RIVER SEGMENT
1983 to 2012 TURNOVER ANALYSIS



