

APPENDIX K. 1950s TO 1980s 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

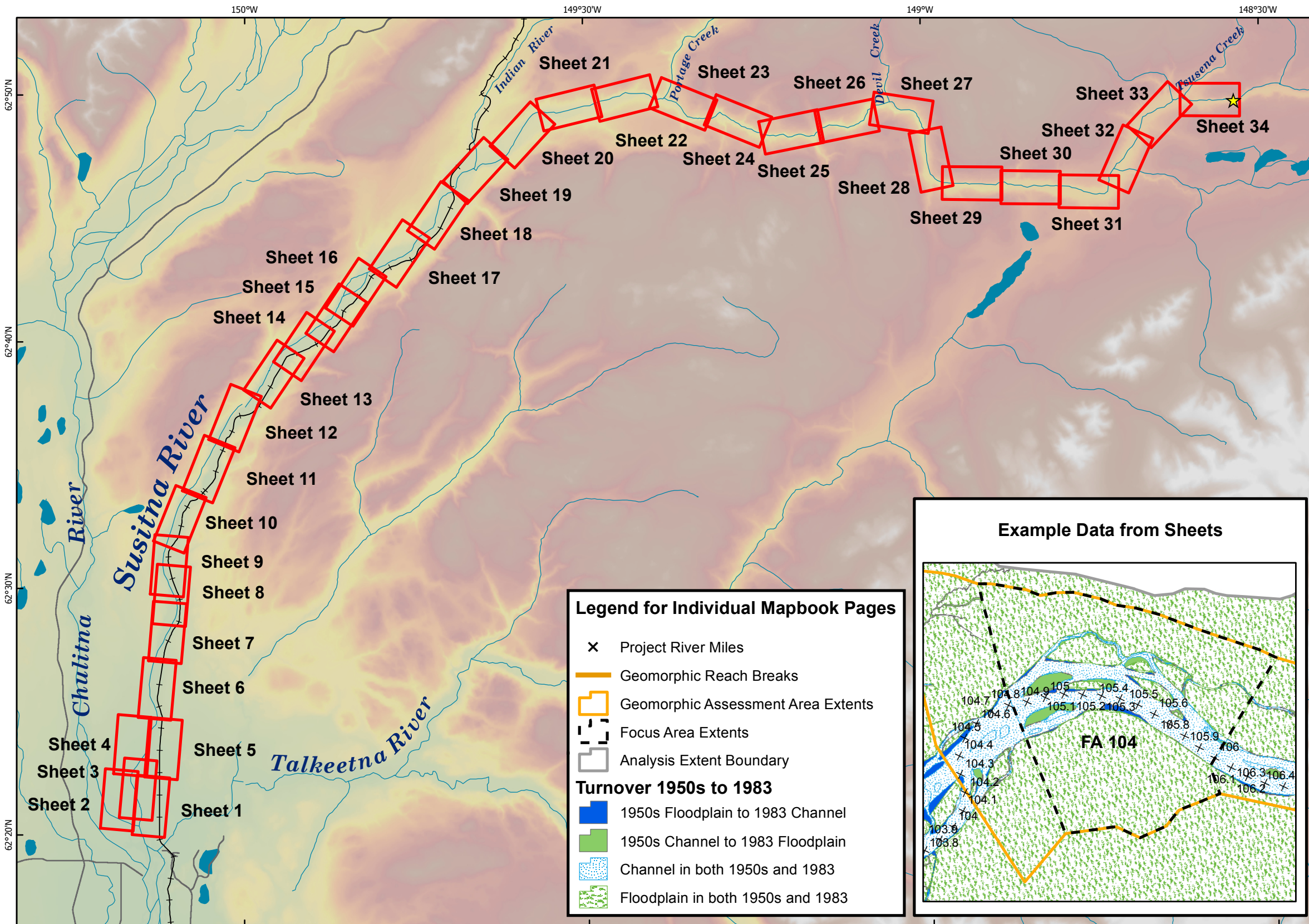
Alaska Energy Authority



Prepared by

Tetra Tech Inc.

September 2014



MIDDLE SUSITNA RIVER SEGMENT TURNOVER ANALYSIS 1950s to 1983

Legend

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

Data Sources: See Map References

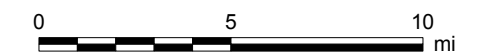
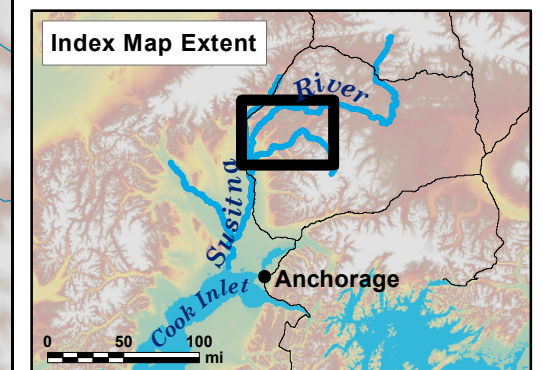
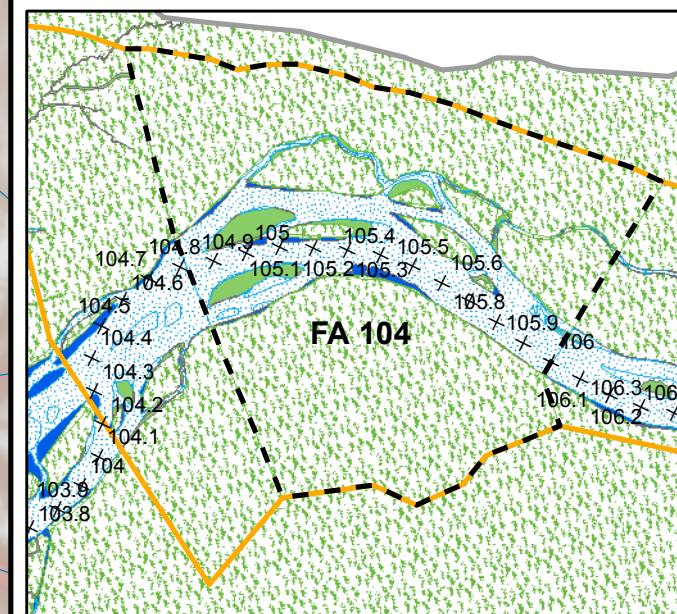
Legend for Individual Mapbook Pages

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

Turnover 1950s to 1983

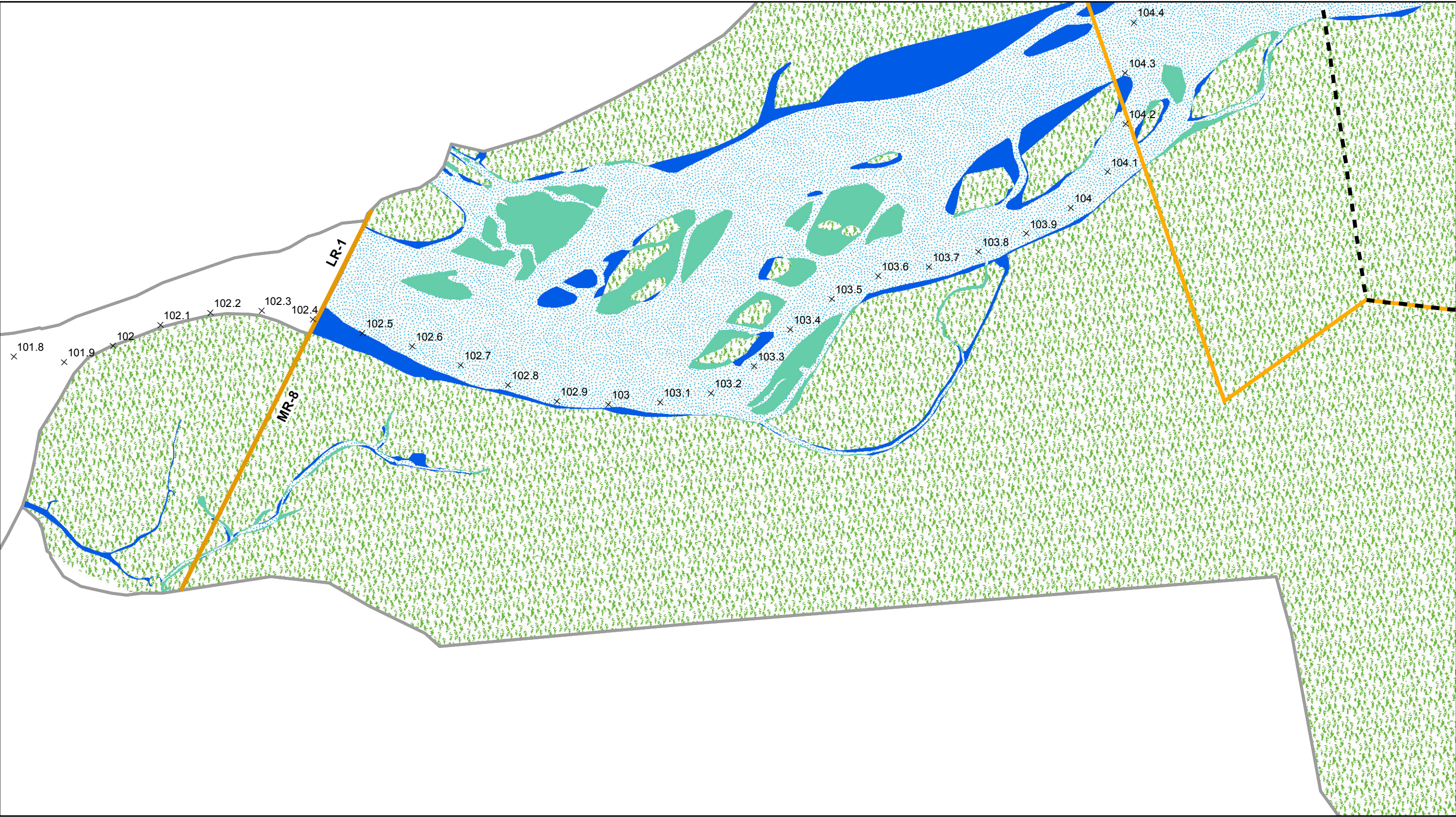
- 1950s Floodplain to 1983 Channel
- 1950s Channel to 1983 Floodplain
- Channel in both 1950s and 1983
- Floodplain in both 1950s and 1983

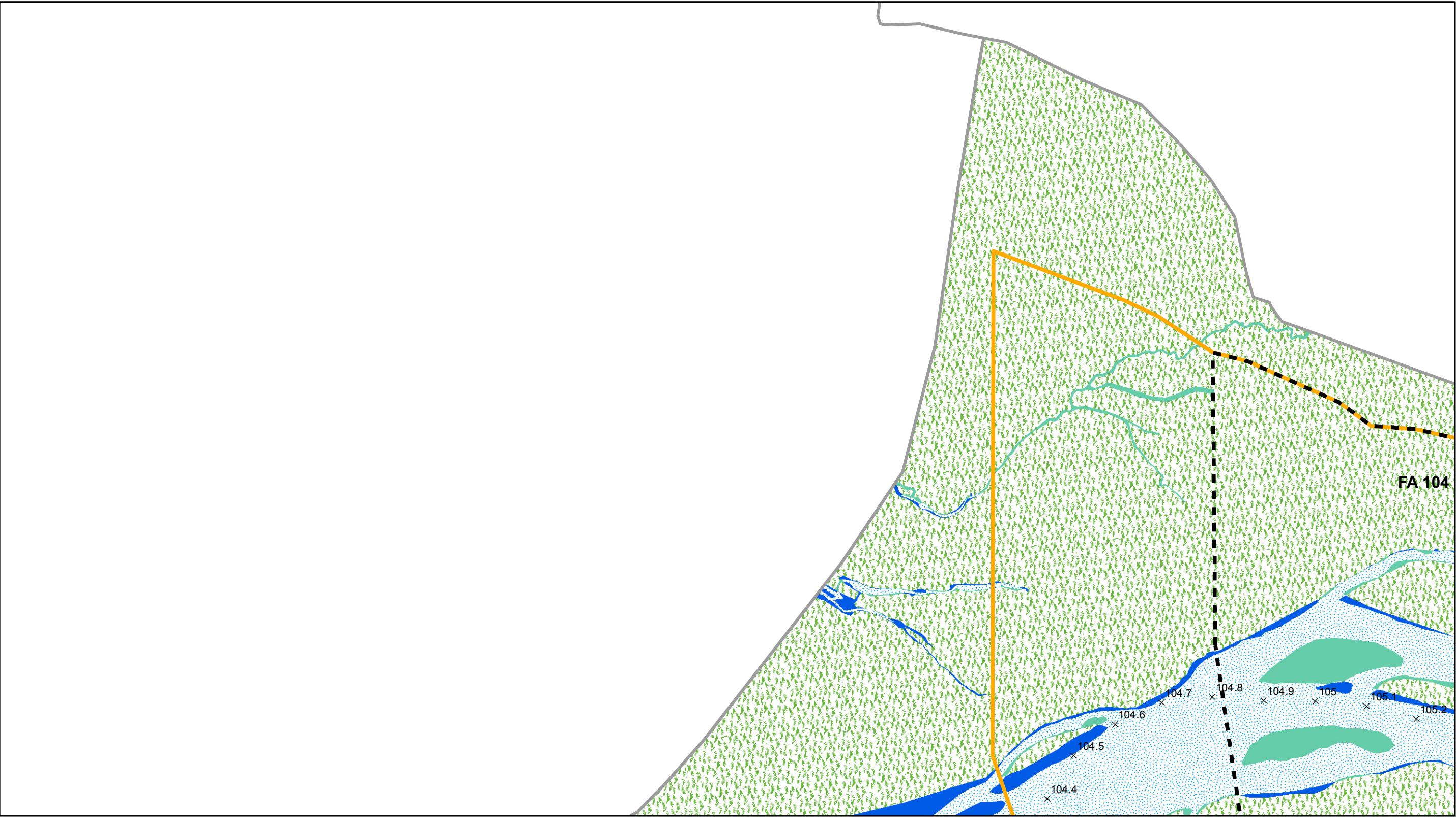
Example Data from Sheets

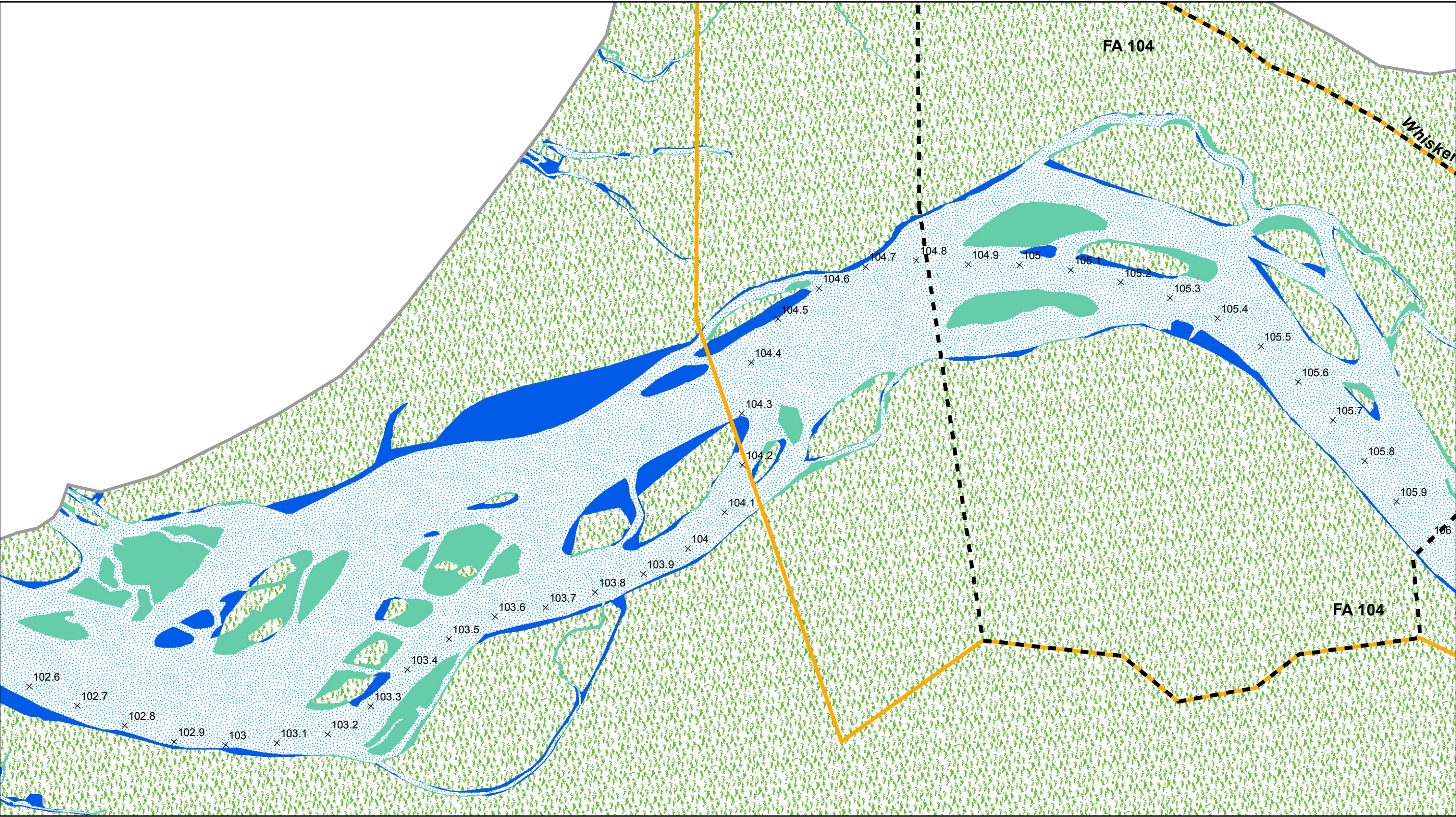


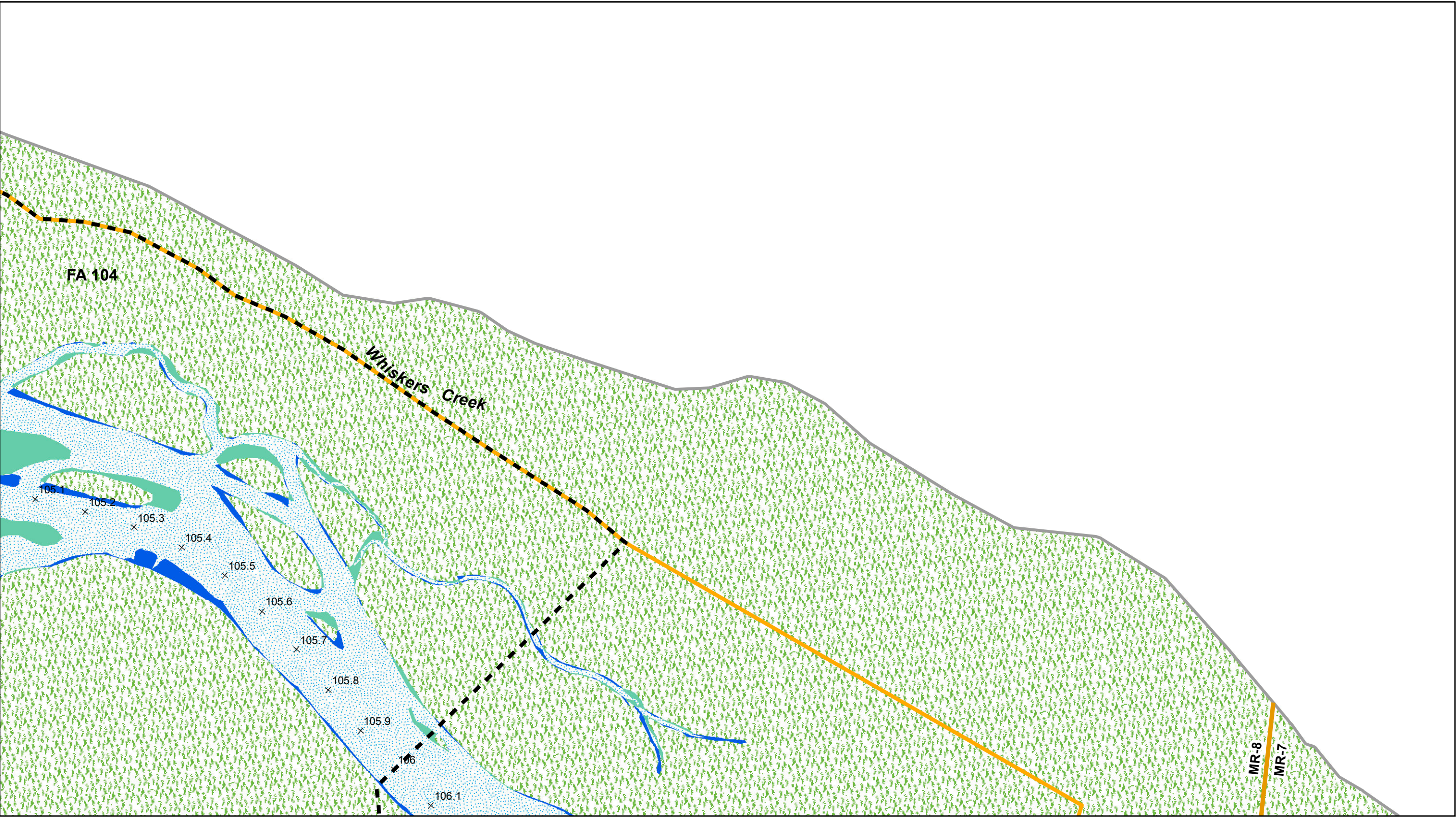
Projection: NAD83 State Plane Alaska 4 FIPS 5004 (ft)
Date Created: 9/18/2014
Map Author: Tetra Tech
File: MR_1950sto1980s_v1_20140204_cover.mxd

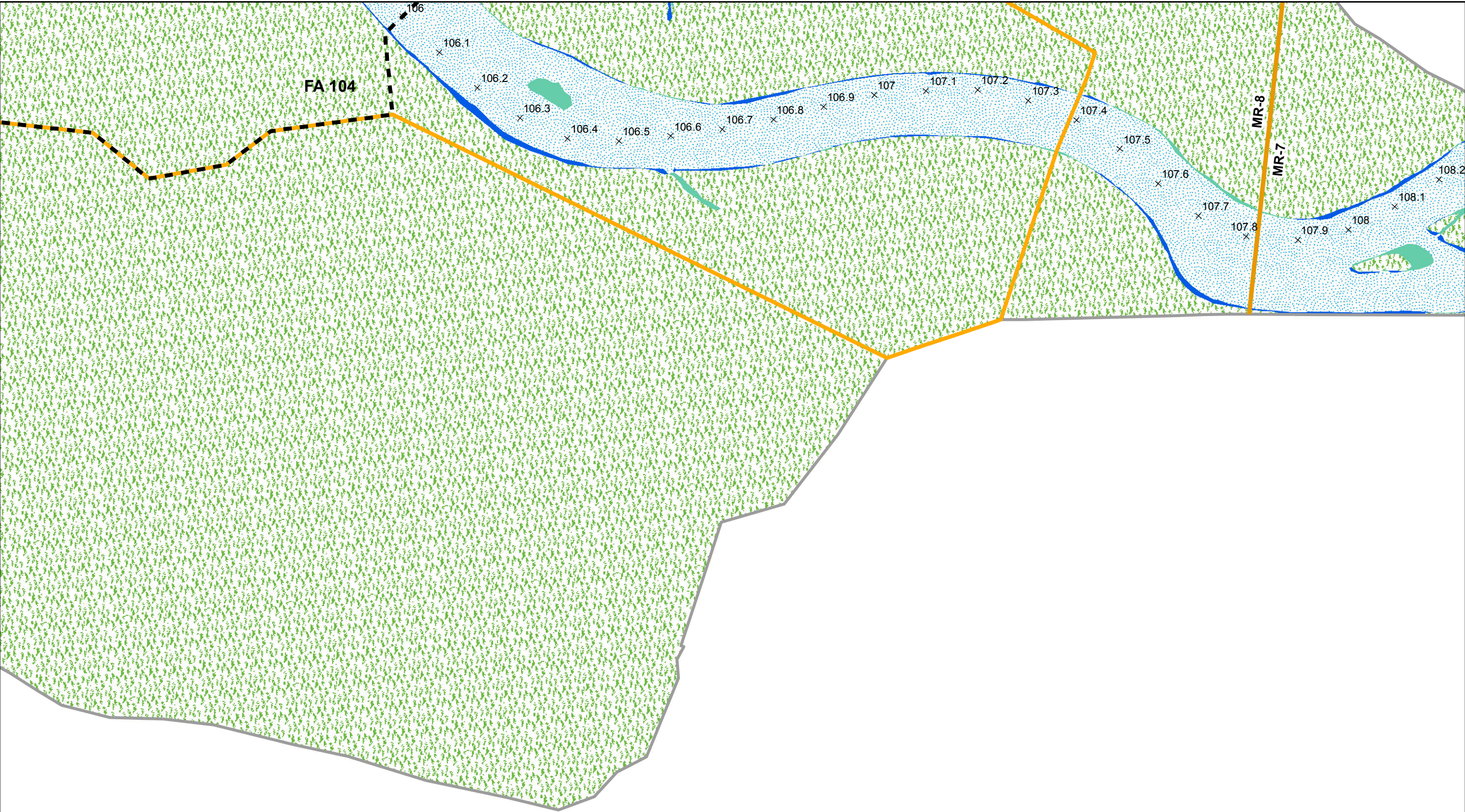


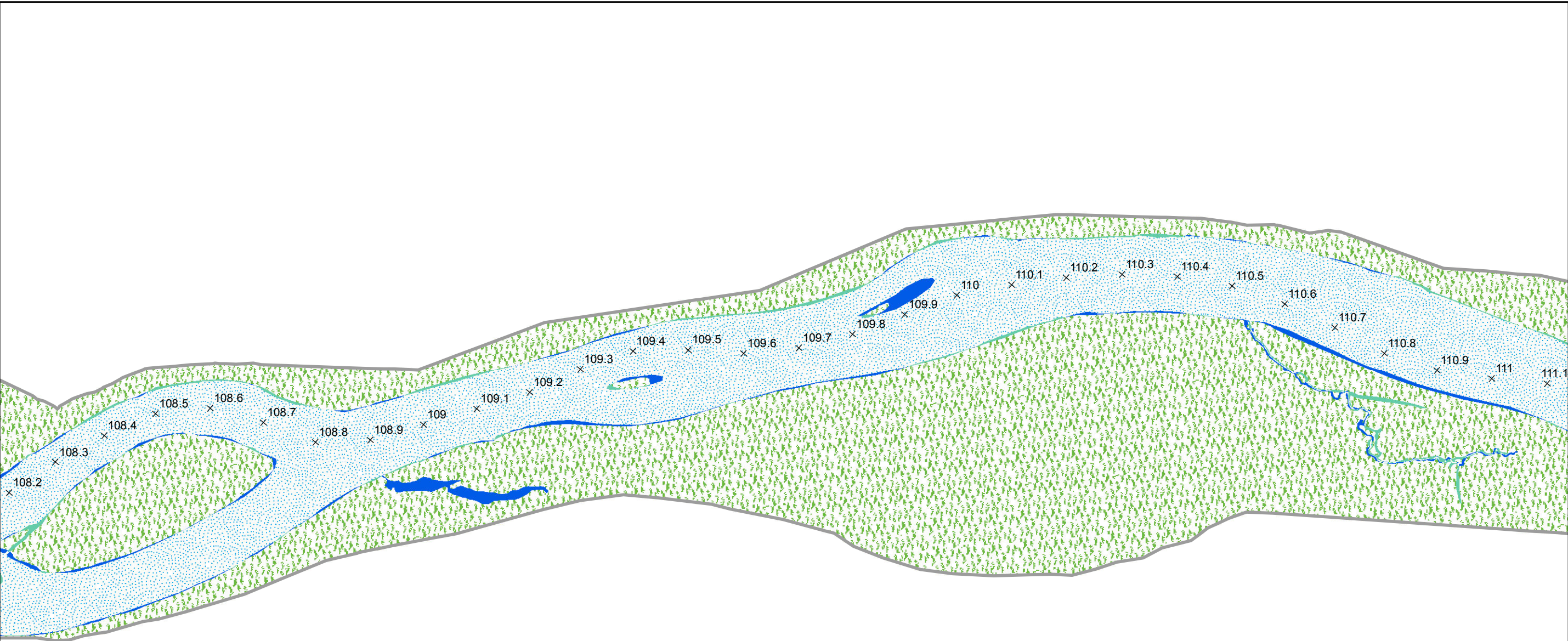


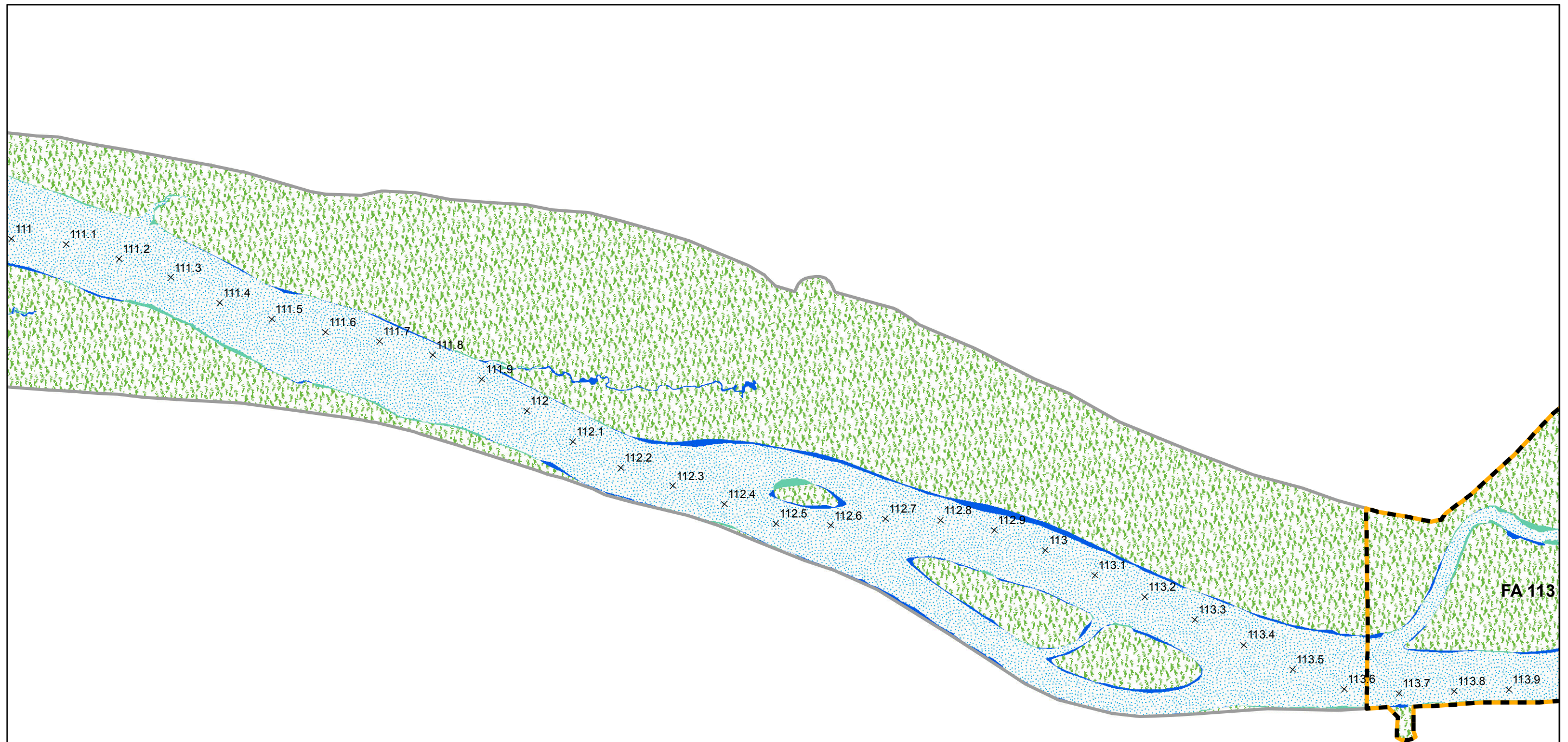


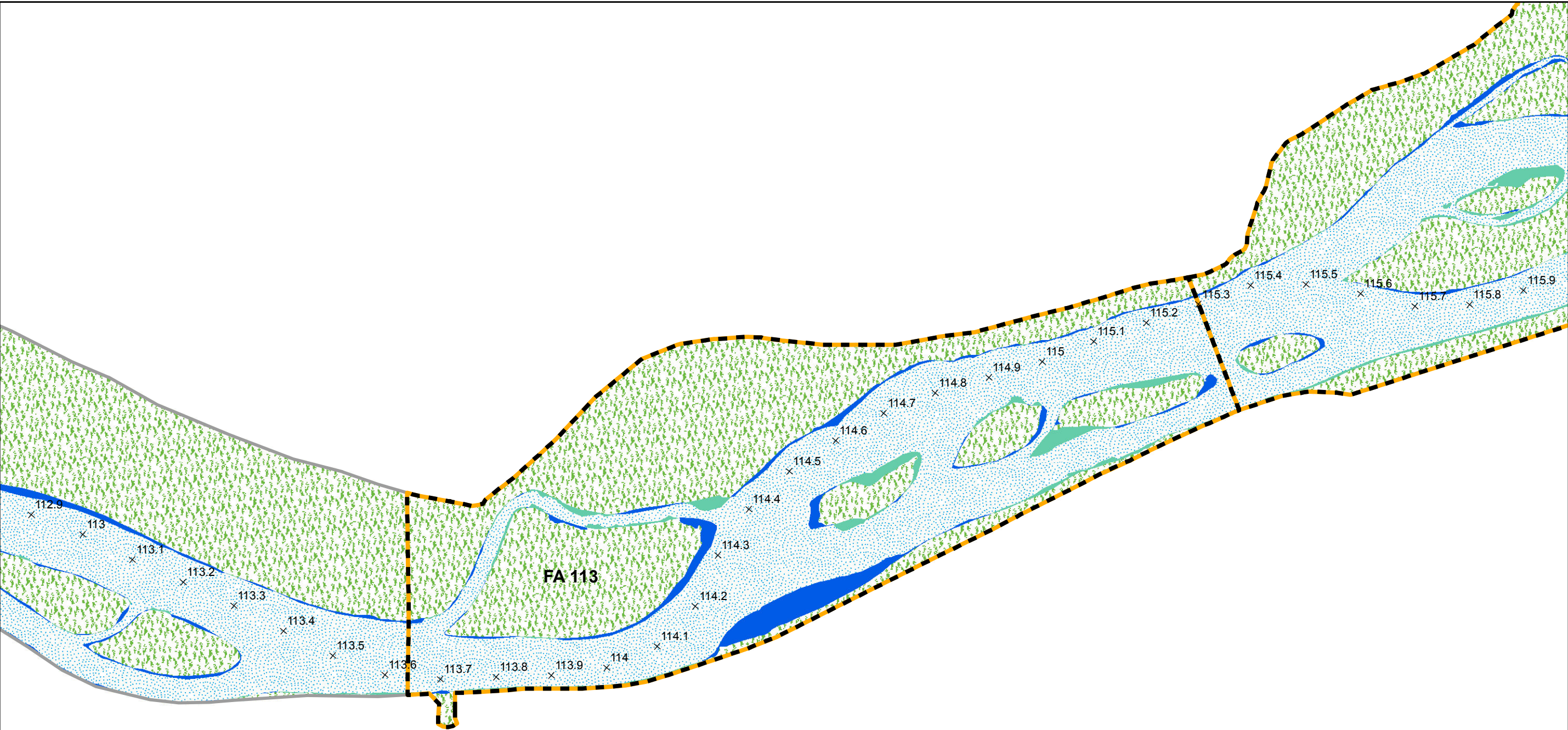


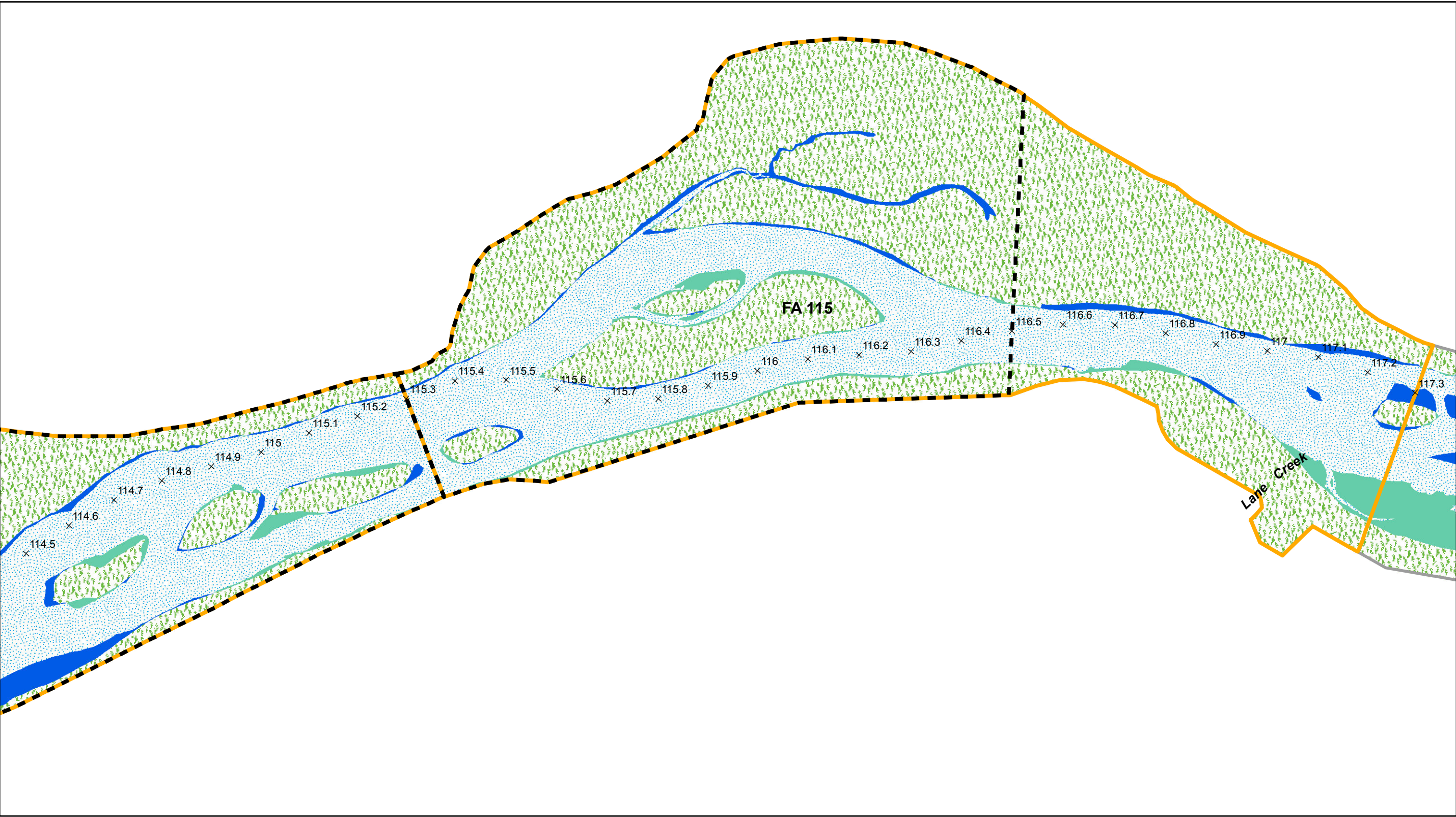


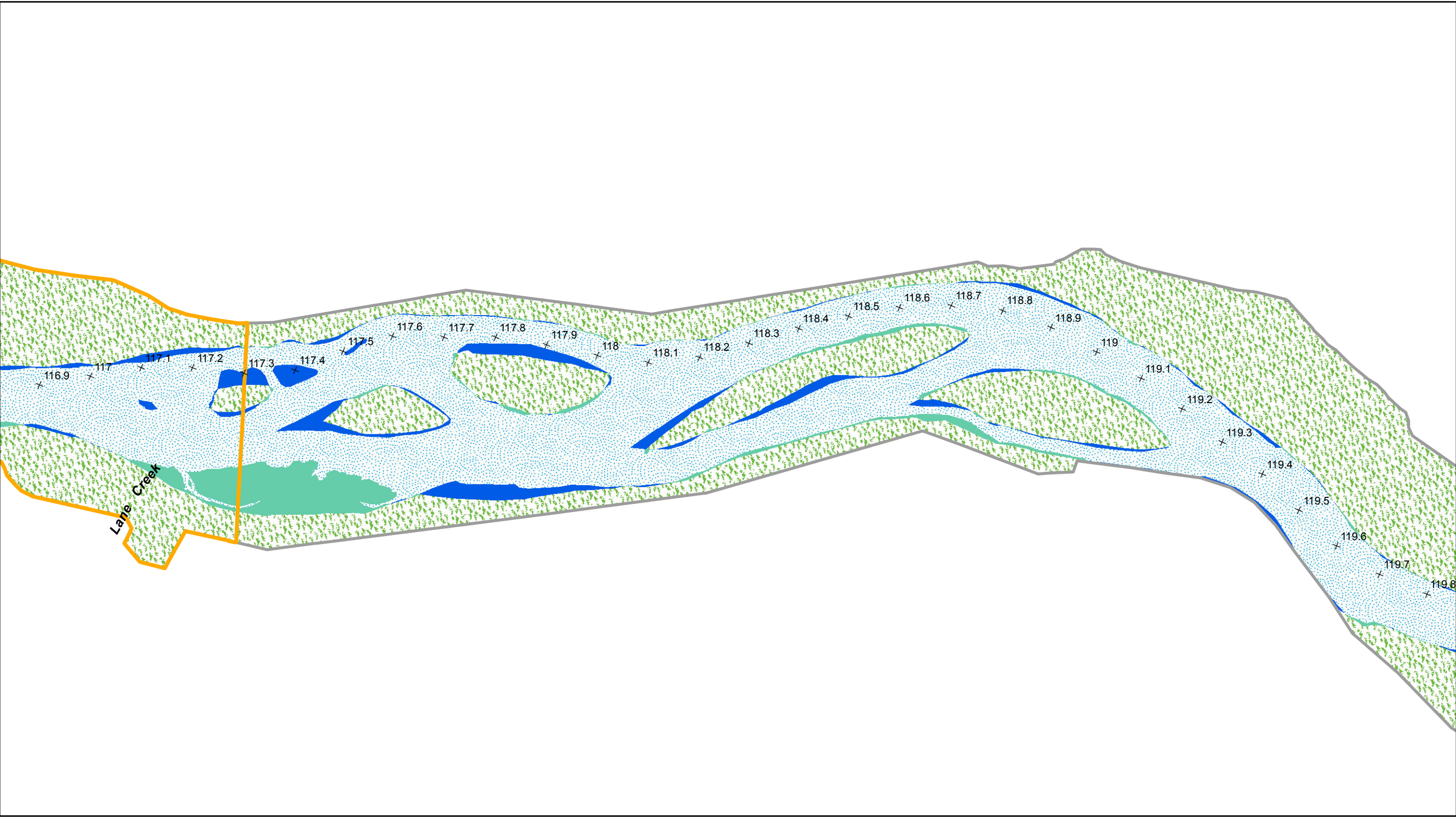


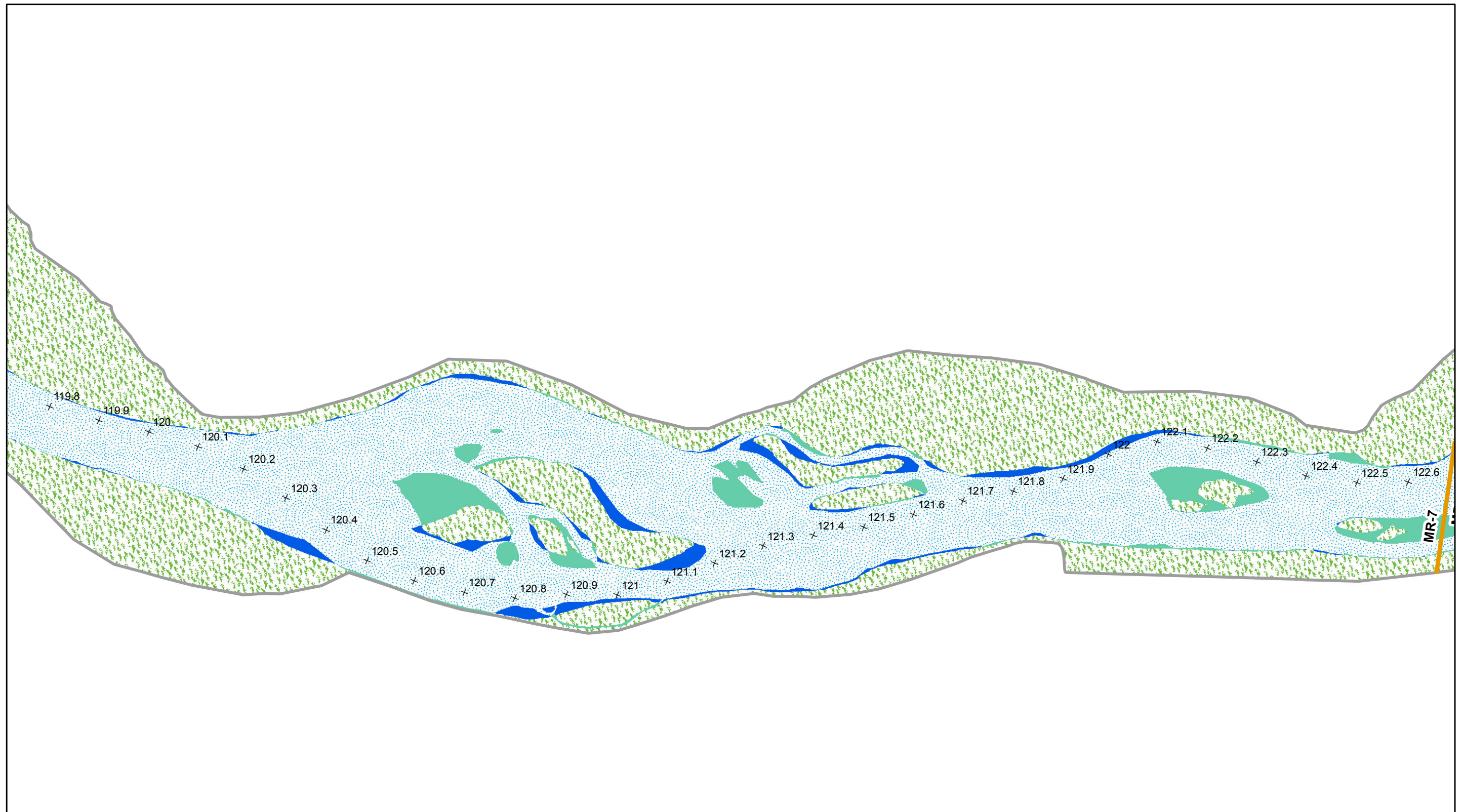












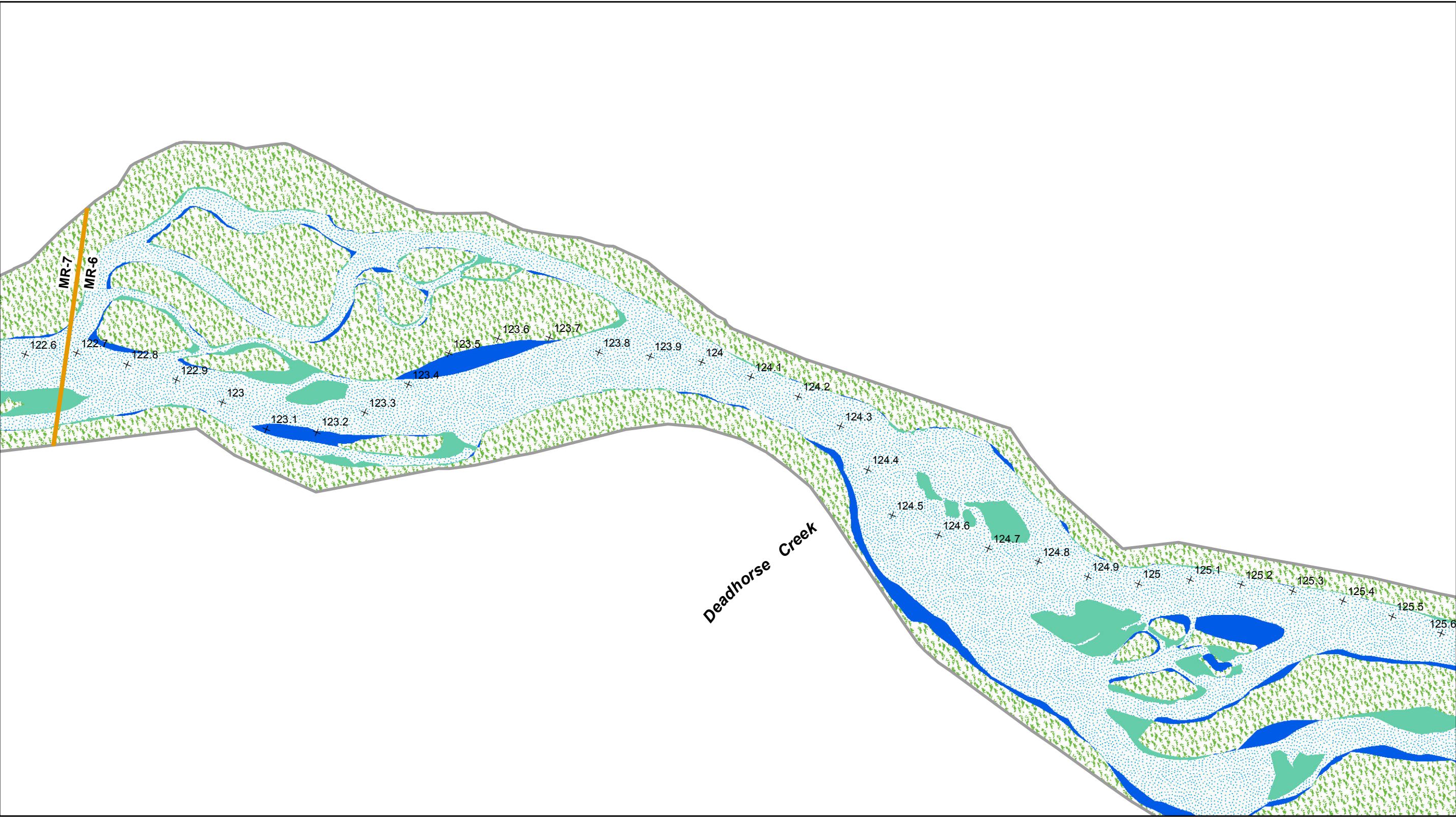
0 1,000 2,000 1 inch = 1,000 feet
 Feet

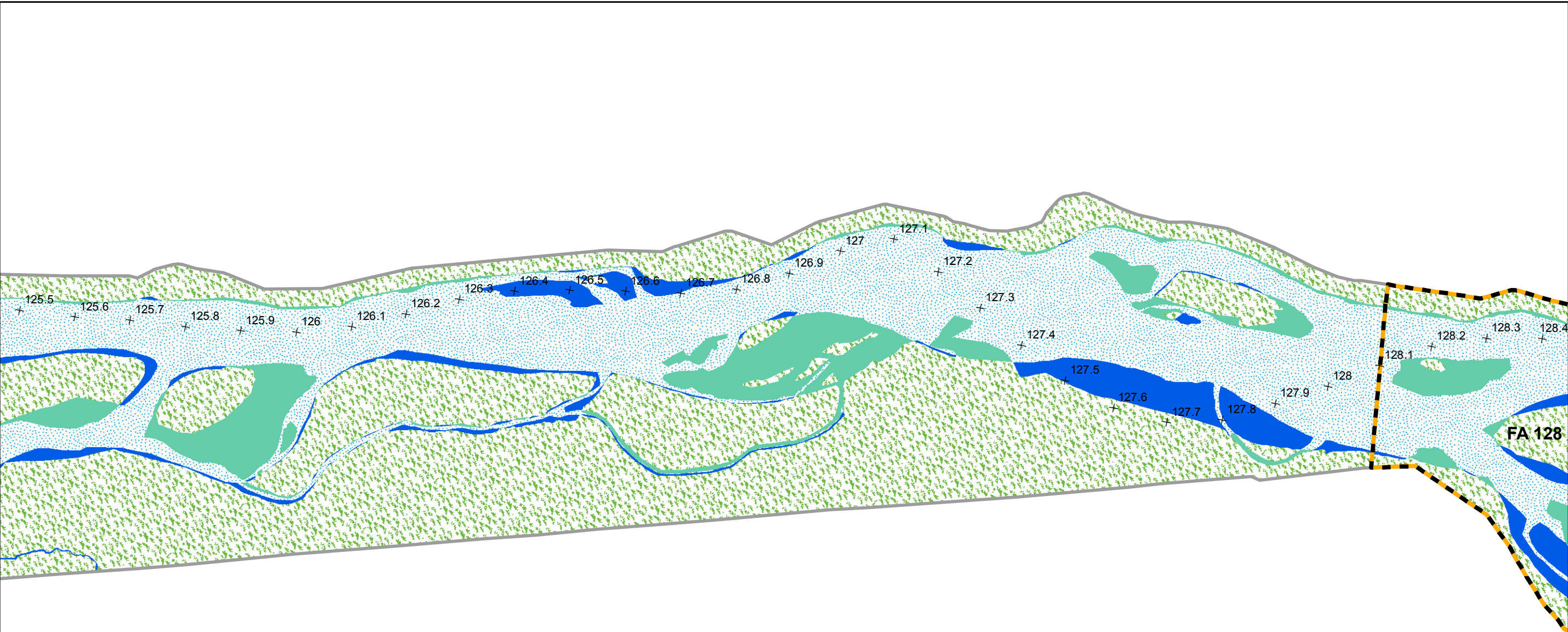
See index page for legend and additional data information.

Sheet 11 of 34

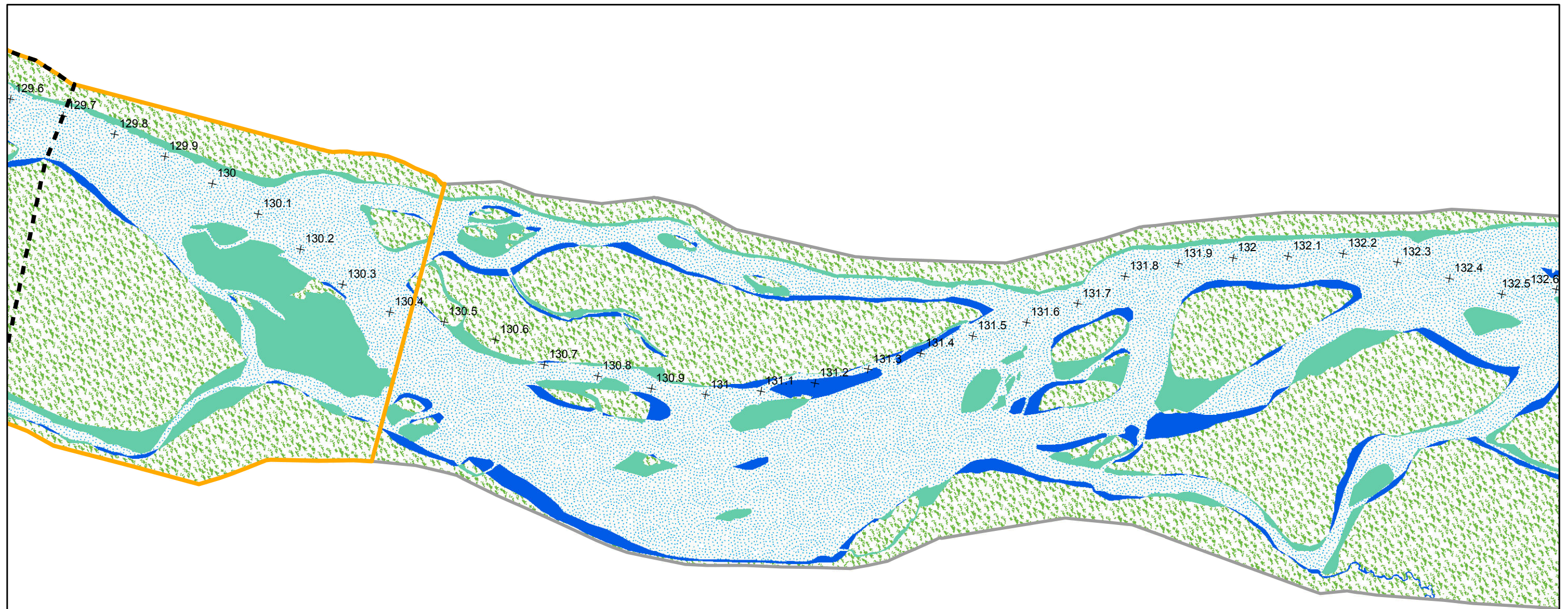
**MIDDLE SUSITNA RIVER SEGMENT
 1950s to 1983 TURNOVER ANALYSIS**









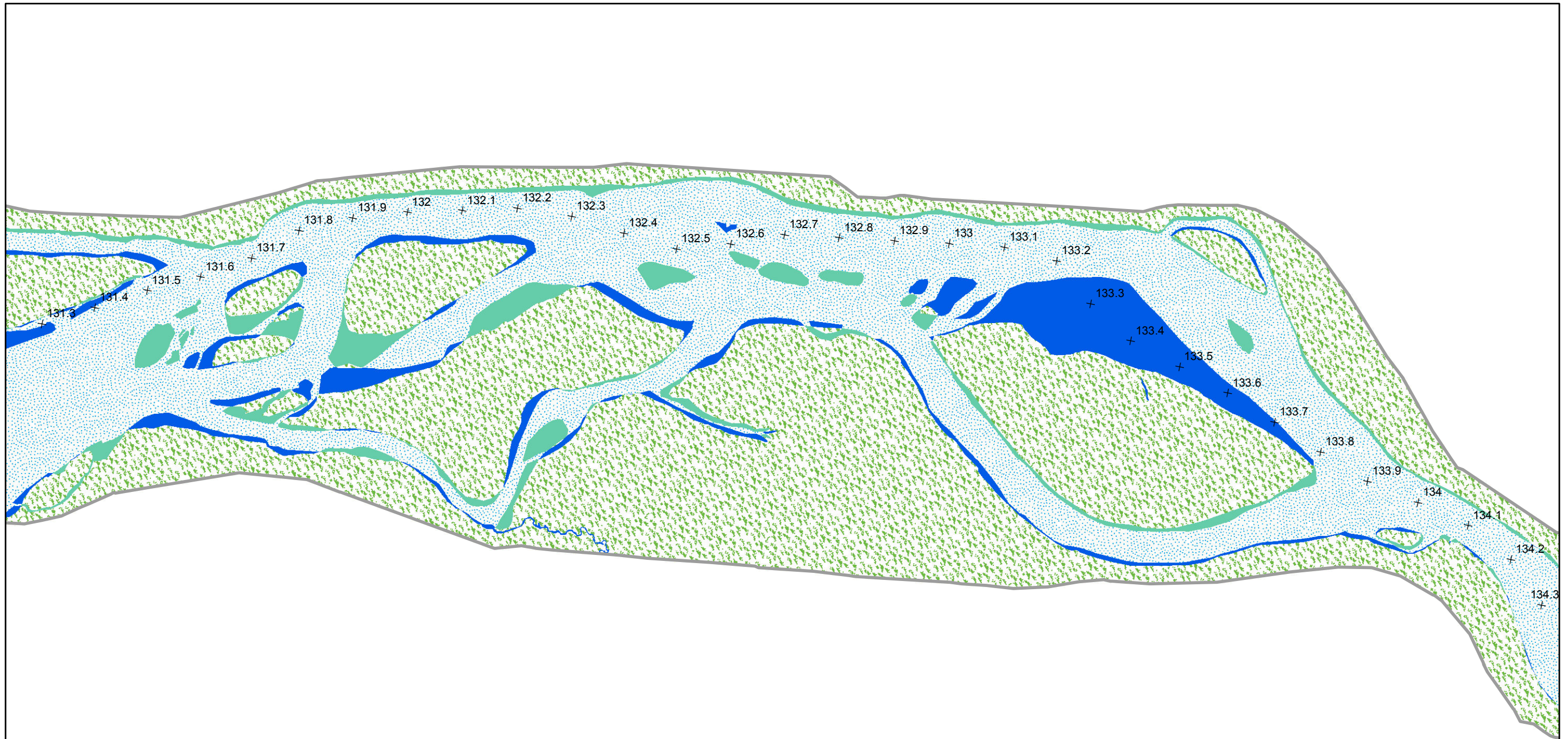


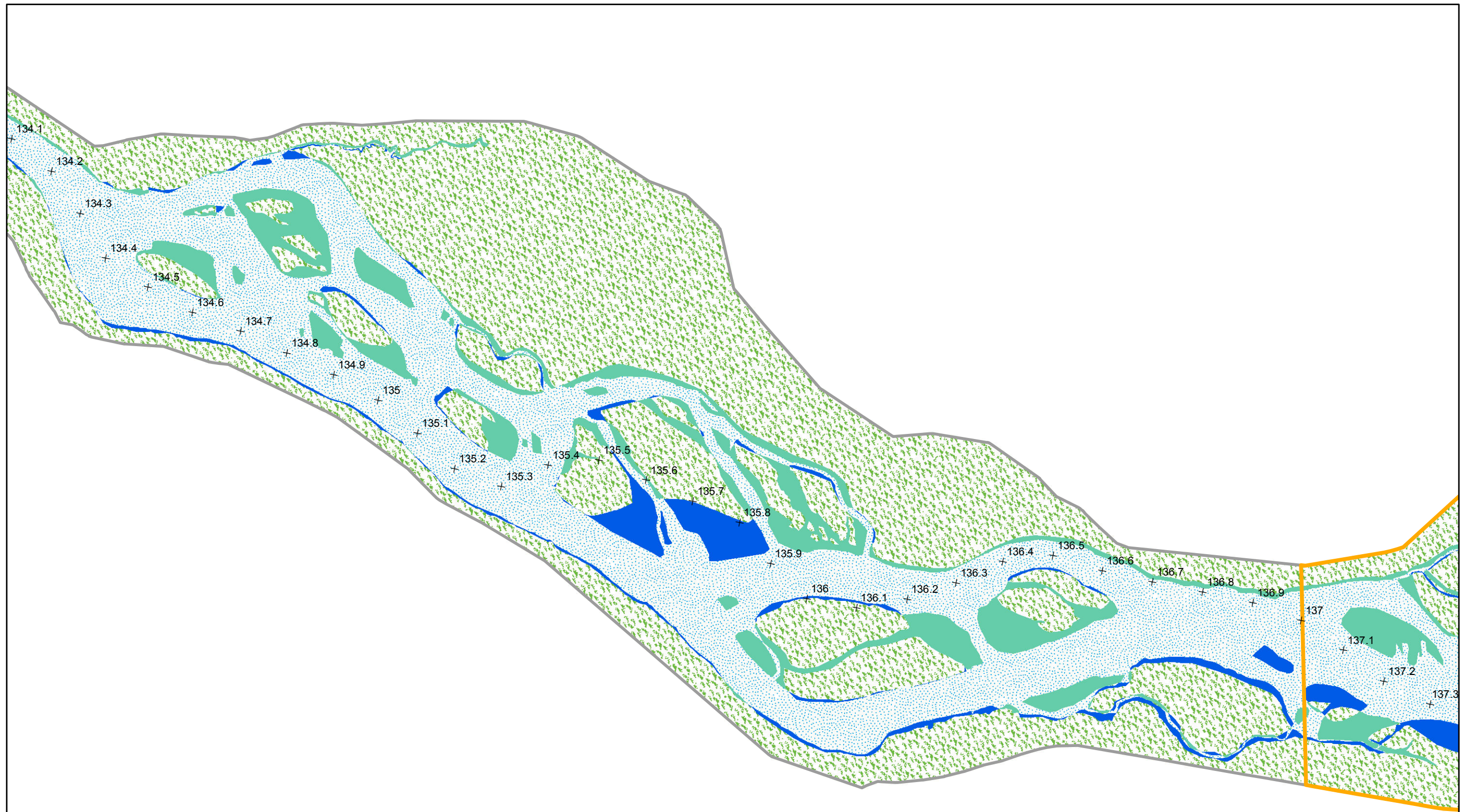
0 1,000 2,000 Feet 1 inch = 1,000 feet
See index page for legend and additional data information.

Sheet 15 of 34

**MIDDLE SUSITNA RIVER SEGMENT
1950s to 1983 TURNOVER ANALYSIS**





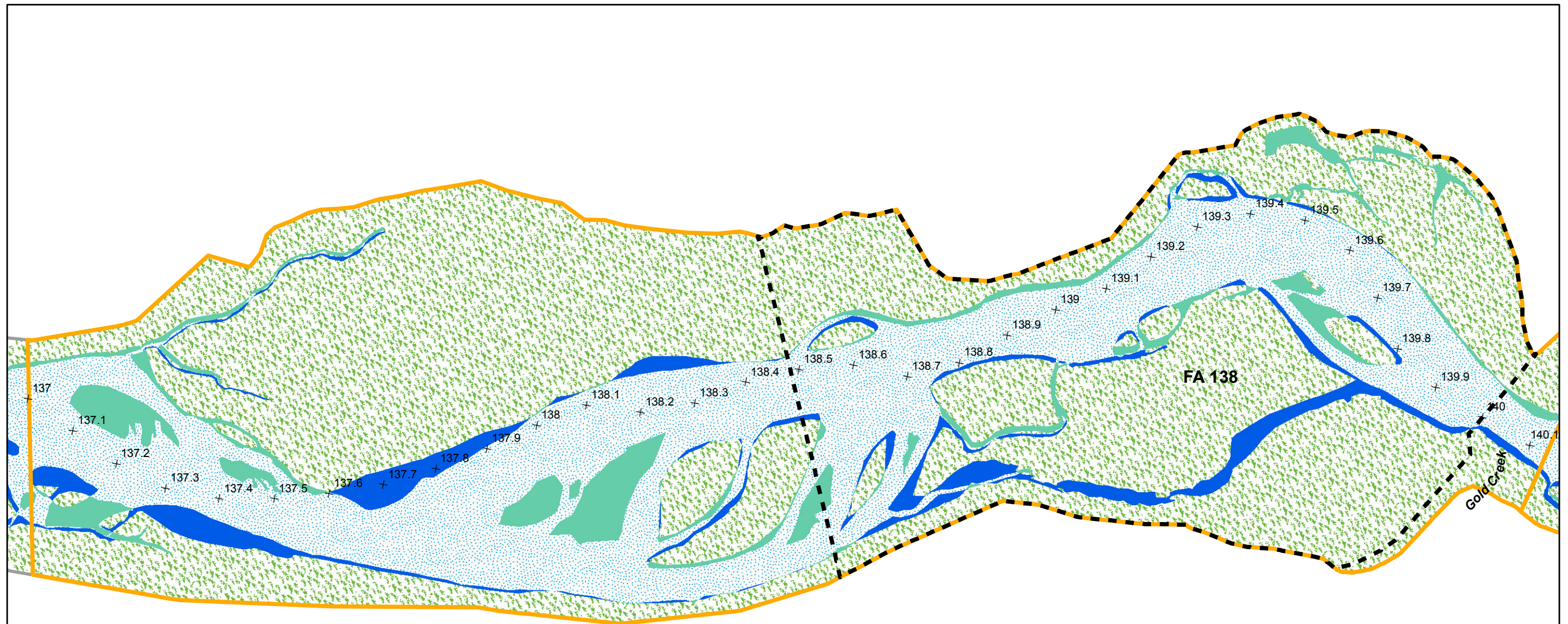


0 1,000 2,000 Feet 1 inch = 1,000 feet
See index page for legend and additional data information.

Sheet 17 of 34

**MIDDLE SUSITNA RIVER SEGMENT
1950s to 1983 TURNOVER ANALYSIS**



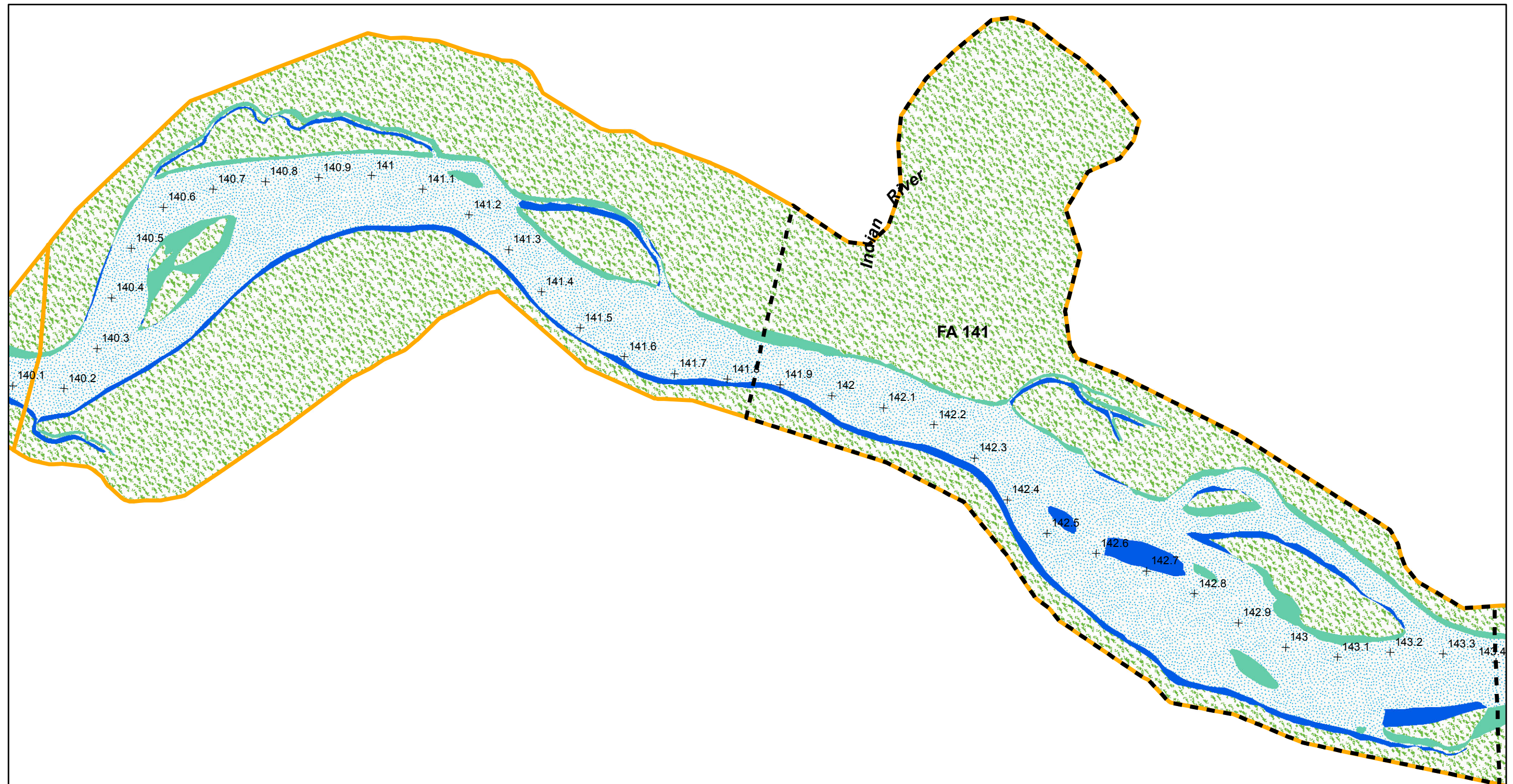


0 1,000 2,000 Feet 1 inch = 1,000 feet
 See index page for legend and additional data information.

Sheet 18 of 34

**MIDDLE SUSITNA RIVER SEGMENT
 1950s to 1983 TURNOVER ANALYSIS**



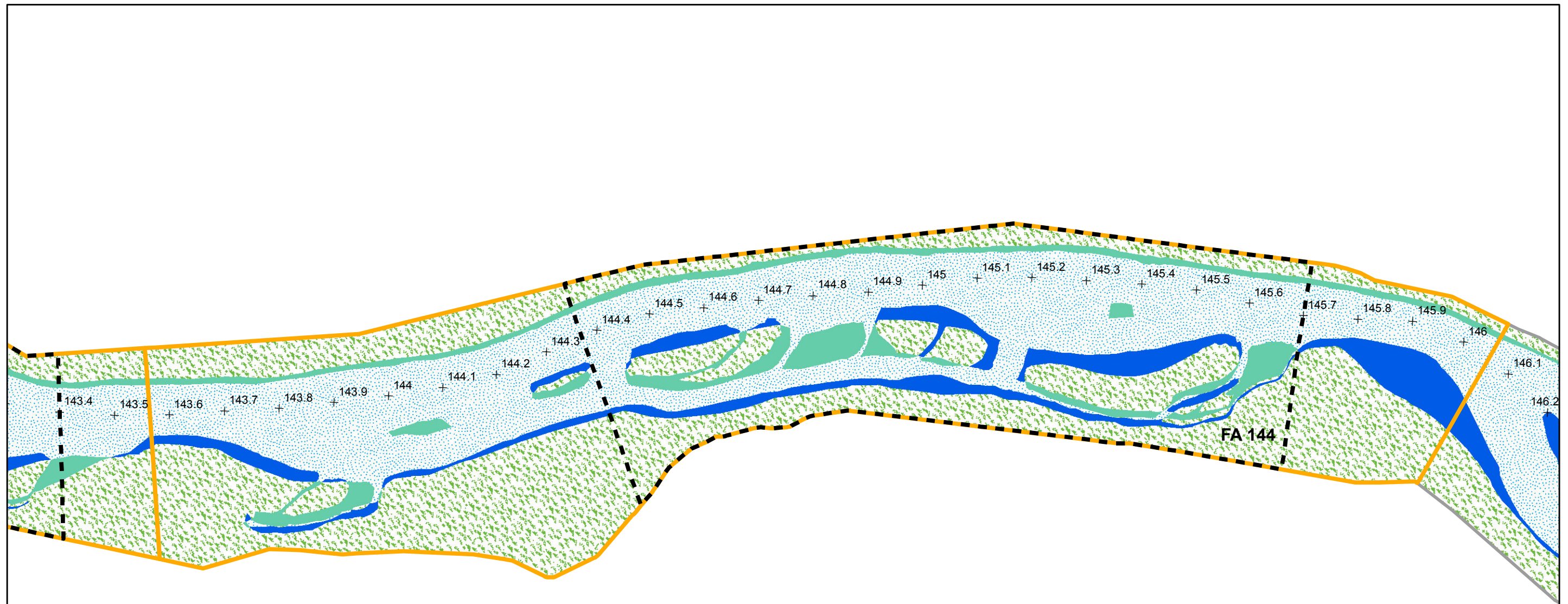


0 1,000 2,000 Feet 1 inch = 1,000 feet
 See index page for legend and additional data information.

Sheet 19 of 34

**MIDDLE SUSITNA RIVER SEGMENT
 1950s to 1983 TURNOVER ANALYSIS**



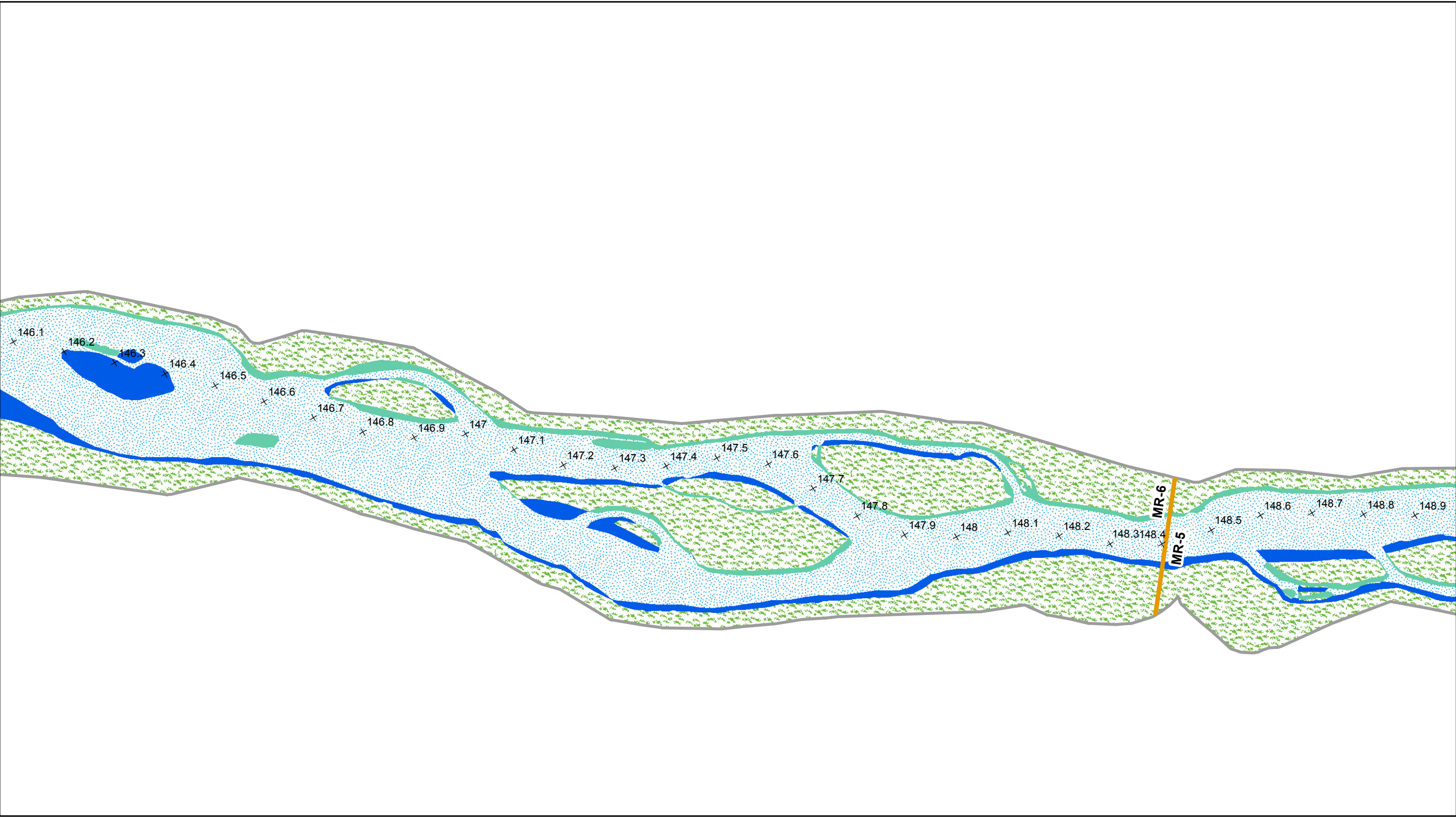


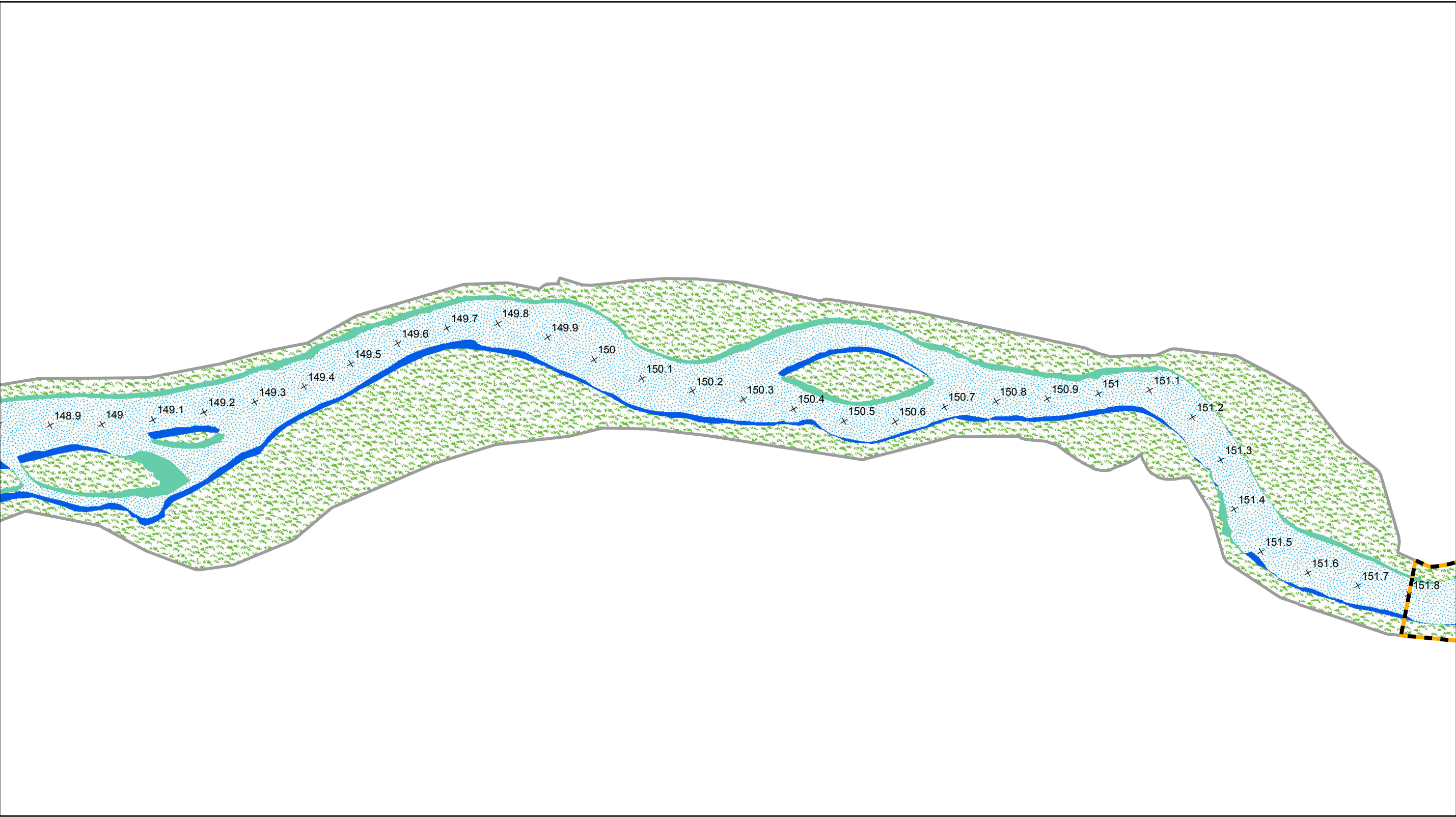
0 1,000 2,000 Feet 1 inch = 1,000 feet
See index page for legend and additional data information.

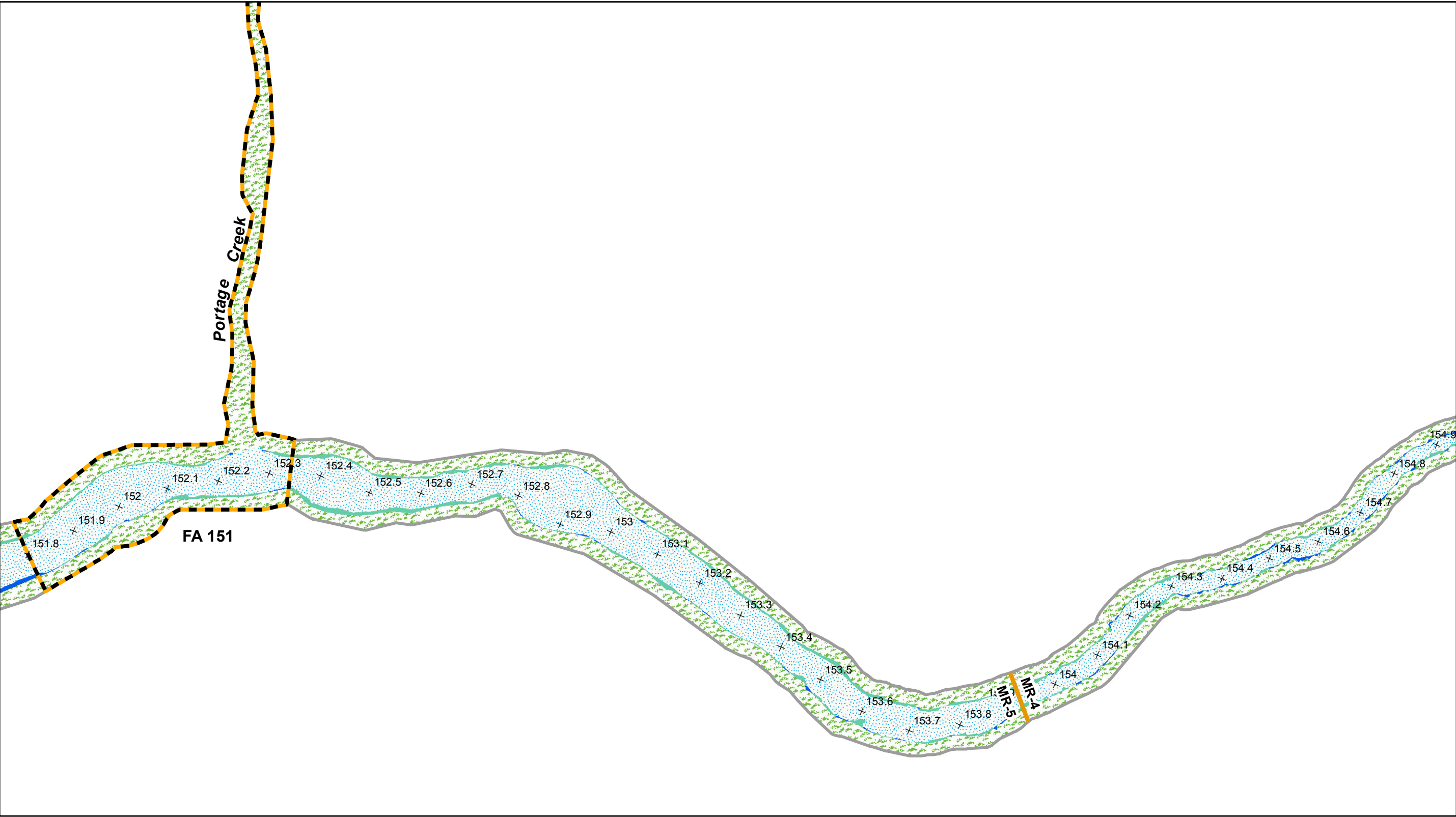
Sheet 20 of 34

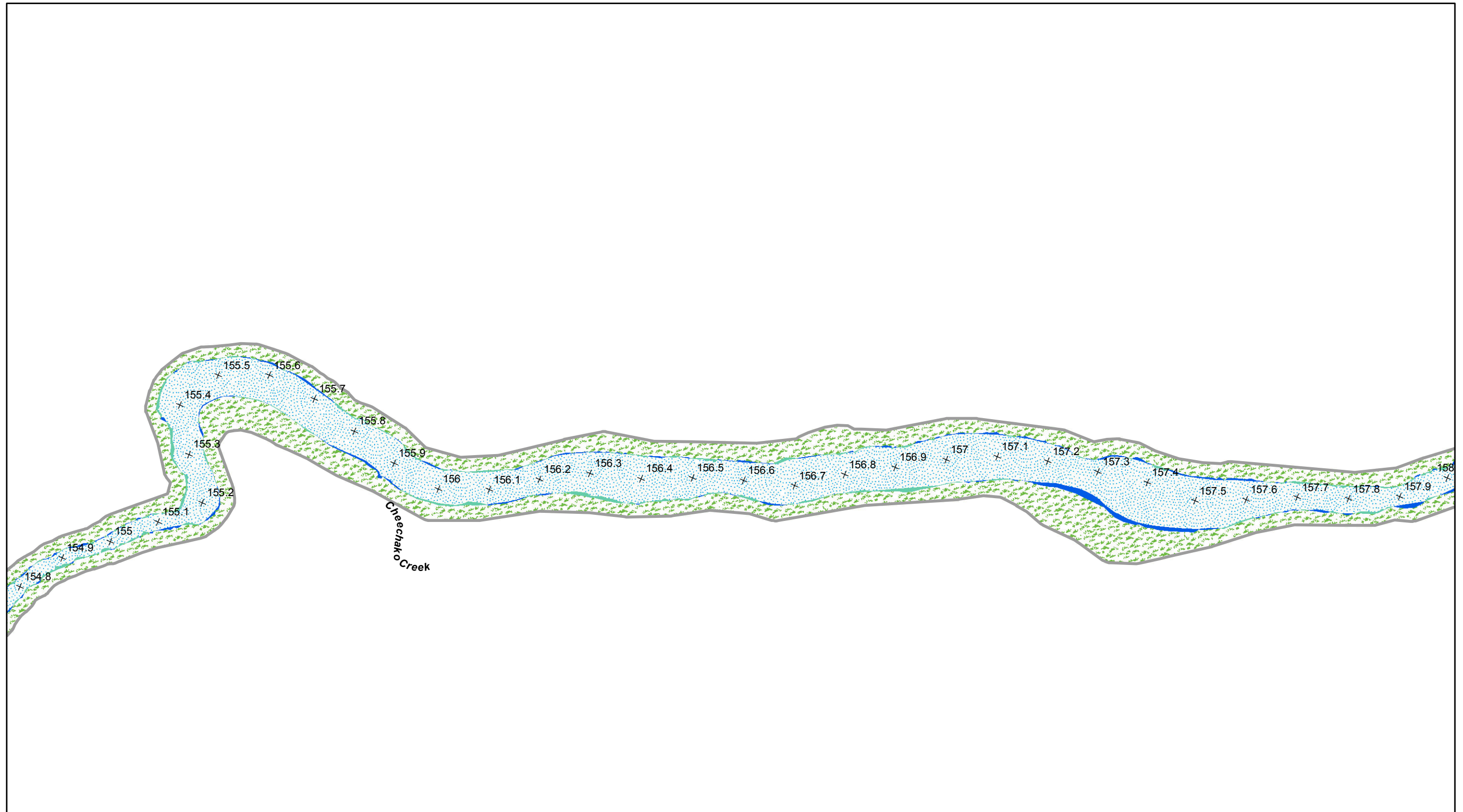
MIDDLE SUSITNA RIVER SEGMENT
1950s to 1983 TURNOVER ANALYSIS









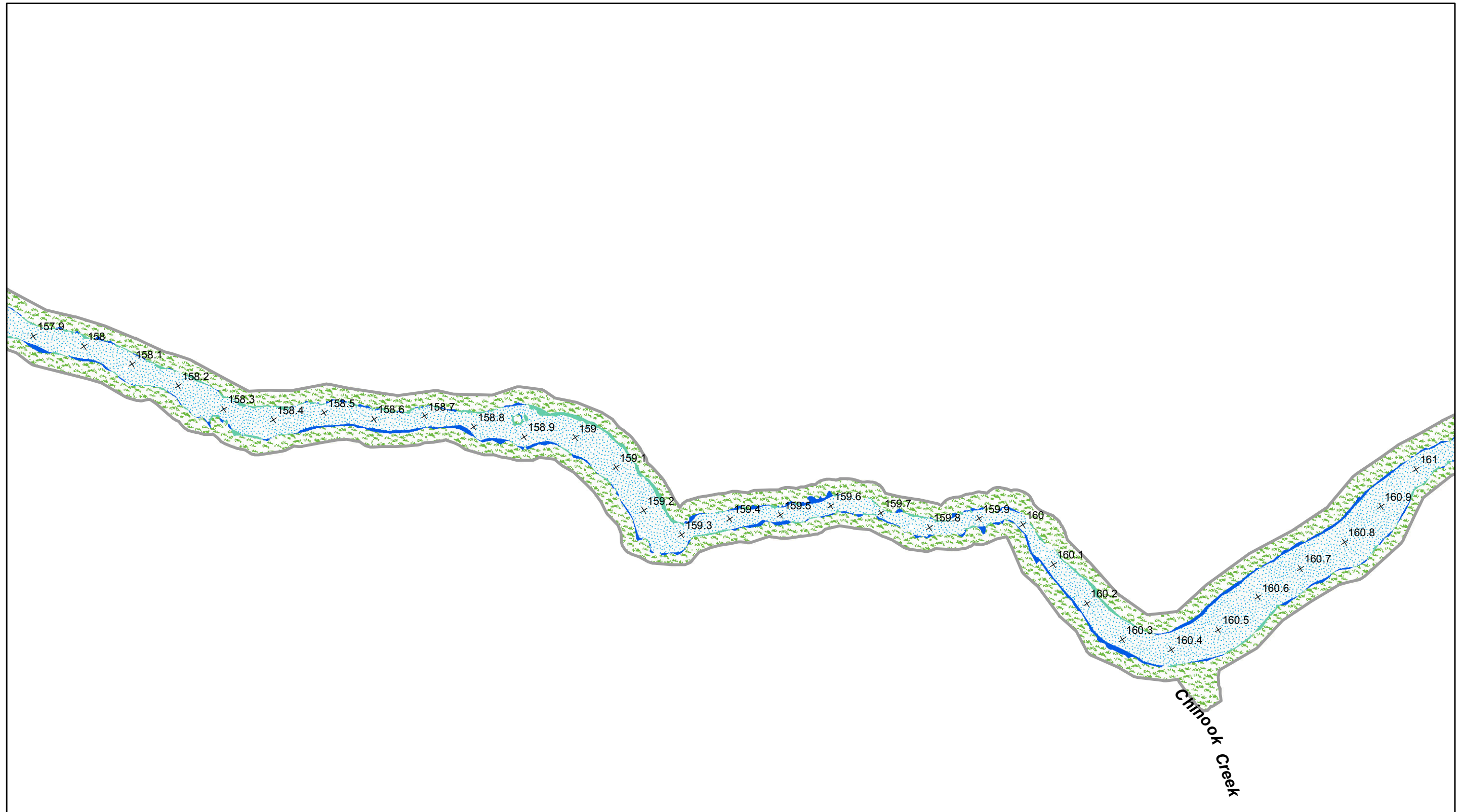


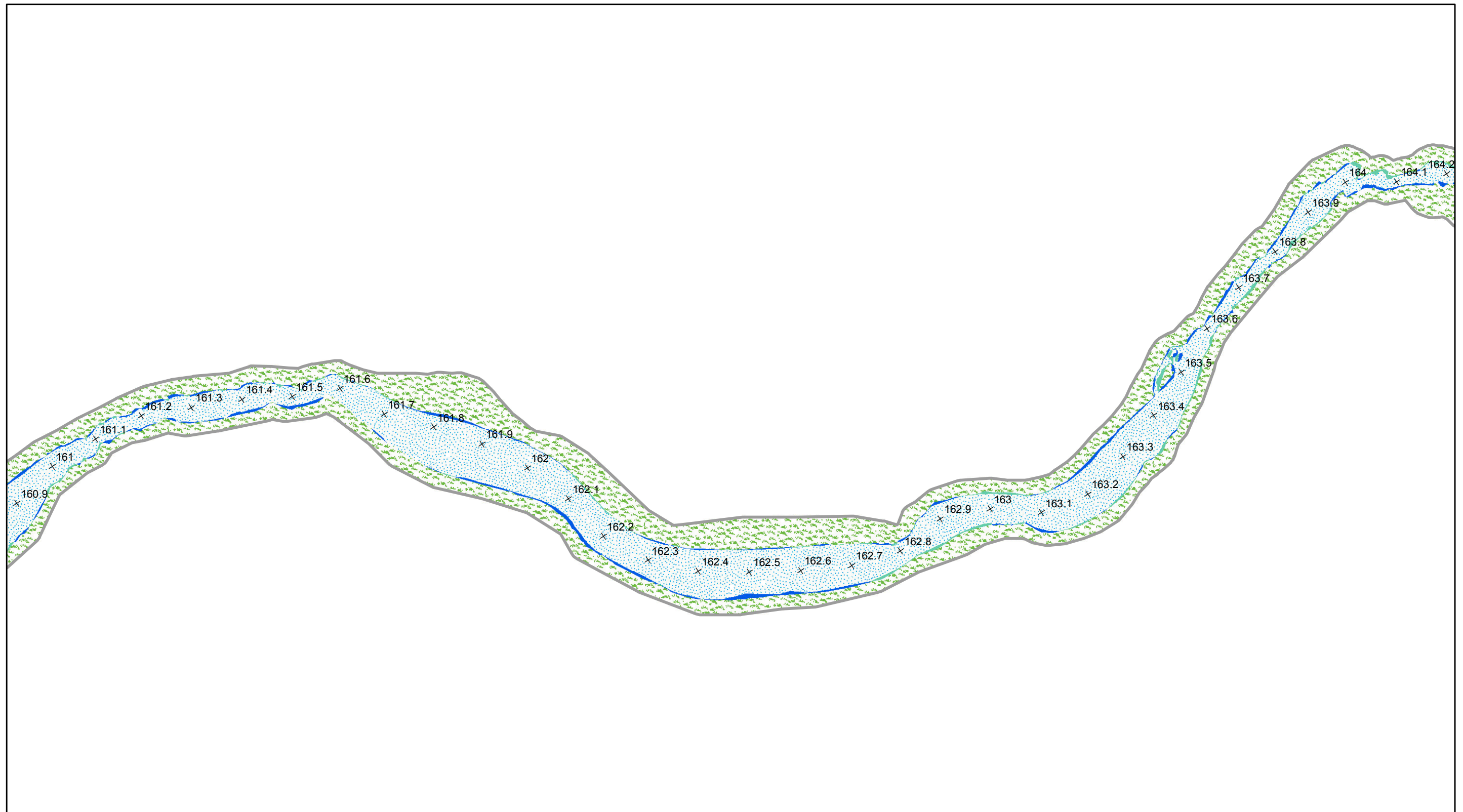
0 1,000 2,000 Feet
1 inch = 1,000 feet
See index page for legend and additional data information.

Sheet 24 of 34

**MIDDLE SUSITNA RIVER SEGMENT
1950s to 1983 TURNOVER ANALYSIS**





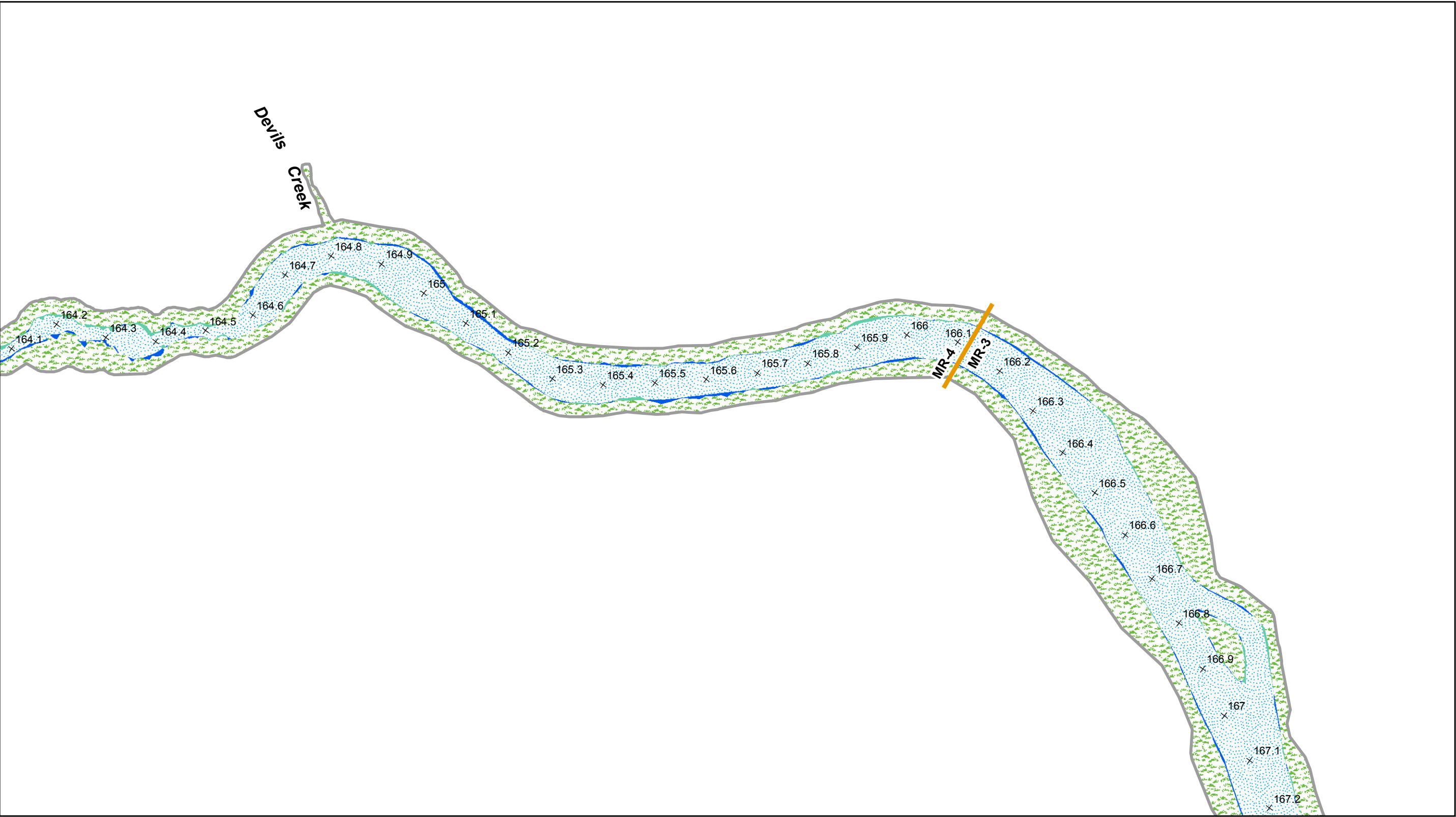


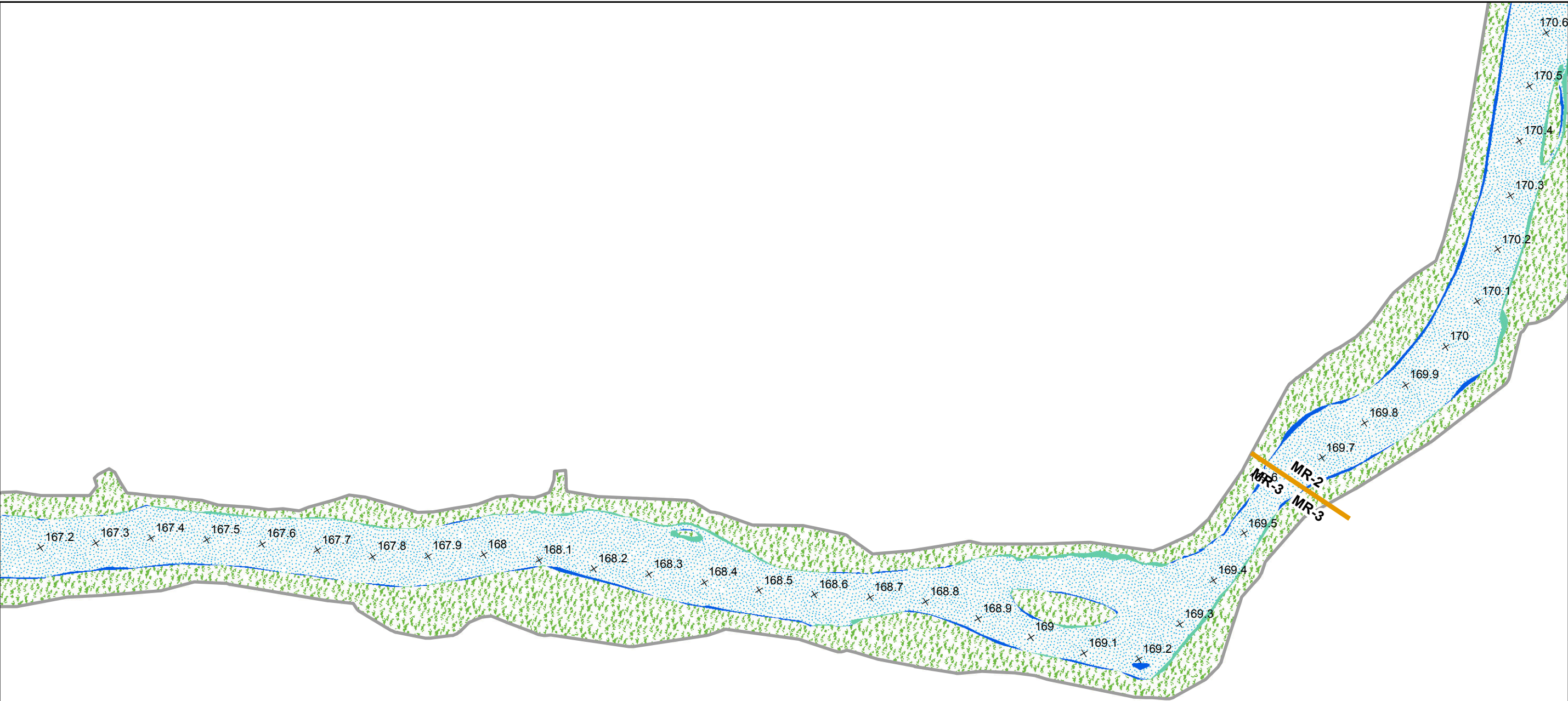
0 1,000 2,000 Feet 1 inch = 1,000 feet
See index page for legend and additional data information.

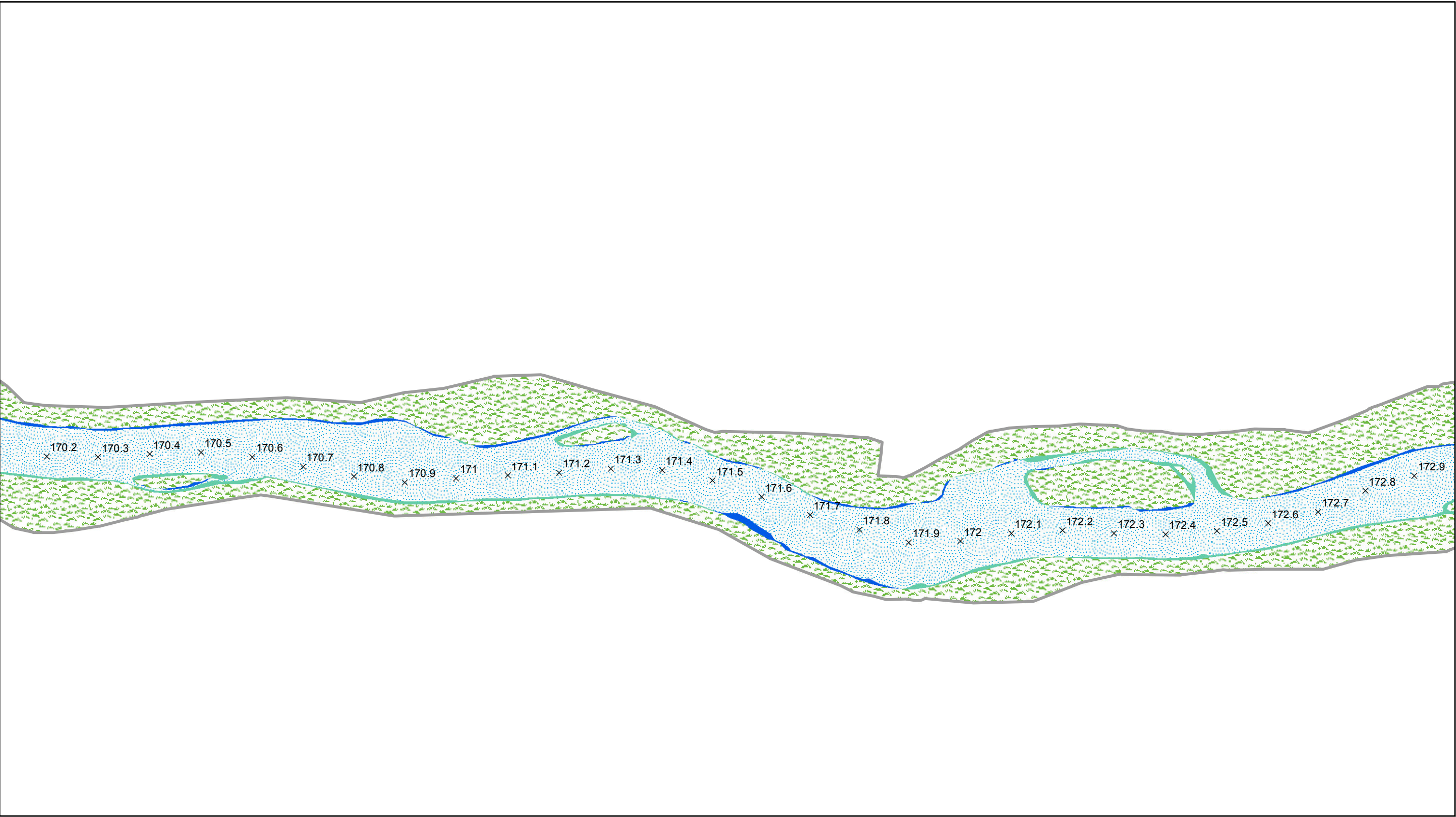
Sheet 26 of 34

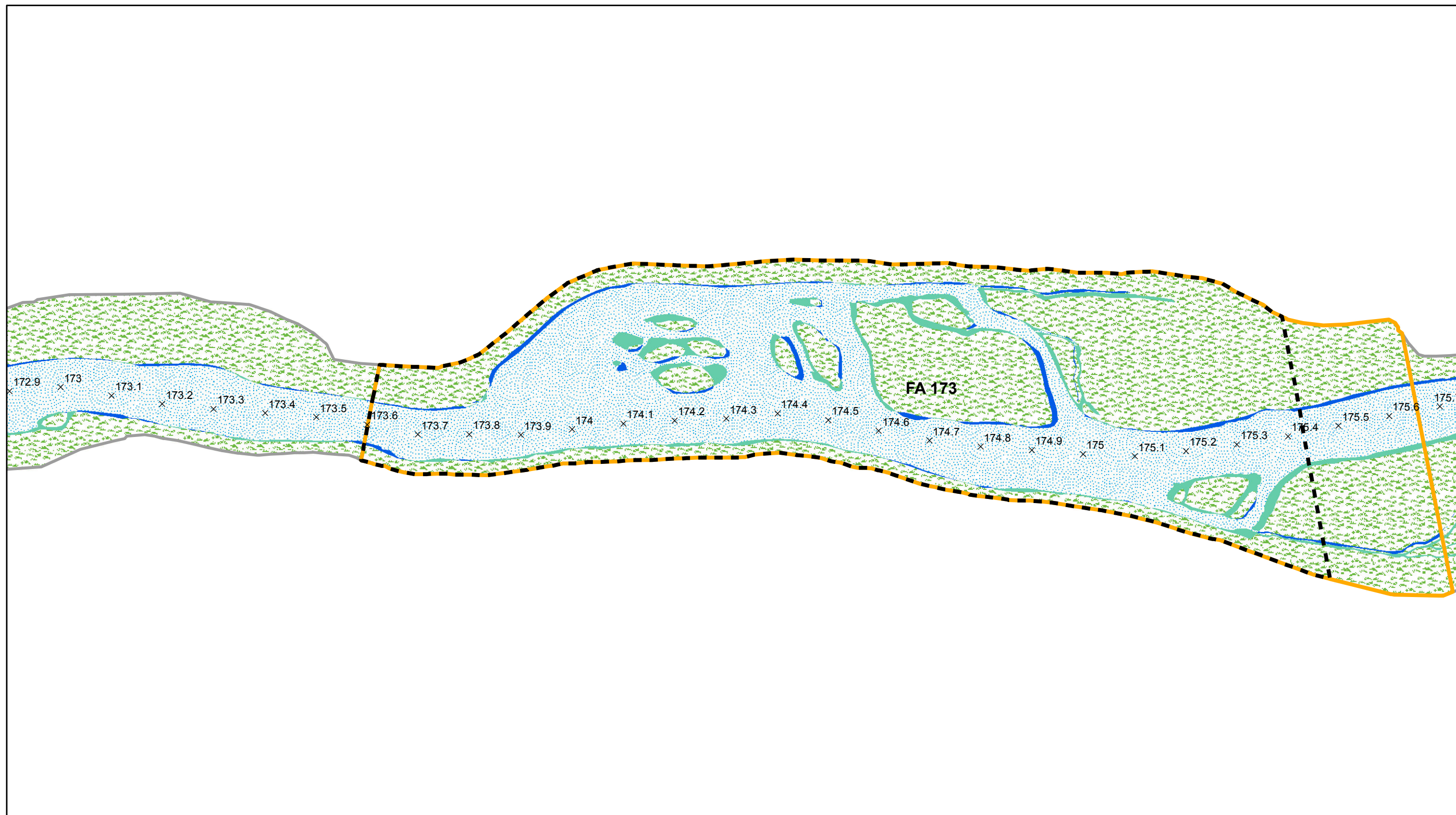
**MIDDLE SUSITNA RIVER SEGMENT
1950s to 1983 TURNOVER ANALYSIS**

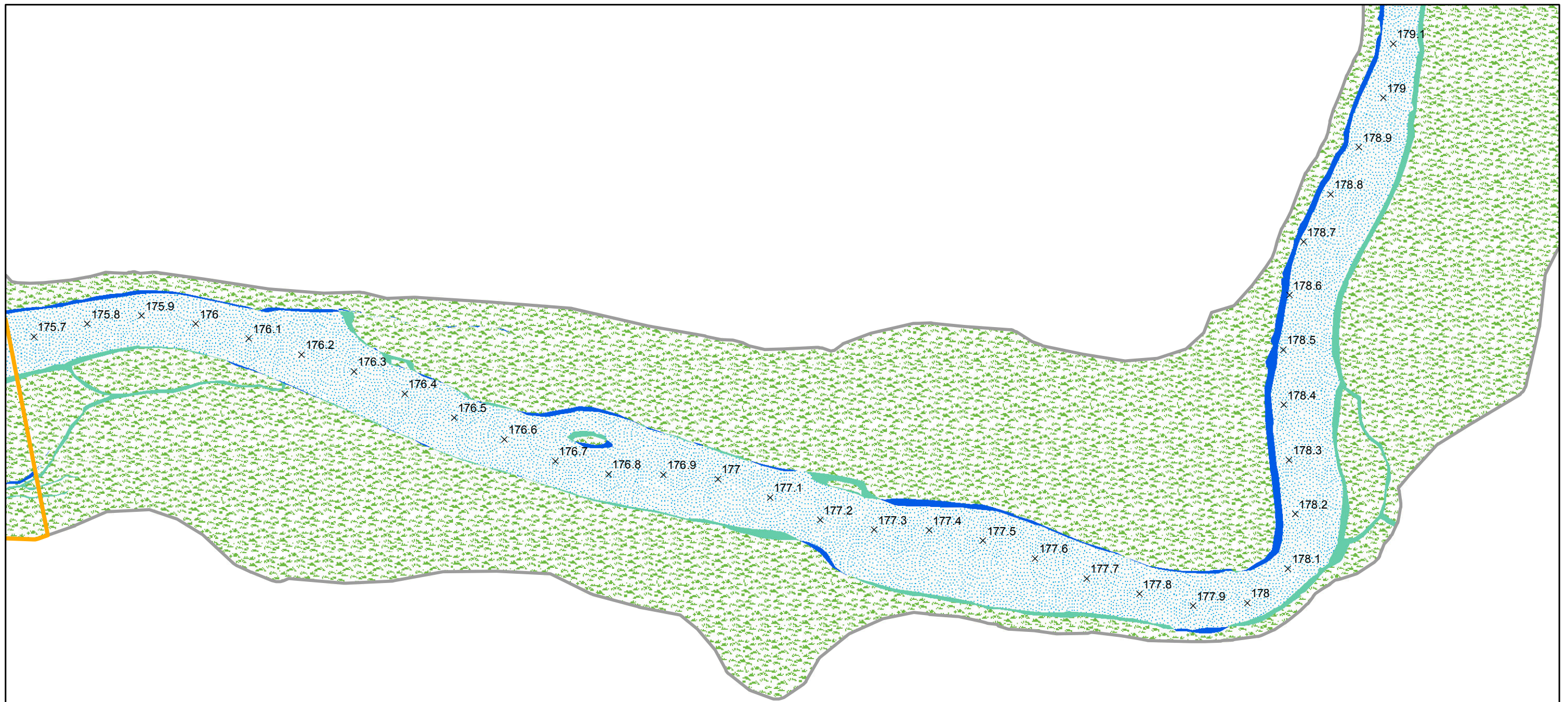


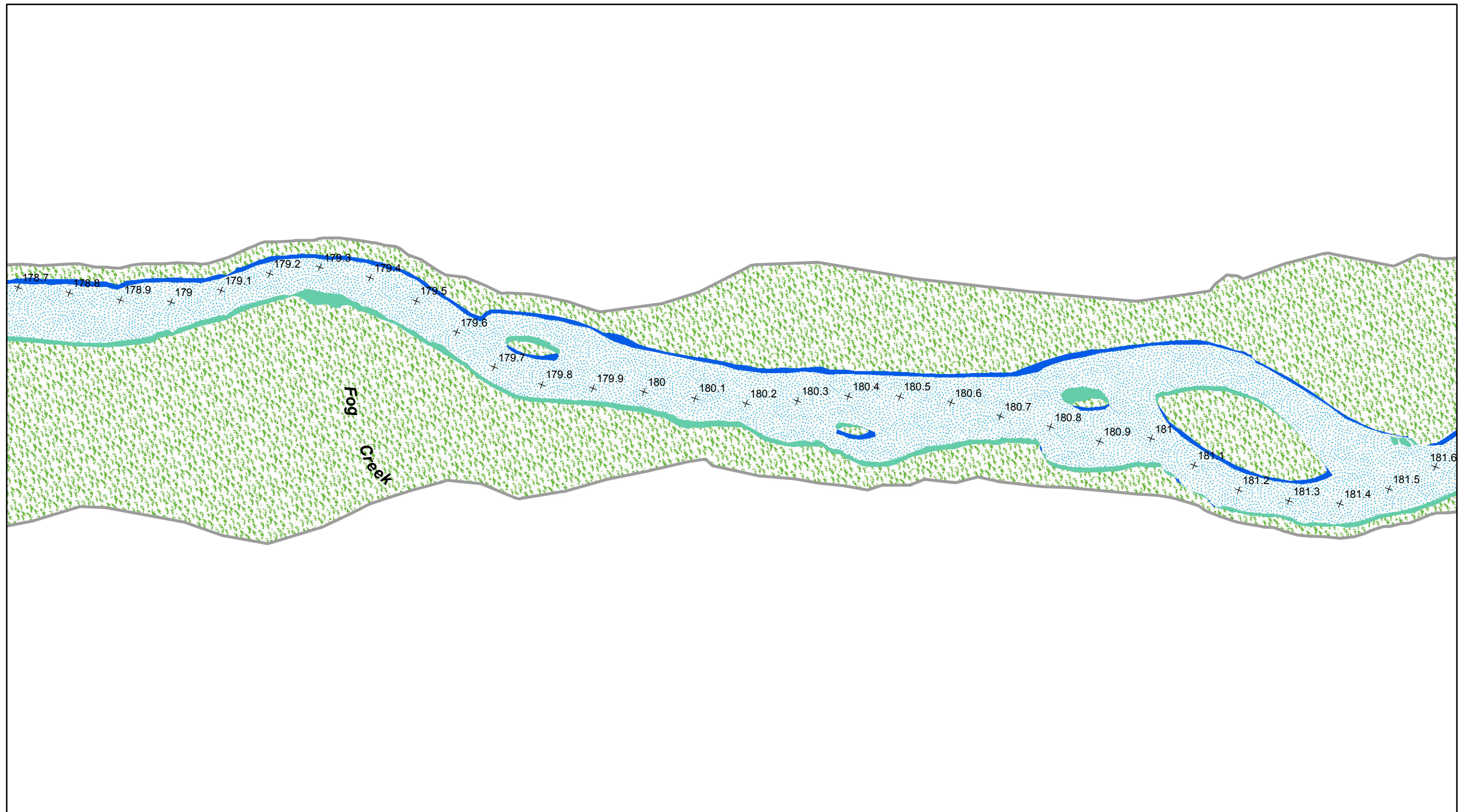












0 1,000 2,000 Feet 1 inch = 1,000 feet
See index page for legend and additional data information.

Sheet 32 of 34

MIDDLE SUSITNA RIVER SEGMENT
1950s to 1983 TURNOVER ANALYSIS



