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

SUSITNA-WATANA HYDRO
Clean, reliable energy for the next 100 years.

Prepared by

Tetra Tech Inc.

September 2014

150°W
149°30'W
149°W
148°30'W
62°50'N
62°40'N
62°30'N

Indian River
Portage Creek
Devil Creek
Tsusena Creek
Susitna River
Chulitna River
Talkeetna River

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Sheet 2
Sheet 3
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Sheet 34

ALASKA ENERGY AUTHORITY

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

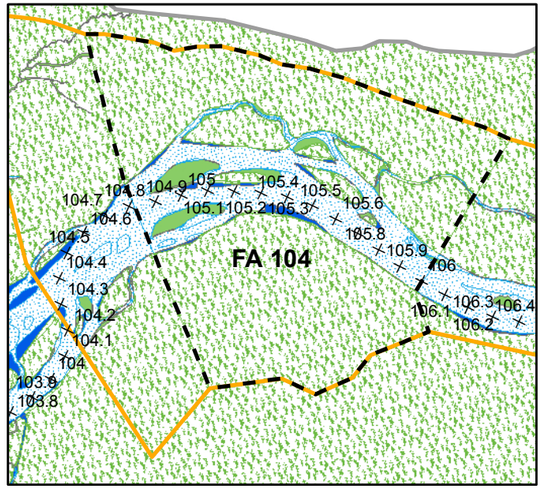
Legend for Individual Mapbook Pages

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

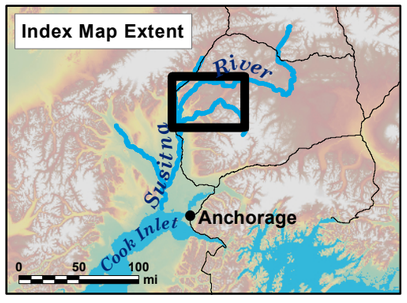
Turnover 1950s to 1983

- 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

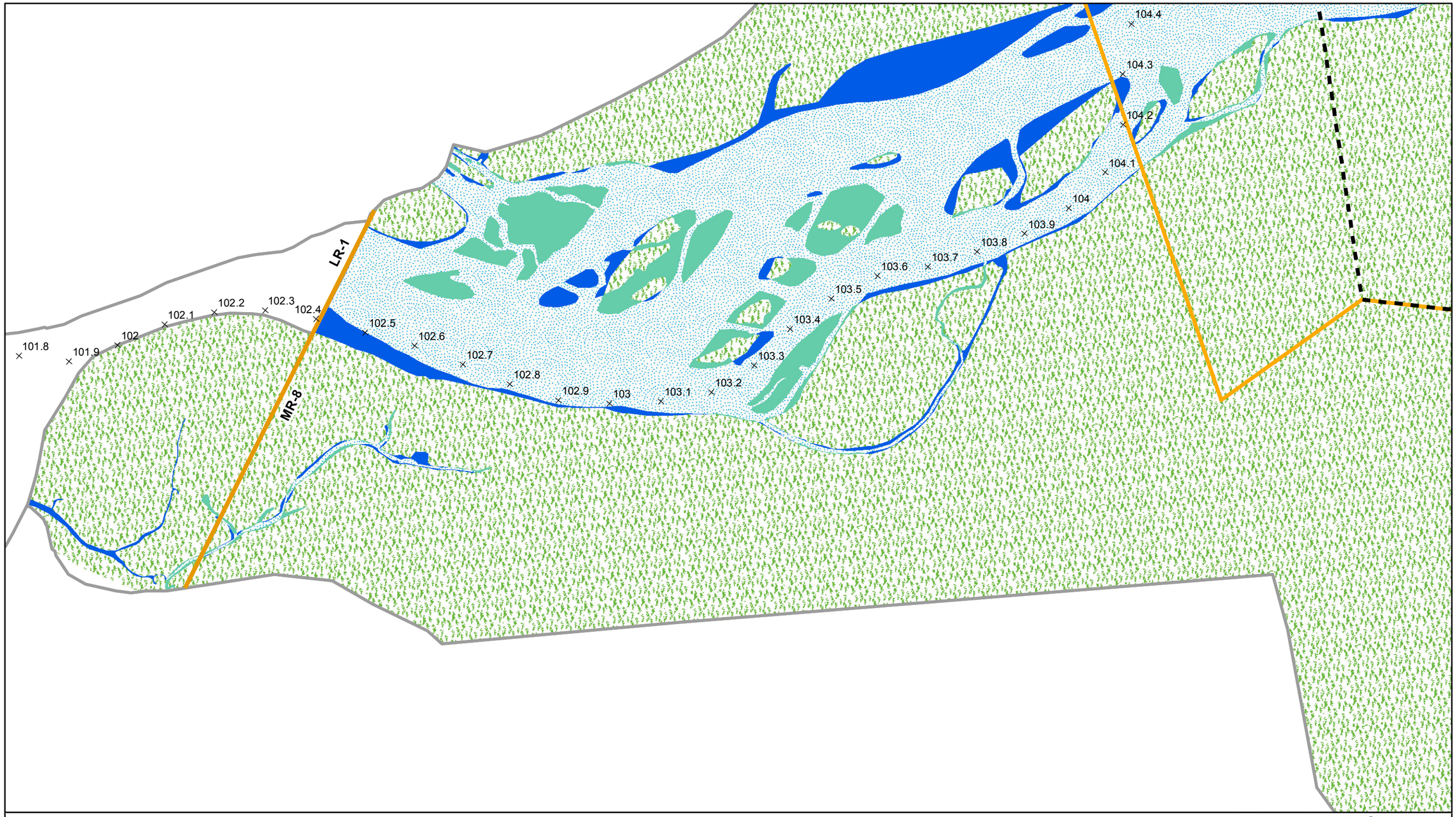


Index Map Extent



0 5 10 mi

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



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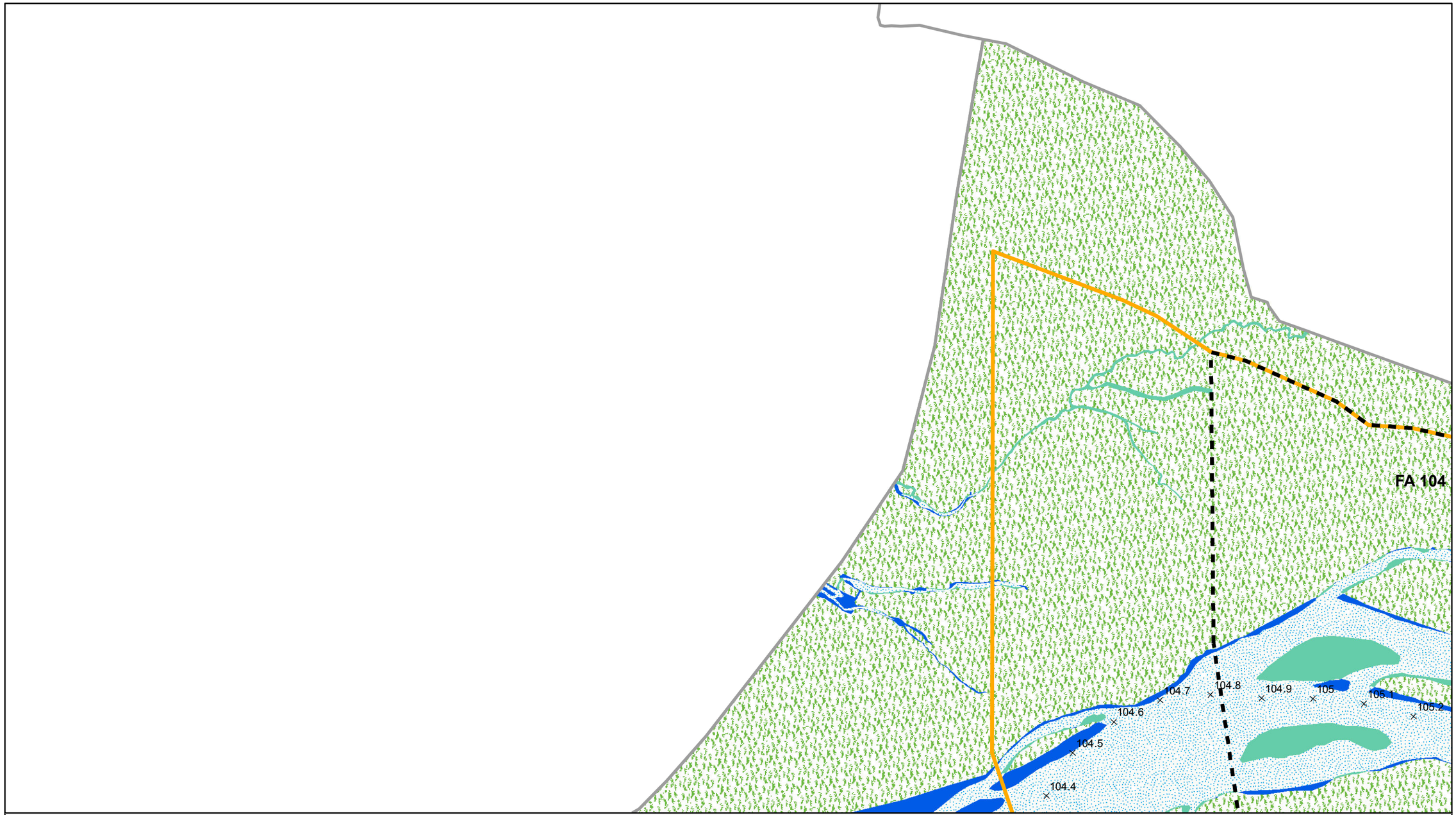
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See index page for legend and additional data information.

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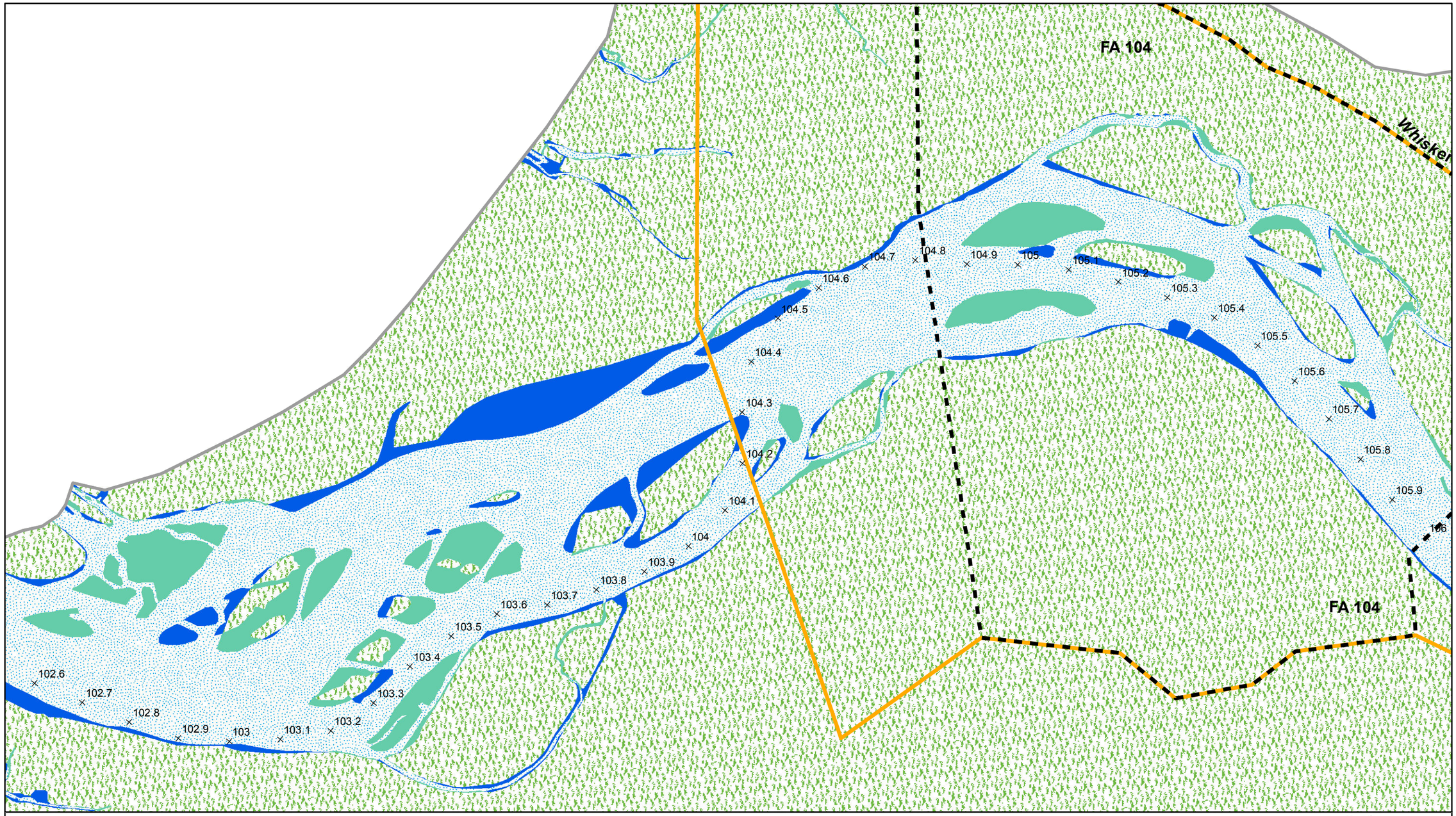
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See index page for legend and additional data information.

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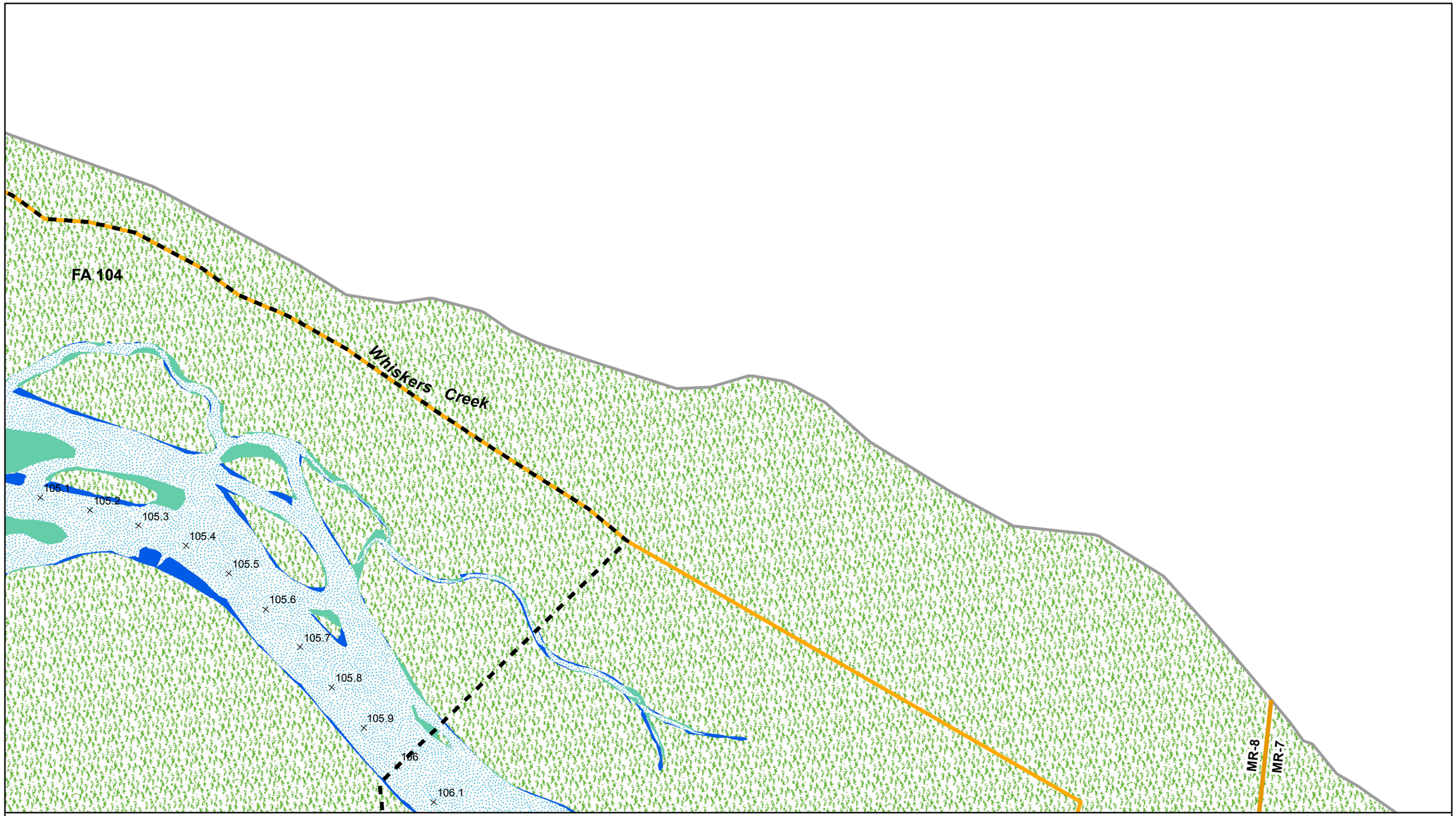
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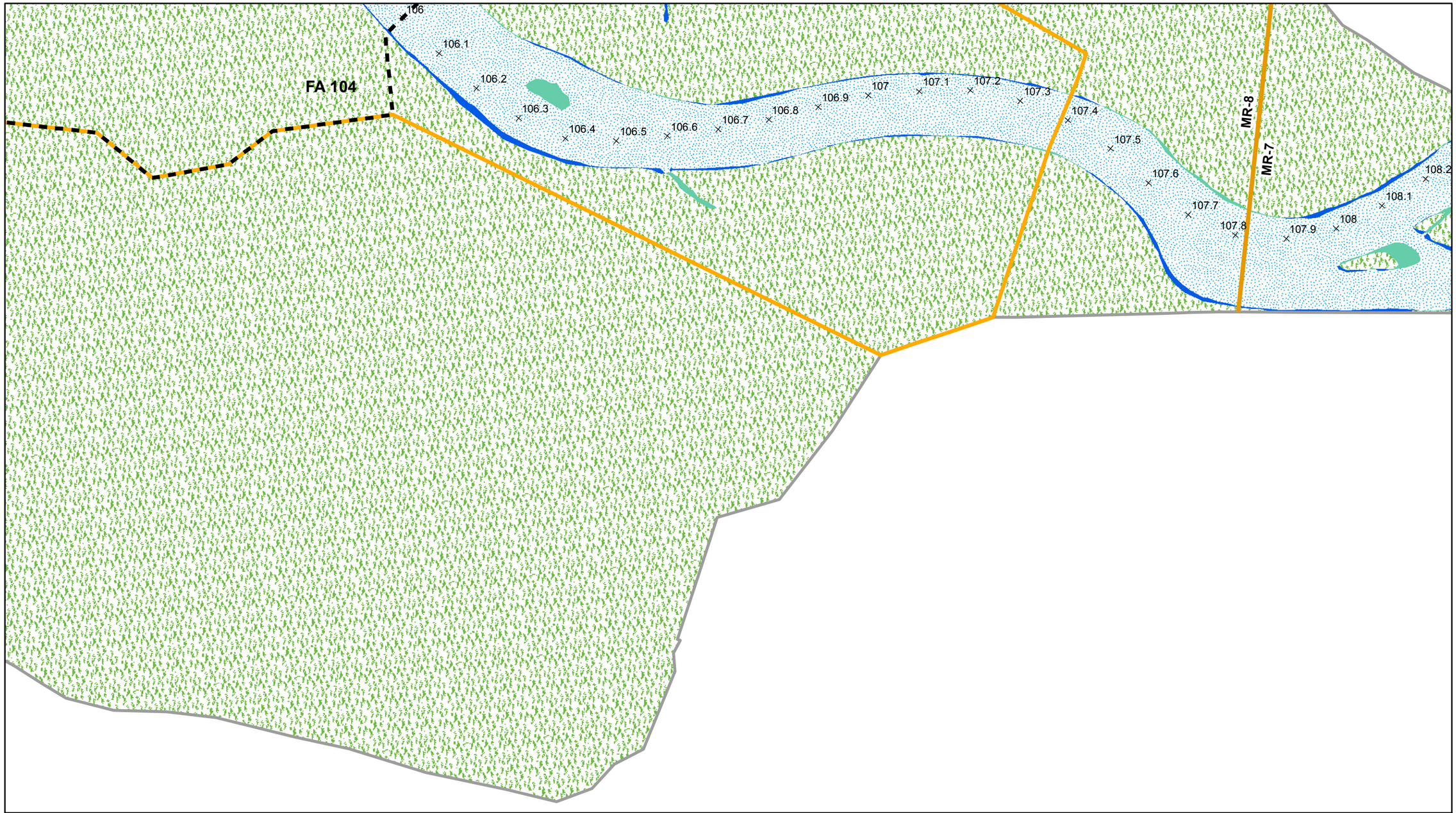
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See index page for legend and additional data information.

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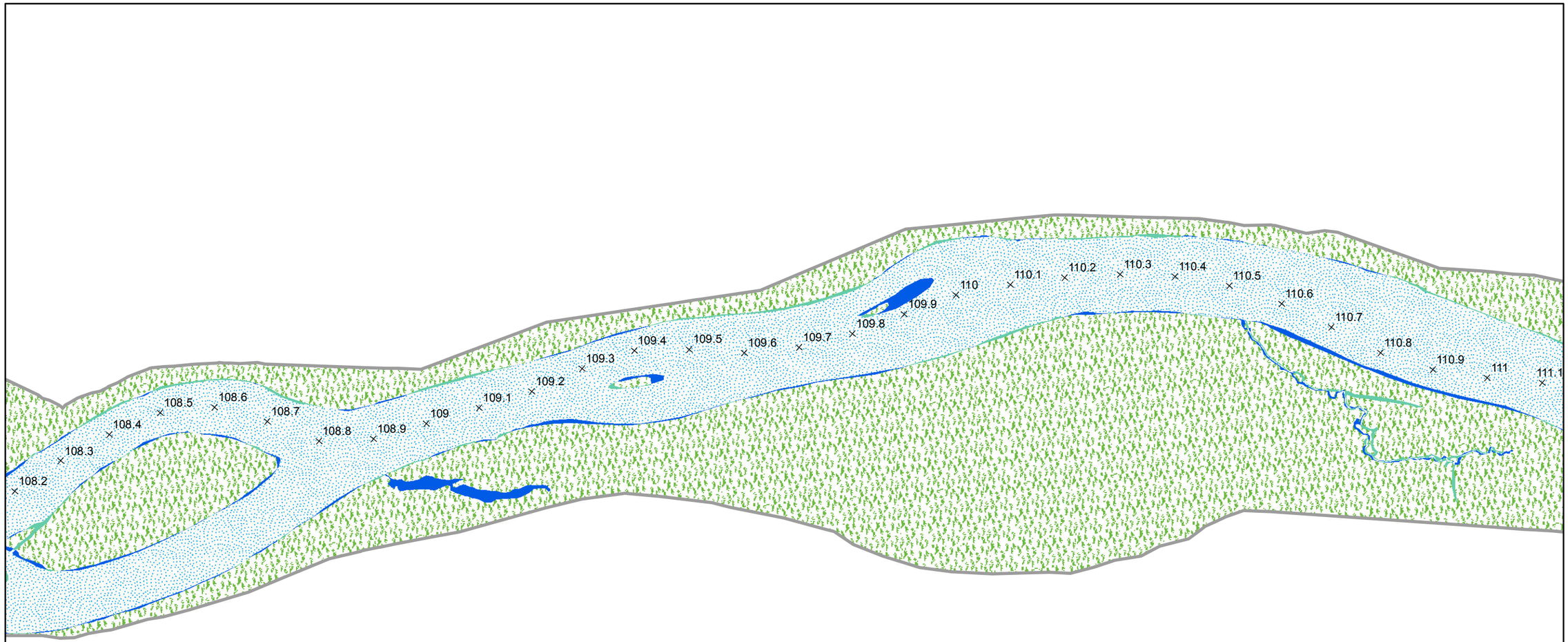
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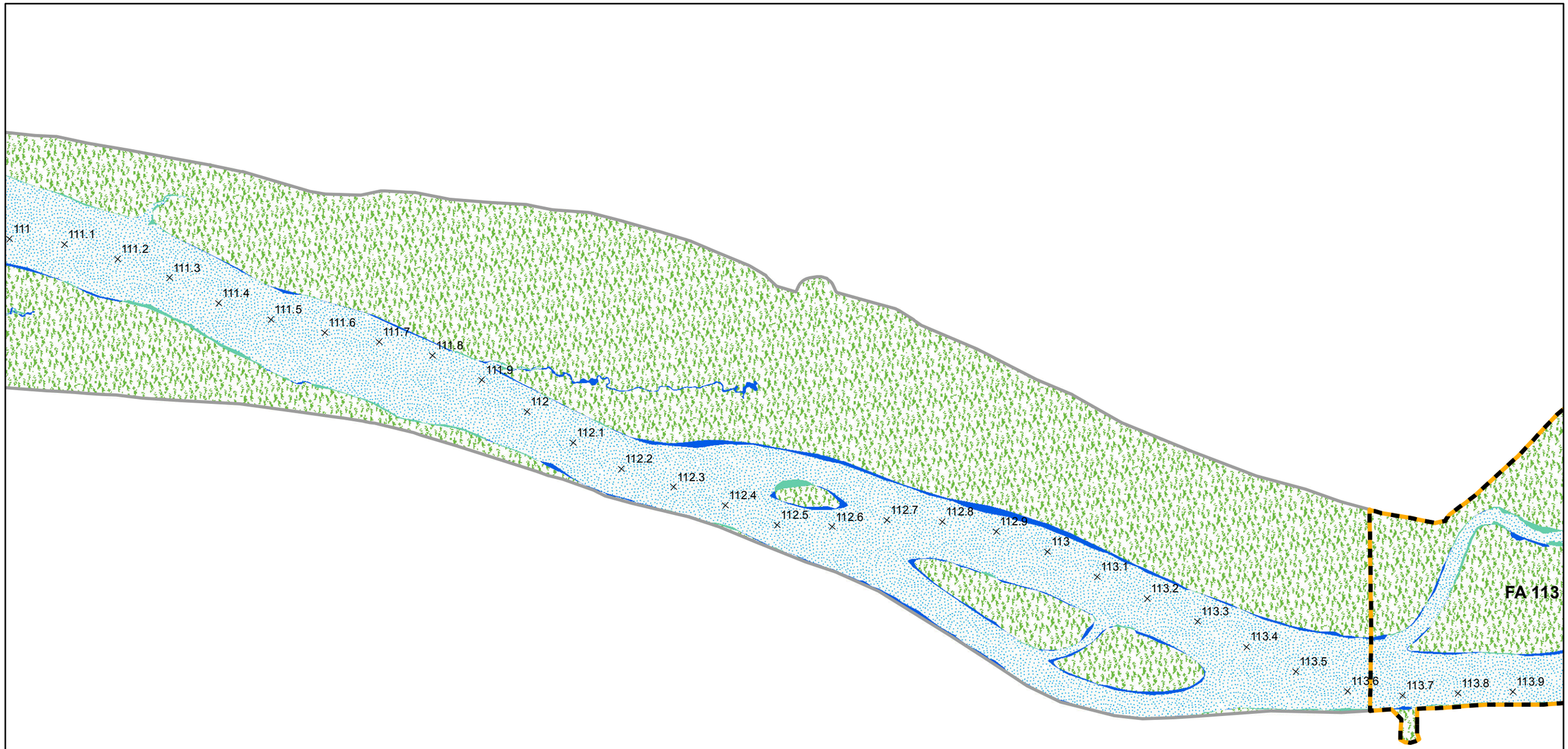
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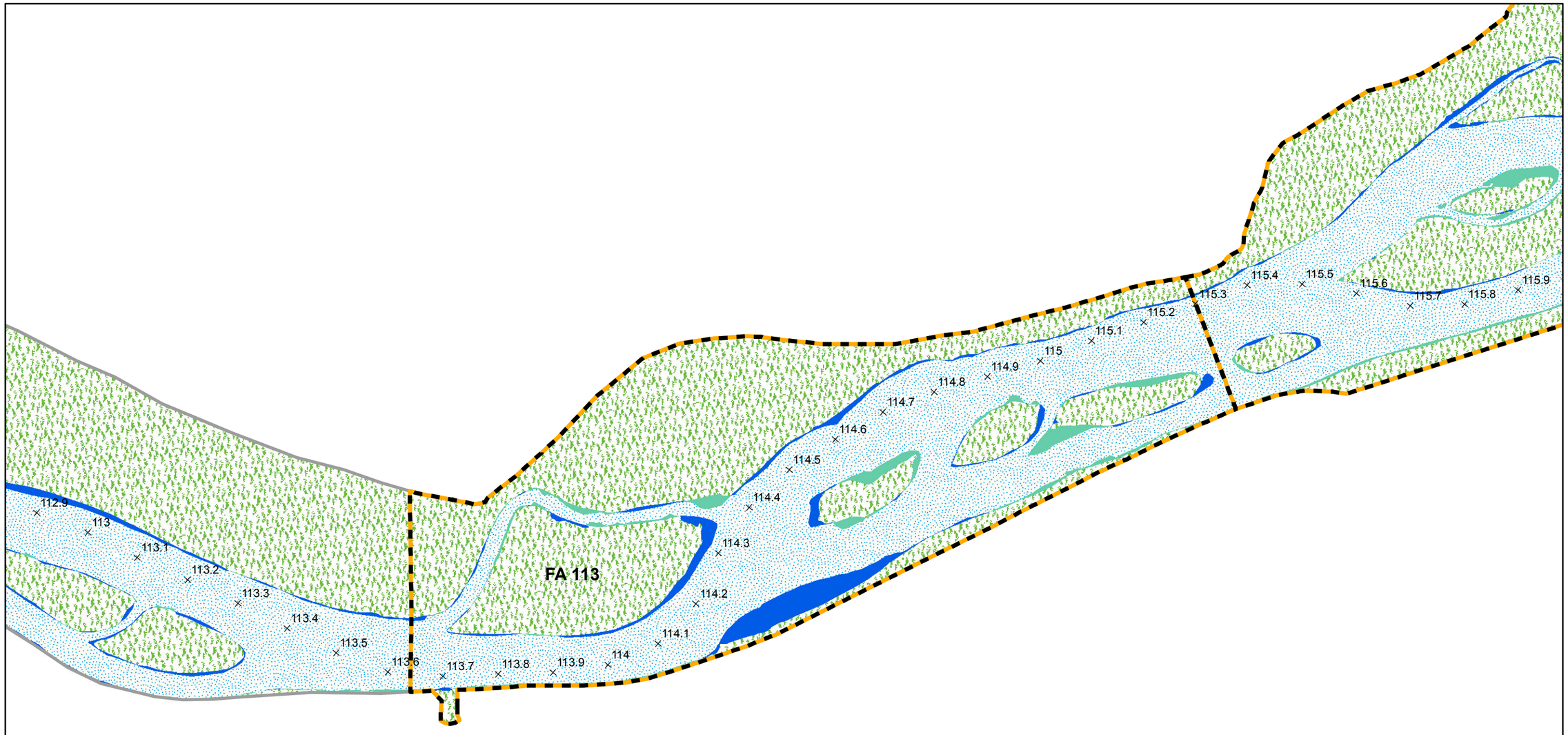
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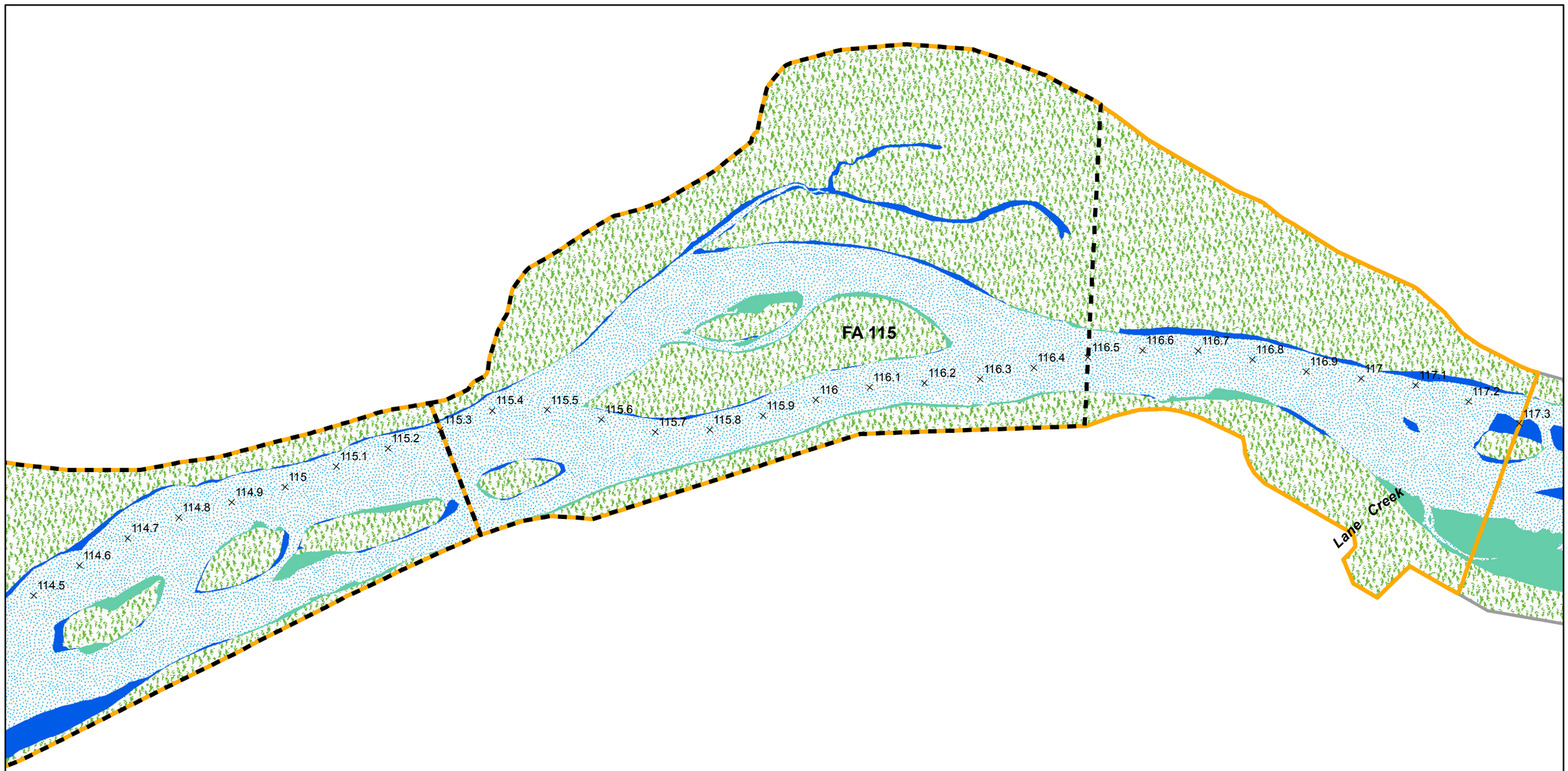
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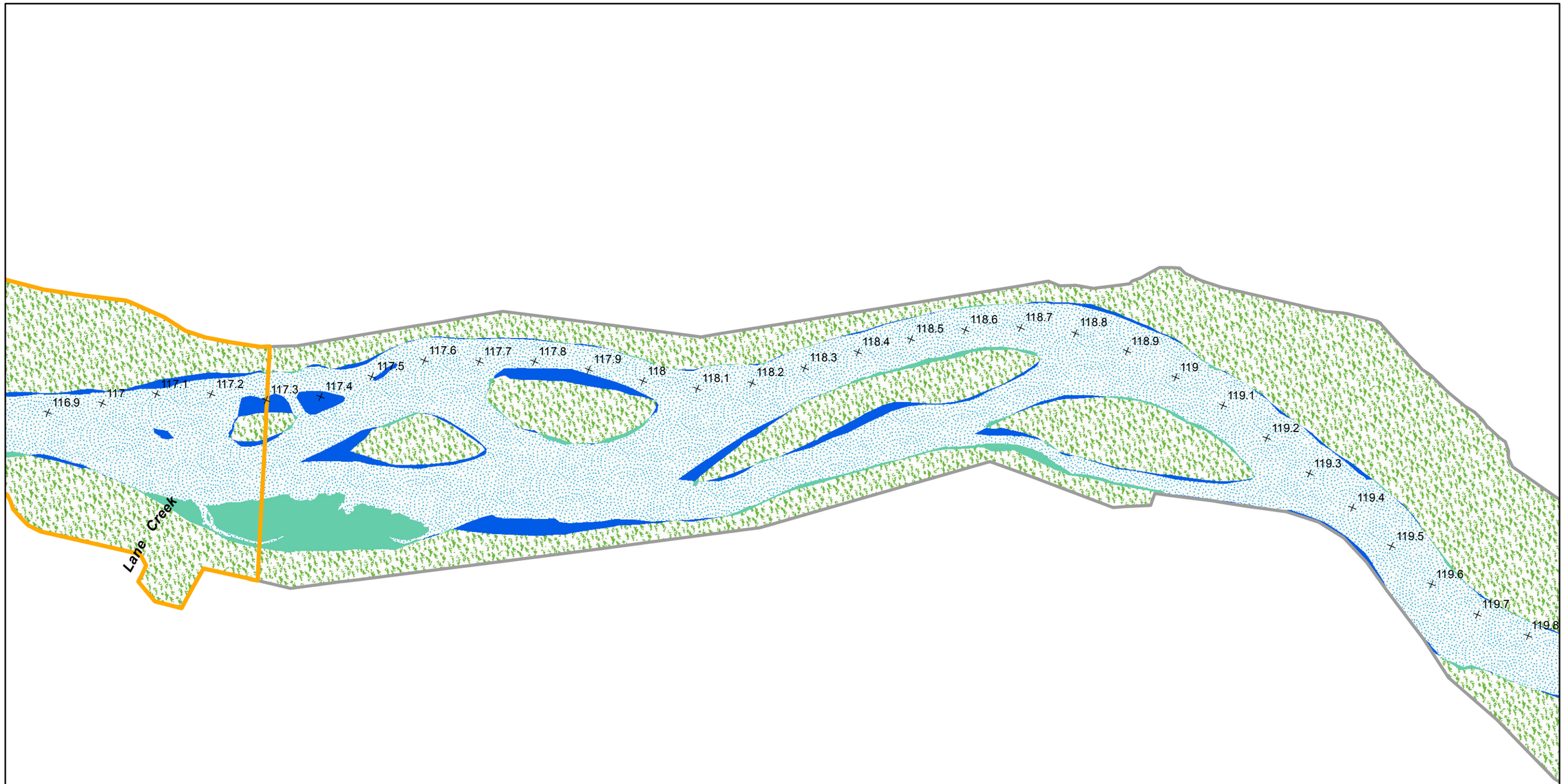
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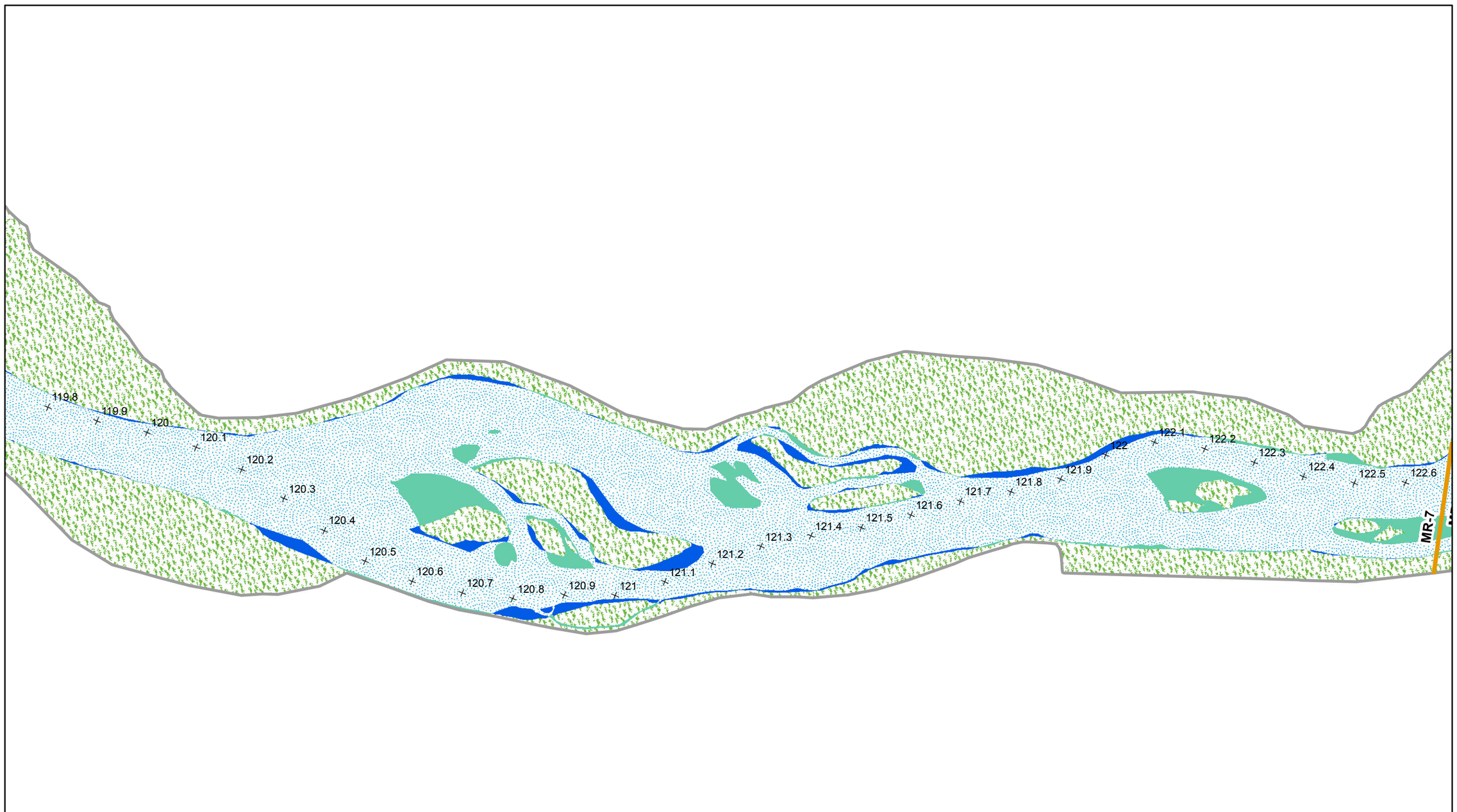
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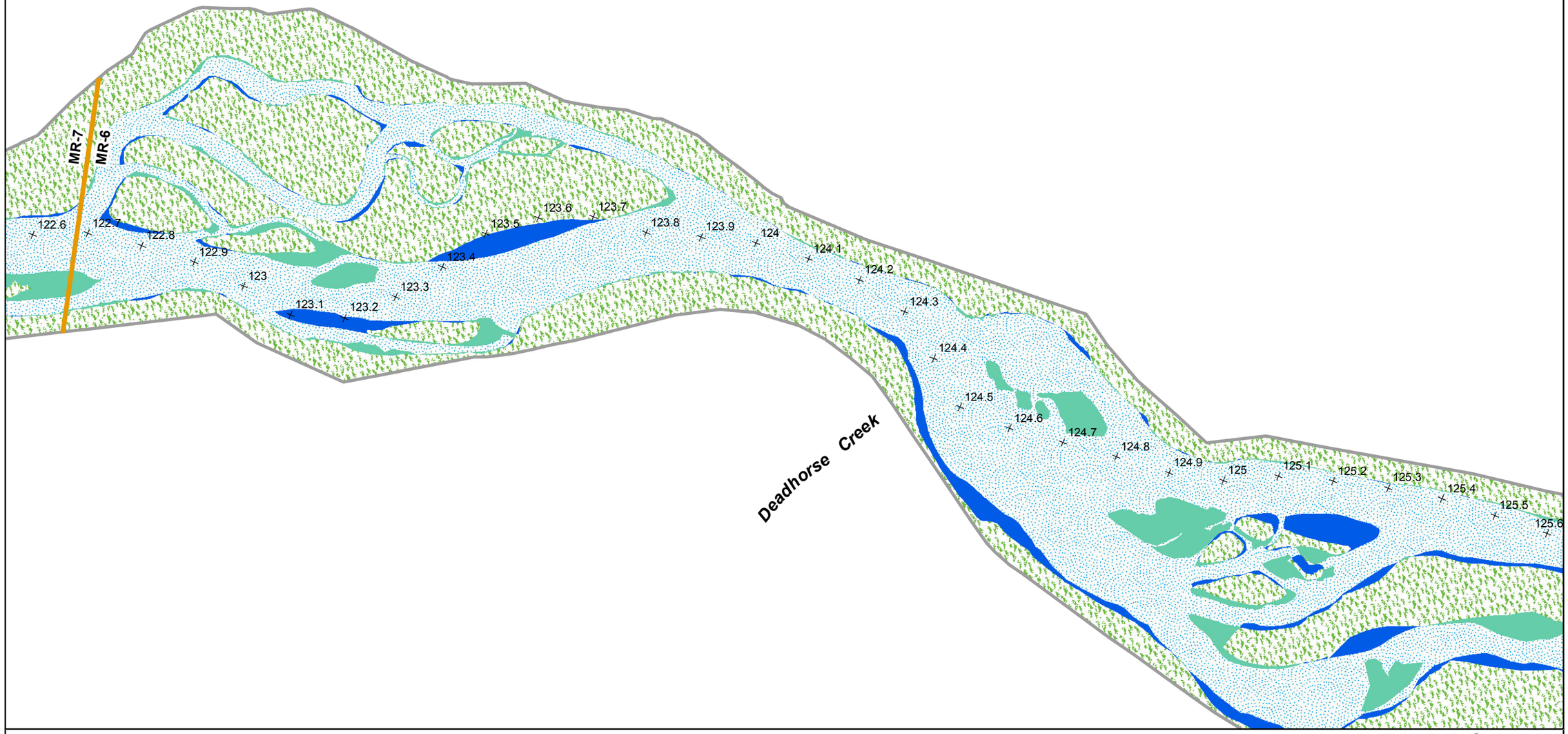
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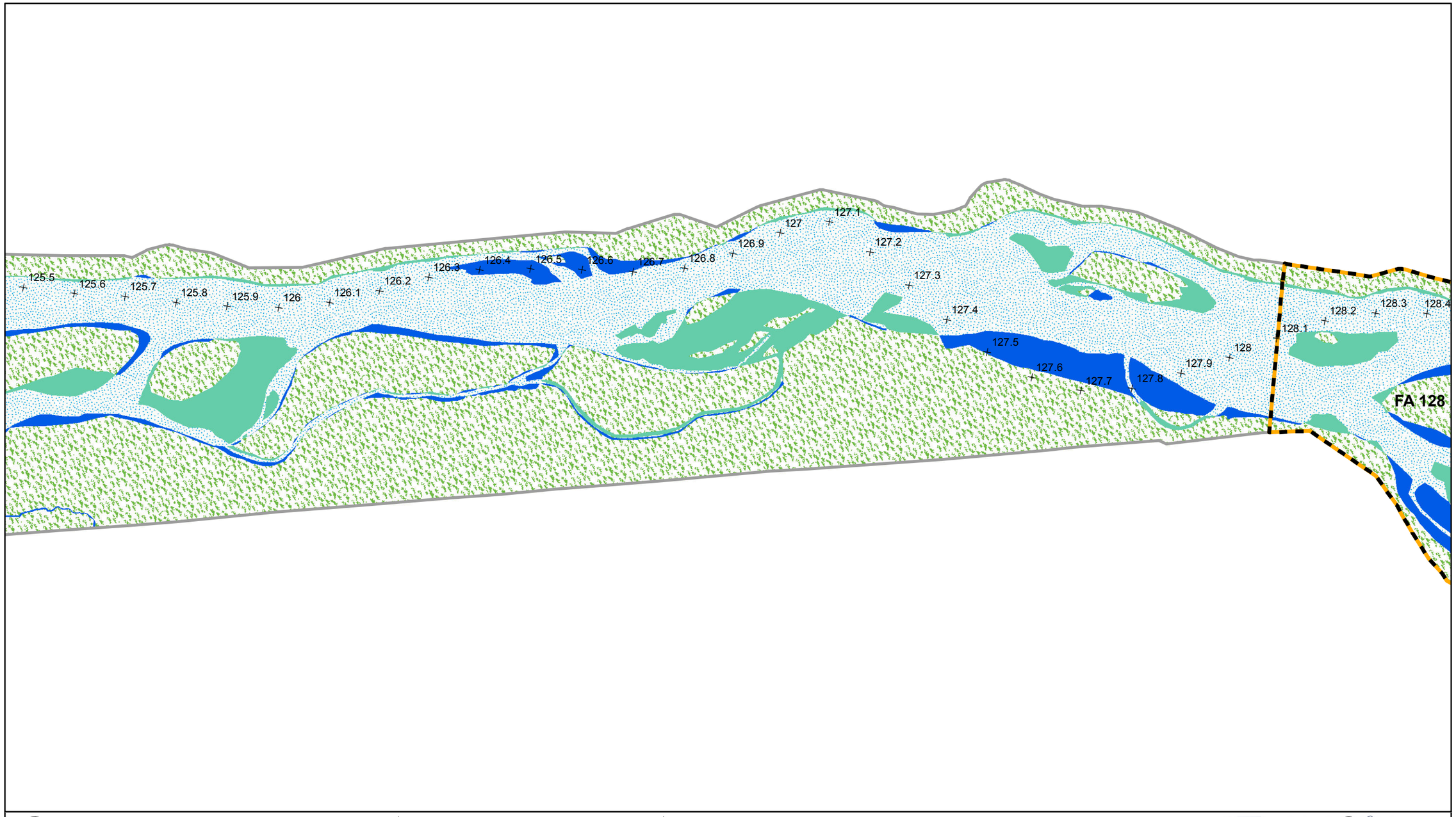
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1 inch = 1,000 feet

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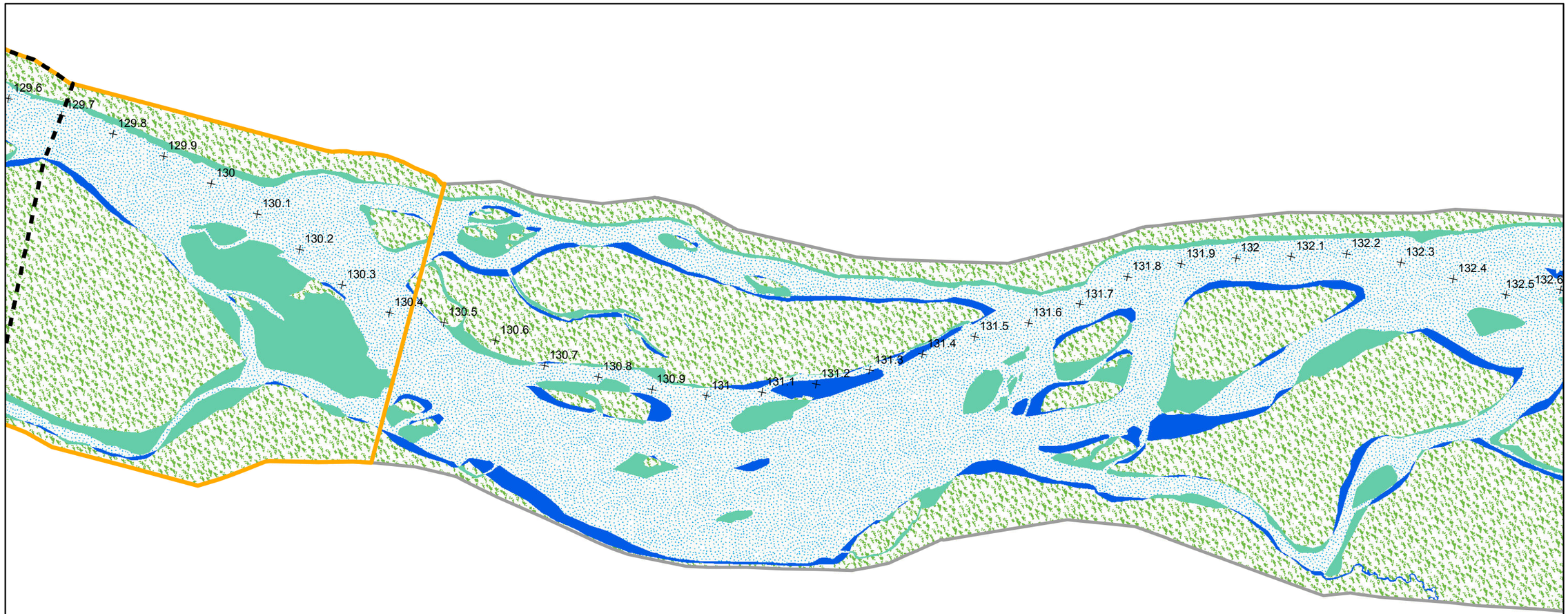
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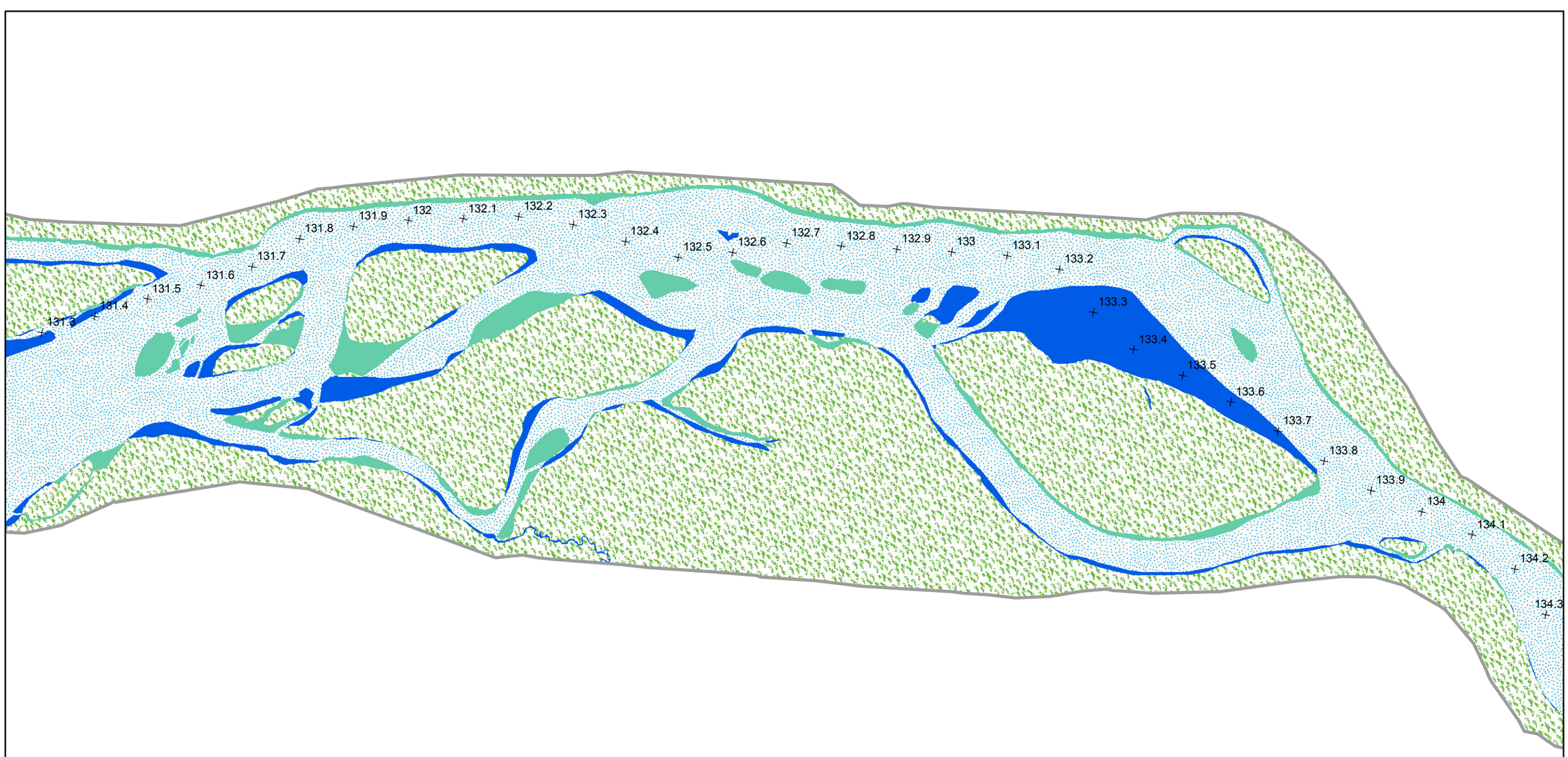
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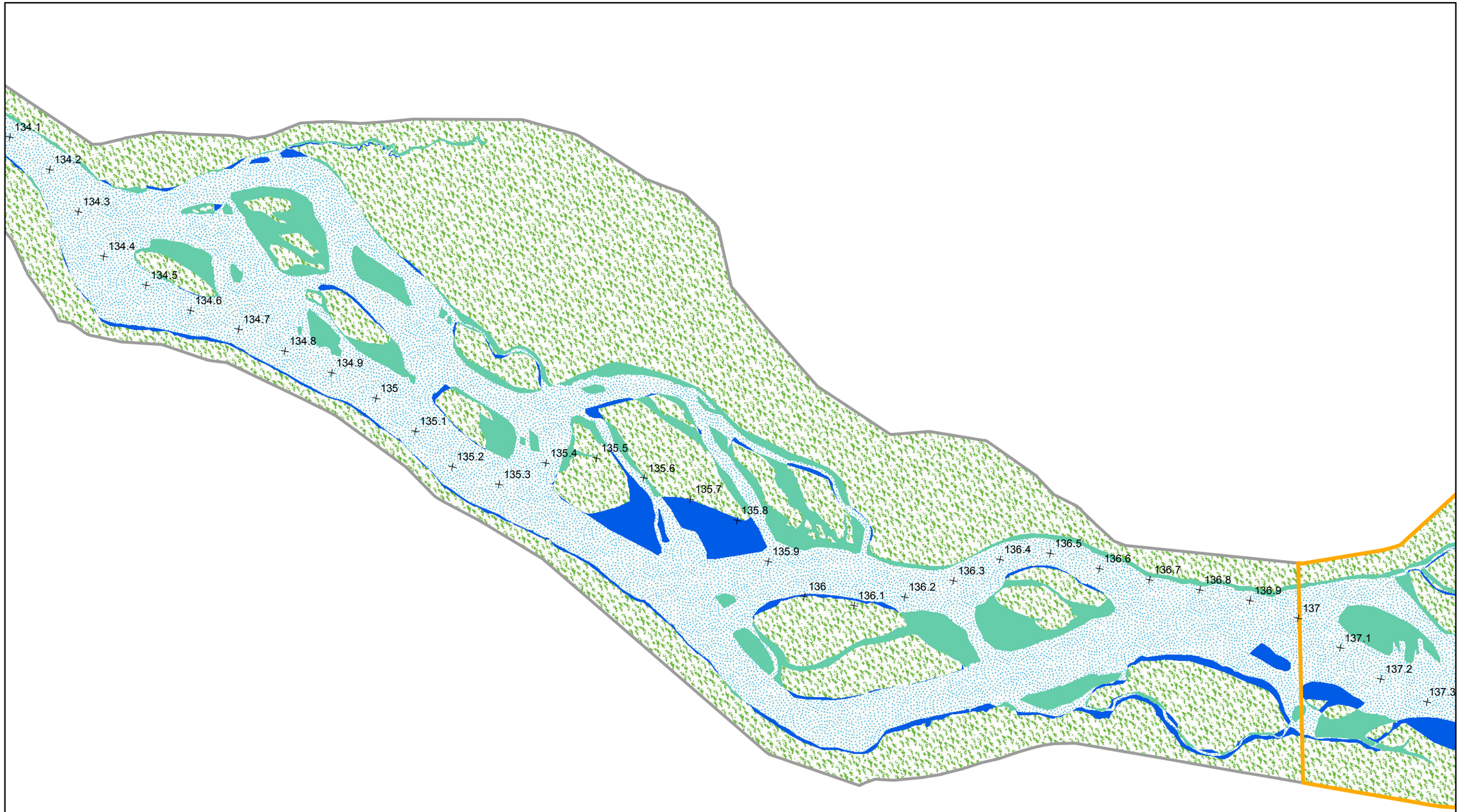
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MIDDLE SUSITNA RIVER SEGMENT
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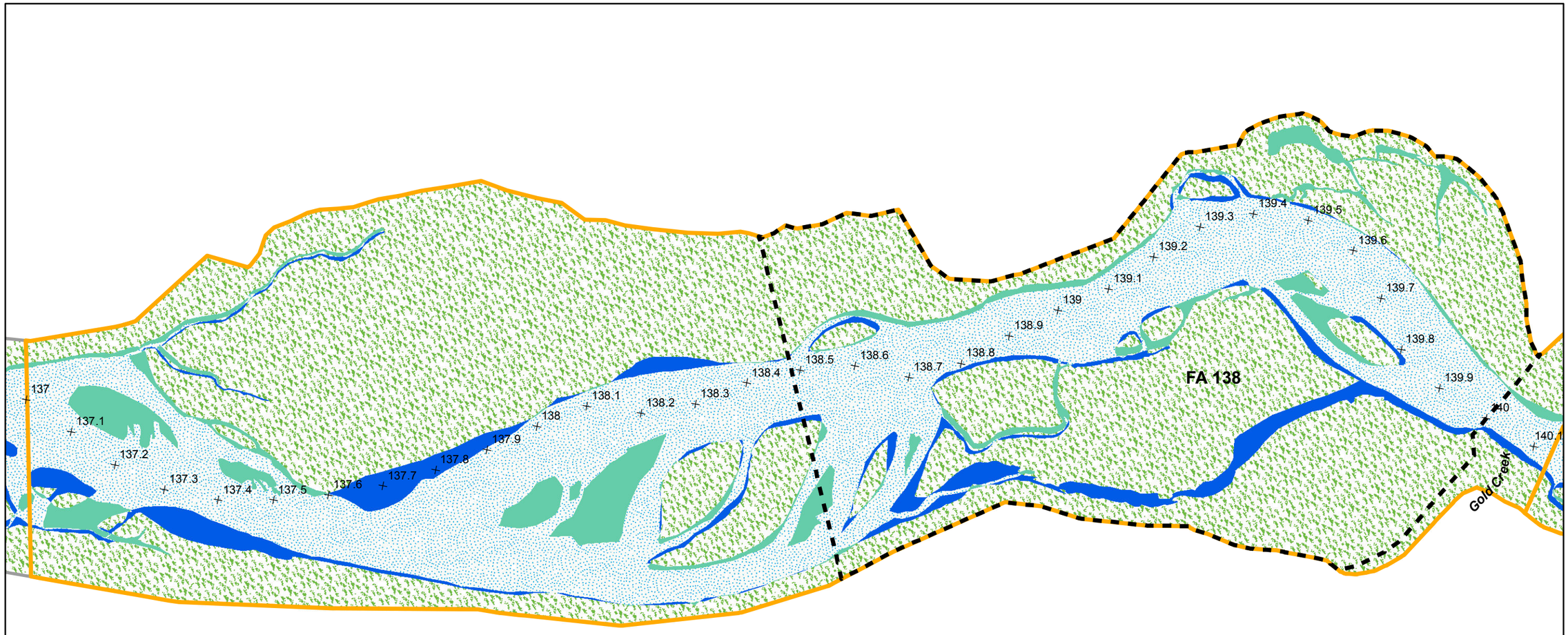
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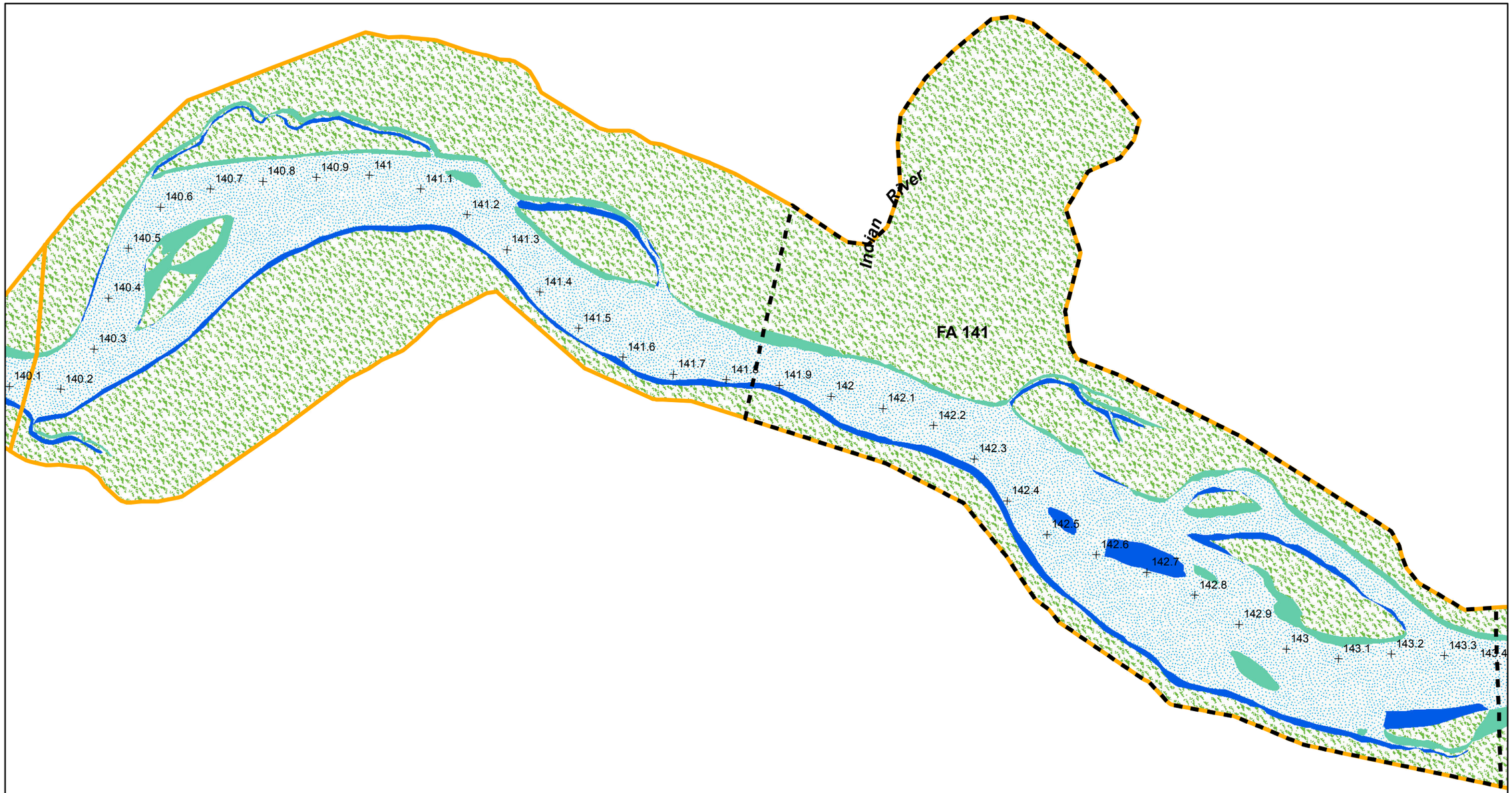
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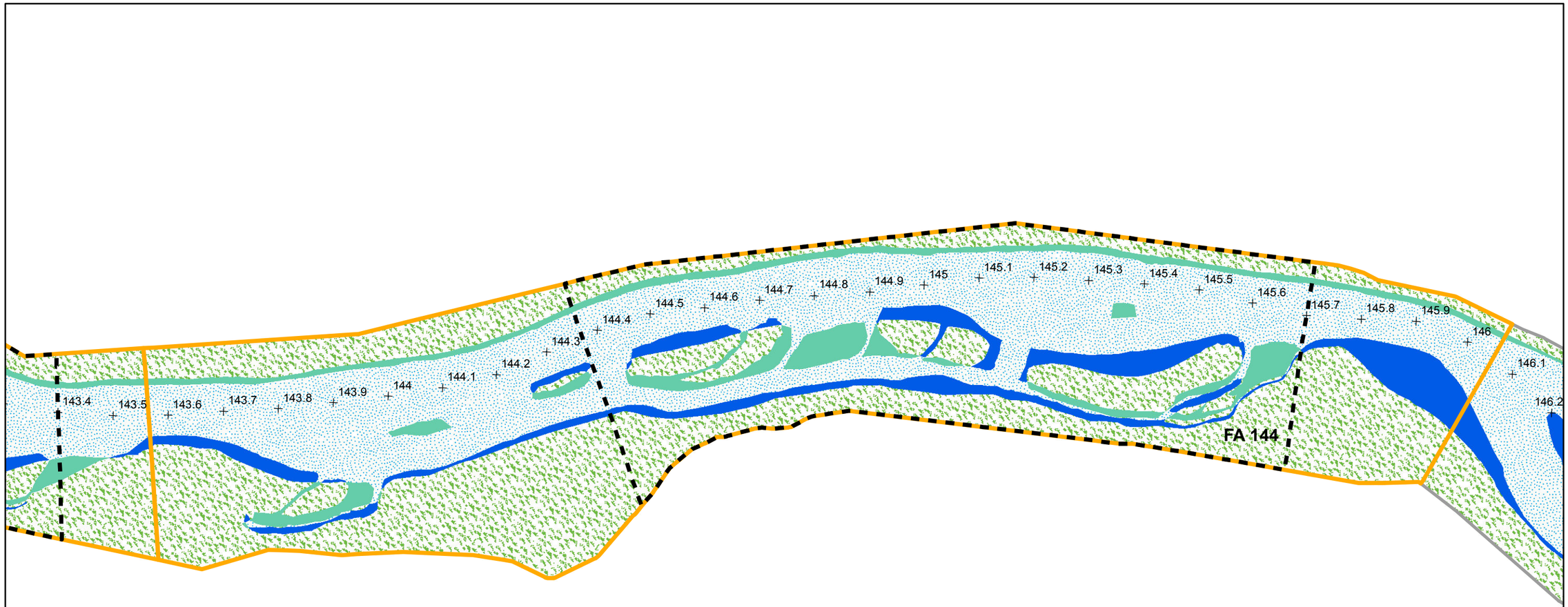
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MIDDLE SUSITNA RIVER SEGMENT
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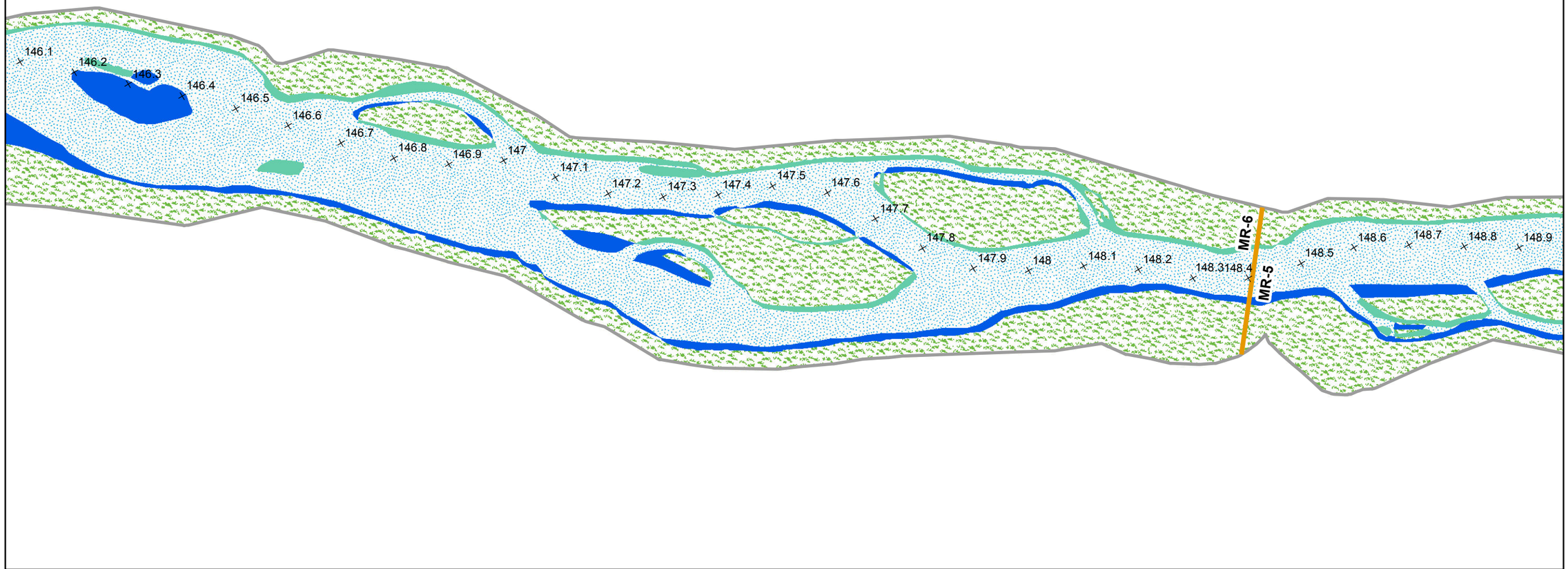
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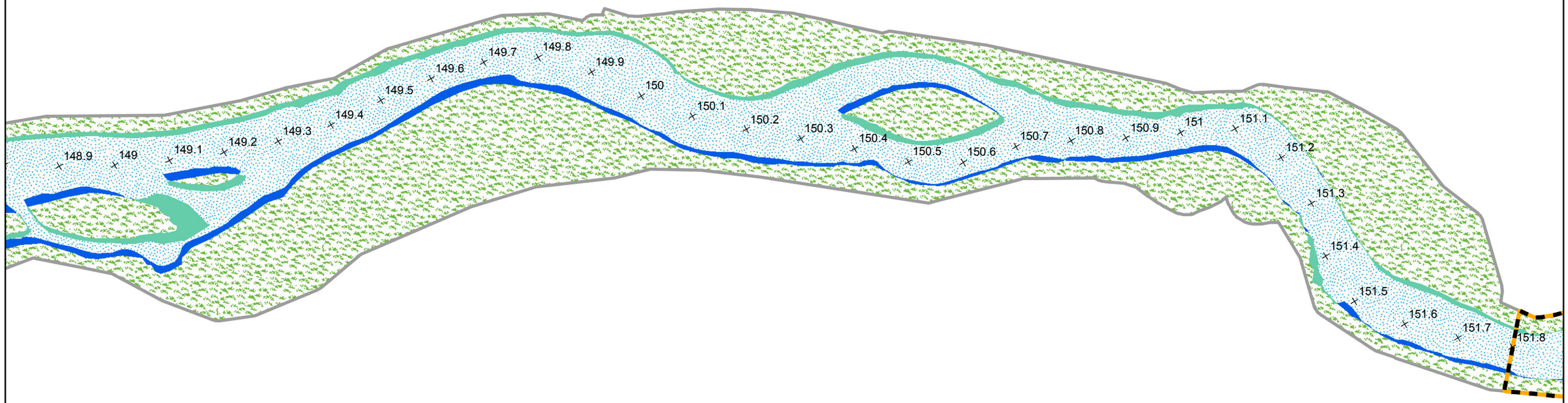
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1 inch = 1,000 feet

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Portage Creek

FA 151

151.8 151.9 152 152.1 152.2 152.3 152.4 152.5 152.6 152.7 152.8 152.9 153 153.1 153.2 153.3 153.4 153.5 153.6 153.7 153.8 154 154.1 154.2 154.3 154.4 154.5 154.6 154.7 154.8 154.9

MR-4 MR-5

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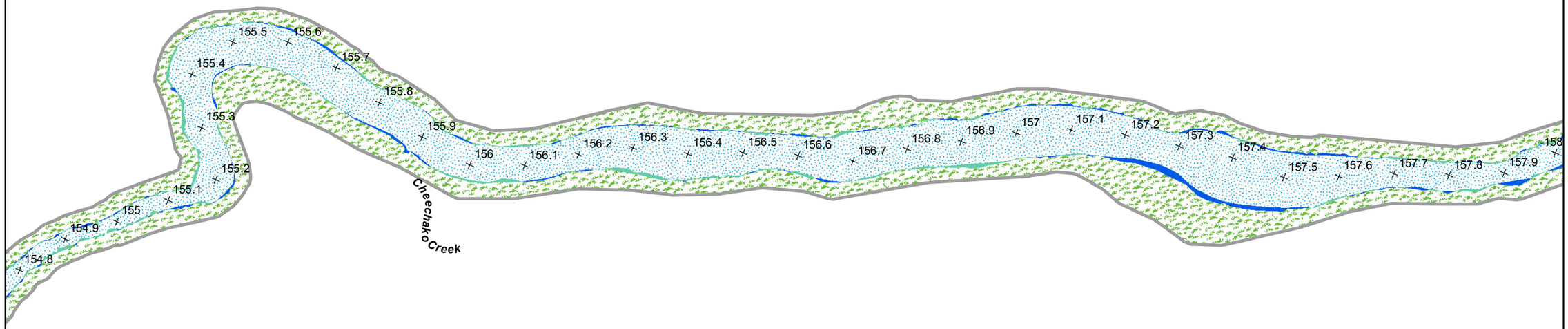
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See index page for legend and additional data information.

MIDDLE SUSITNA RIVER SEGMENT
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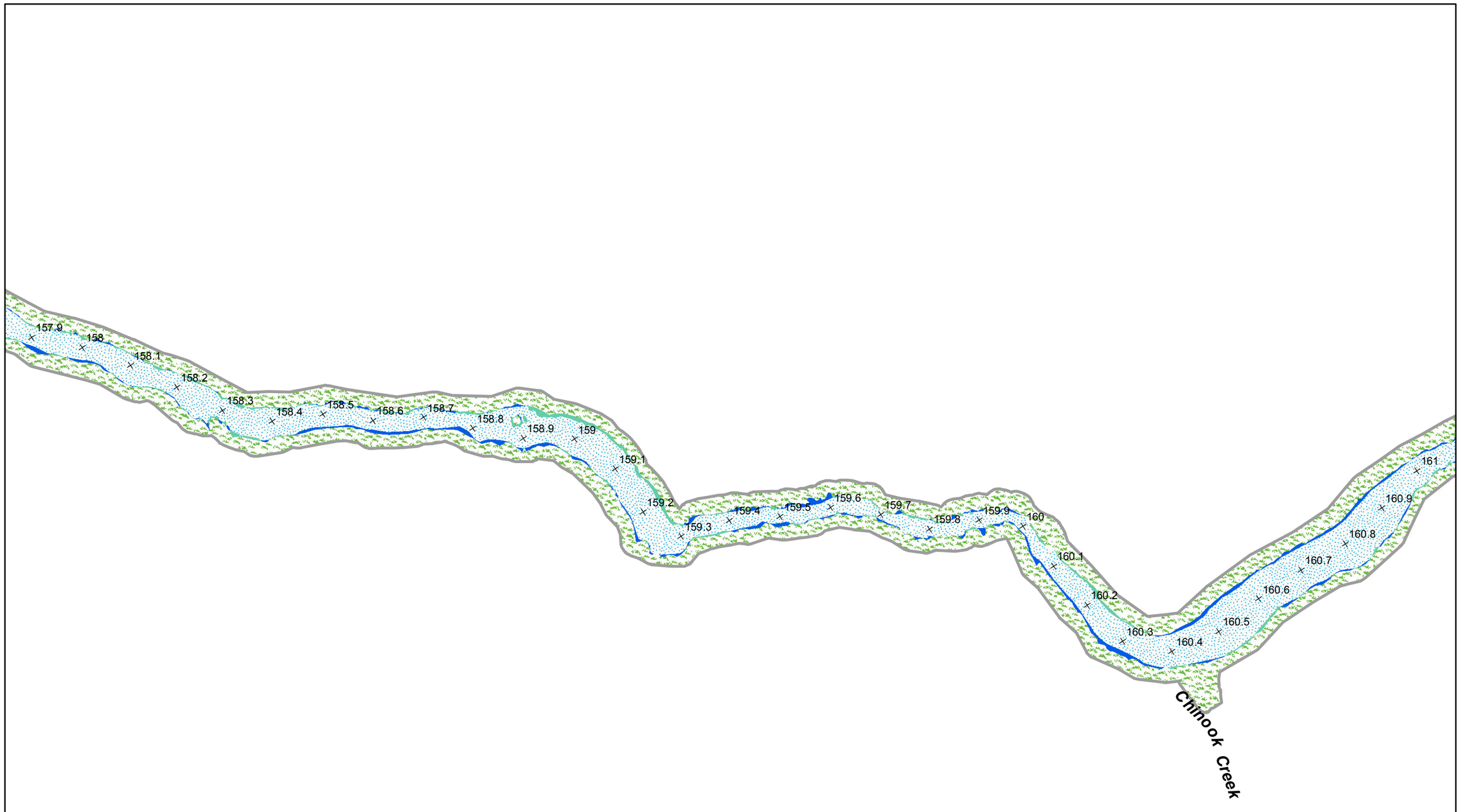
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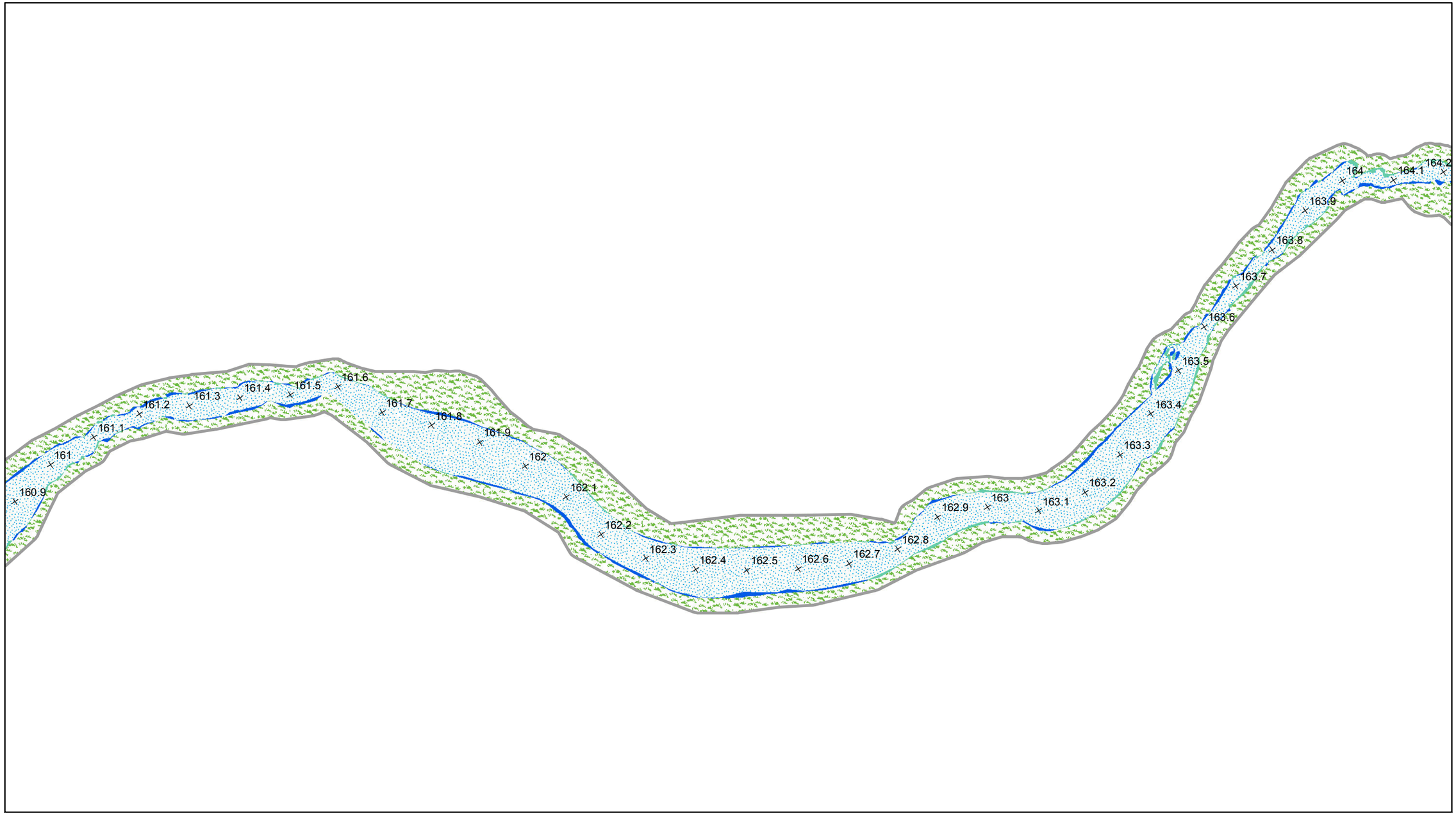
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See index page for legend and additional data information.

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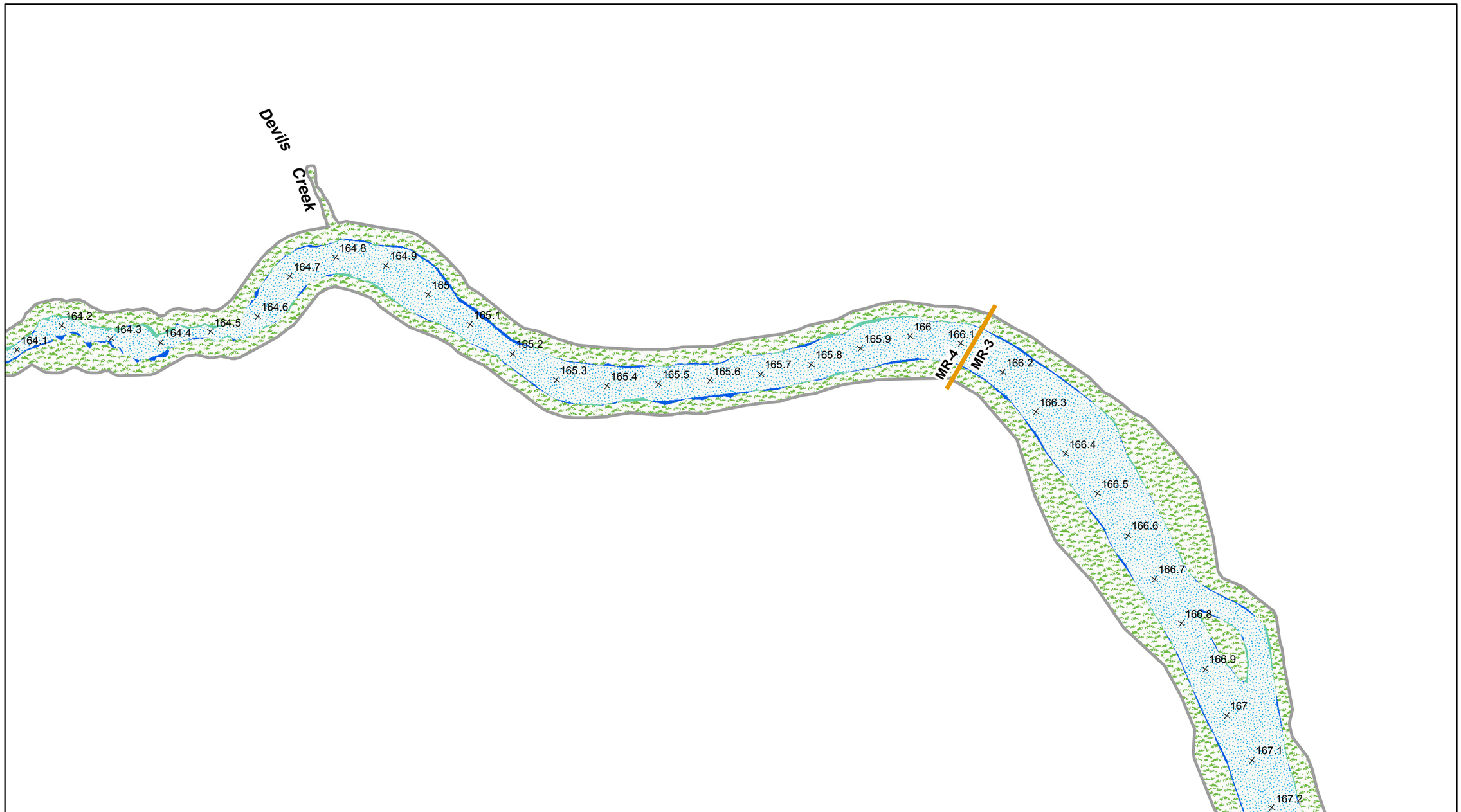
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See index page for legend and additional data information.

MIDDLE SUSITNA RIVER SEGMENT
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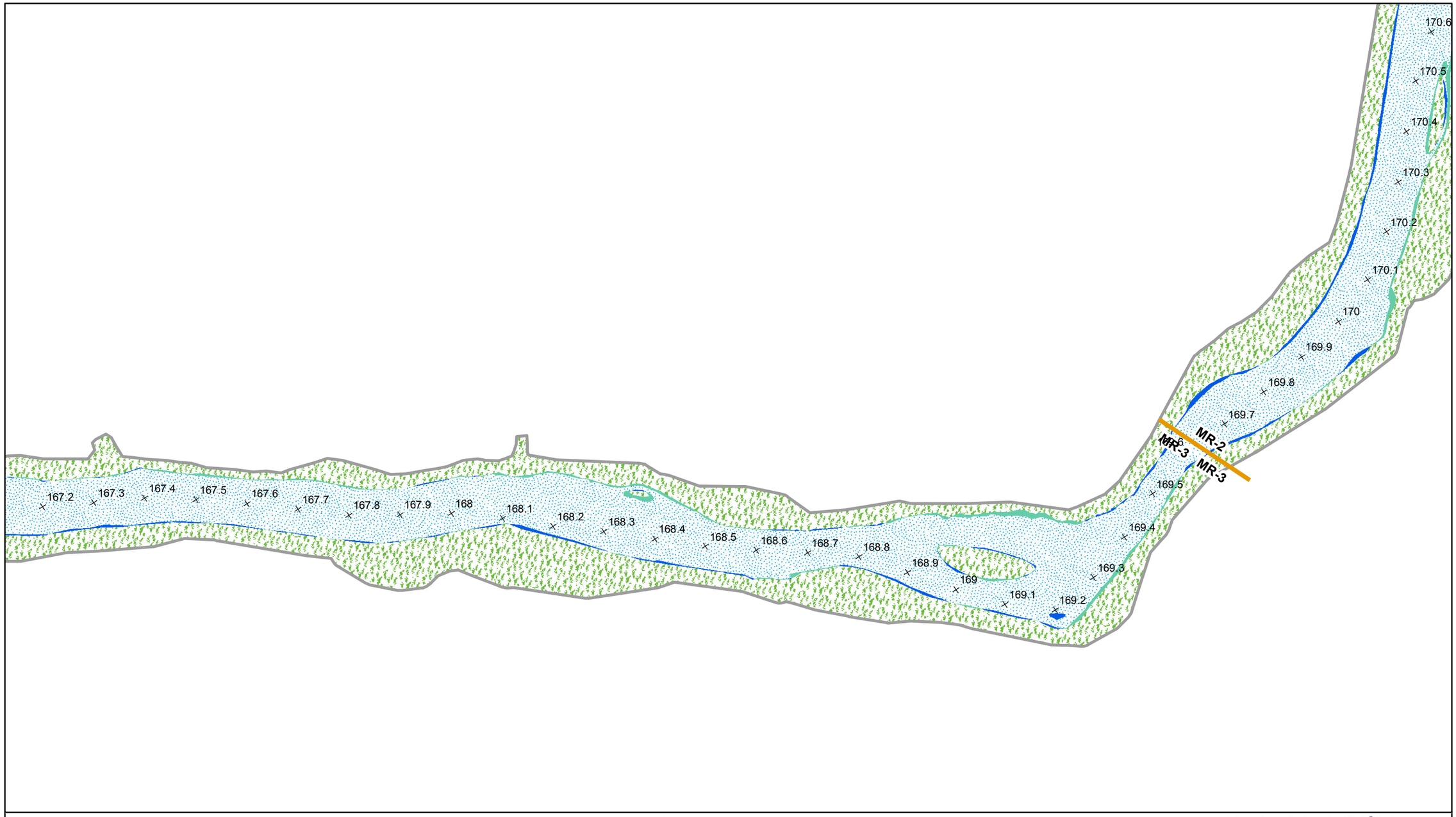
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See index page for legend and additional data information.

MIDDLE SUSITNA RIVER SEGMENT
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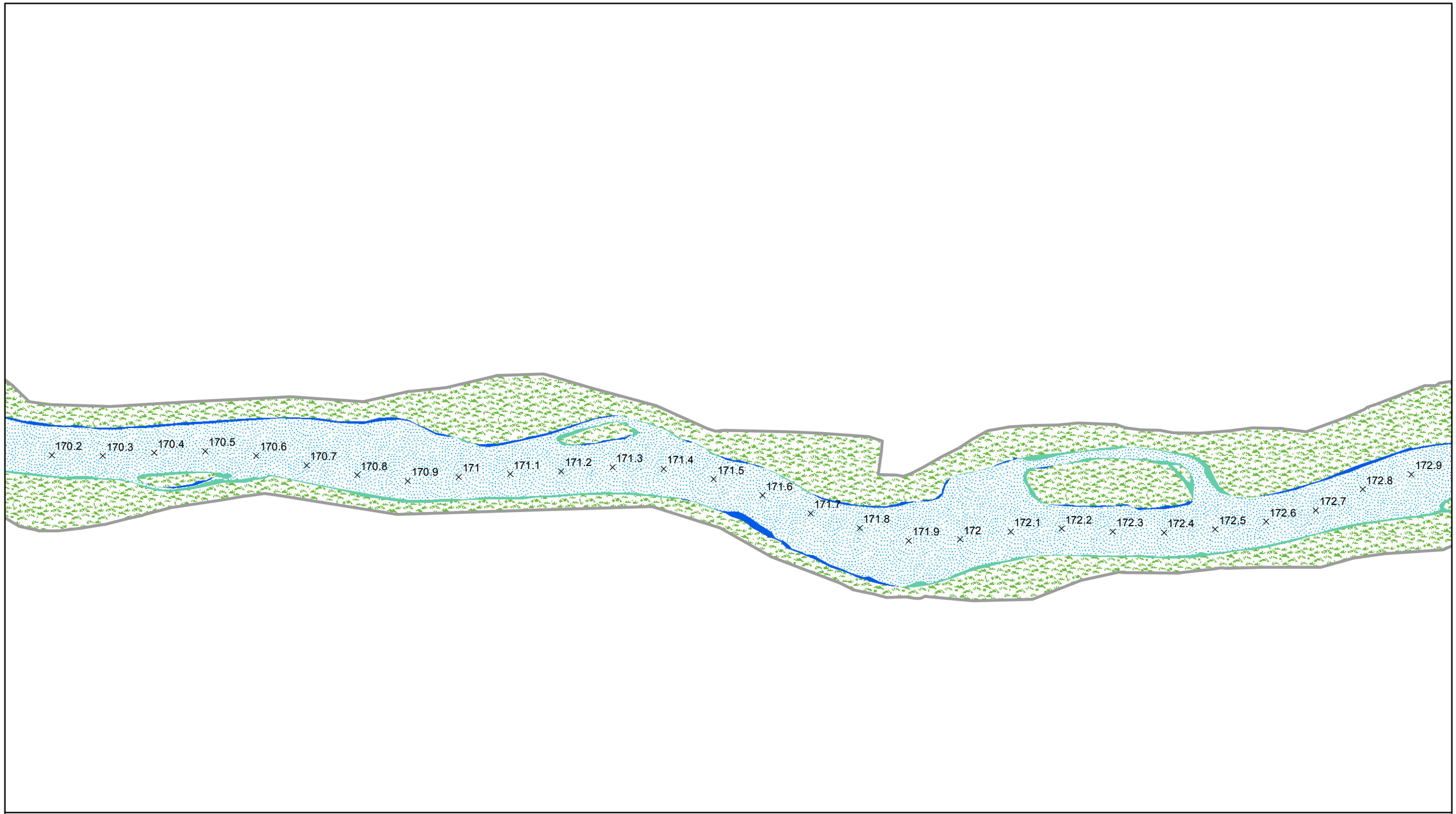
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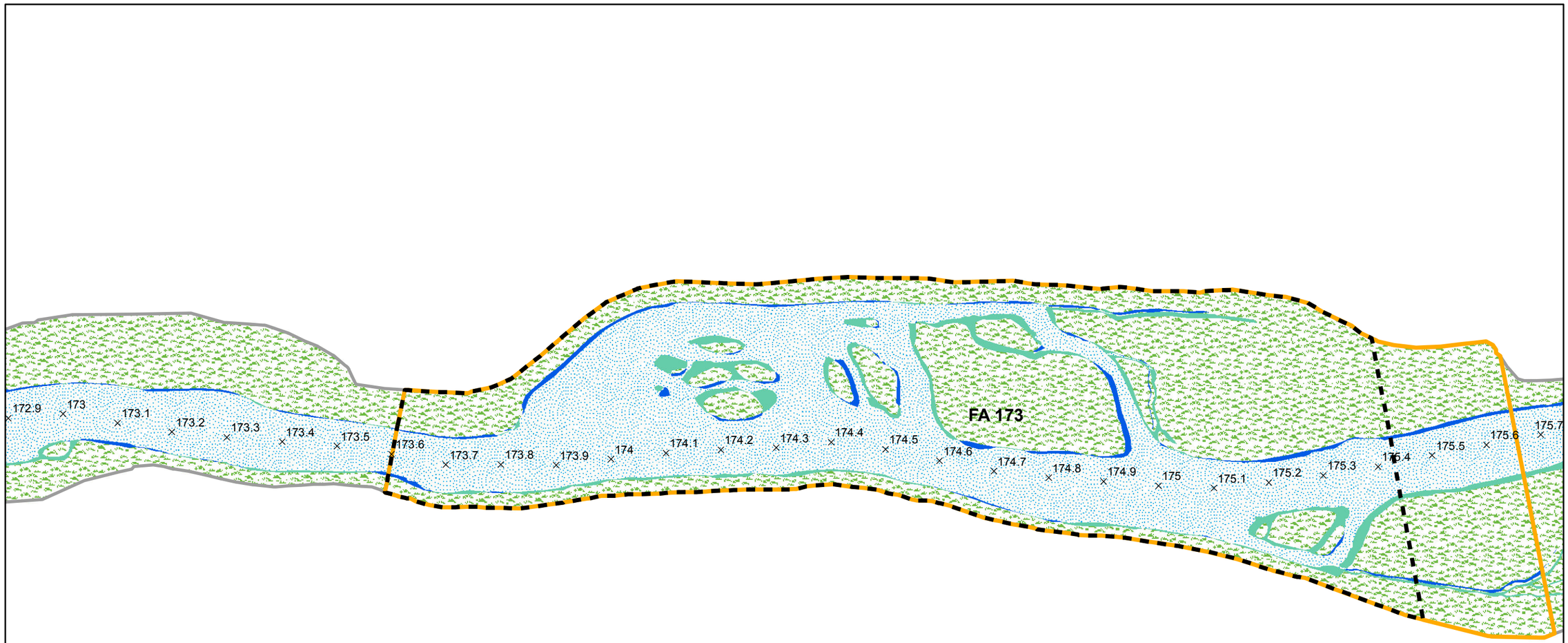
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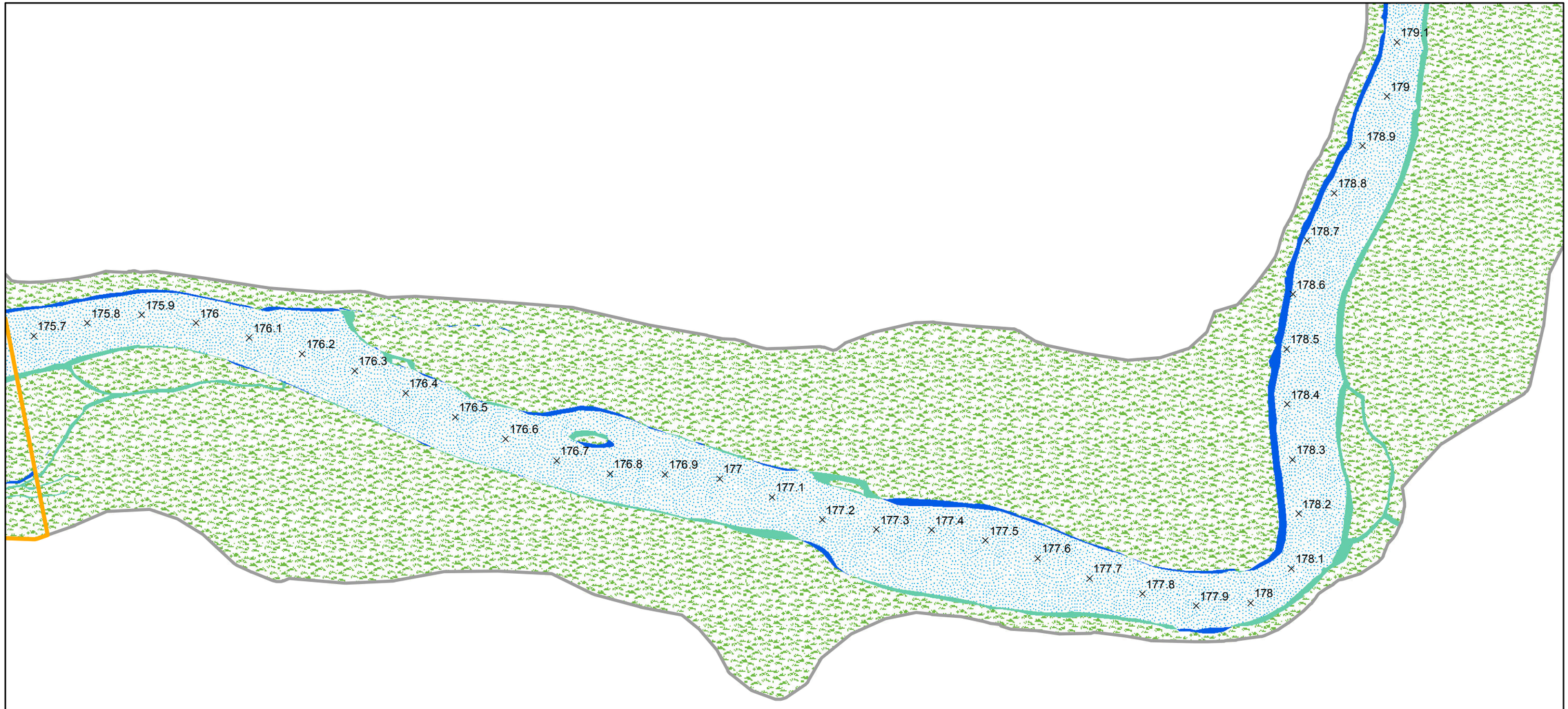
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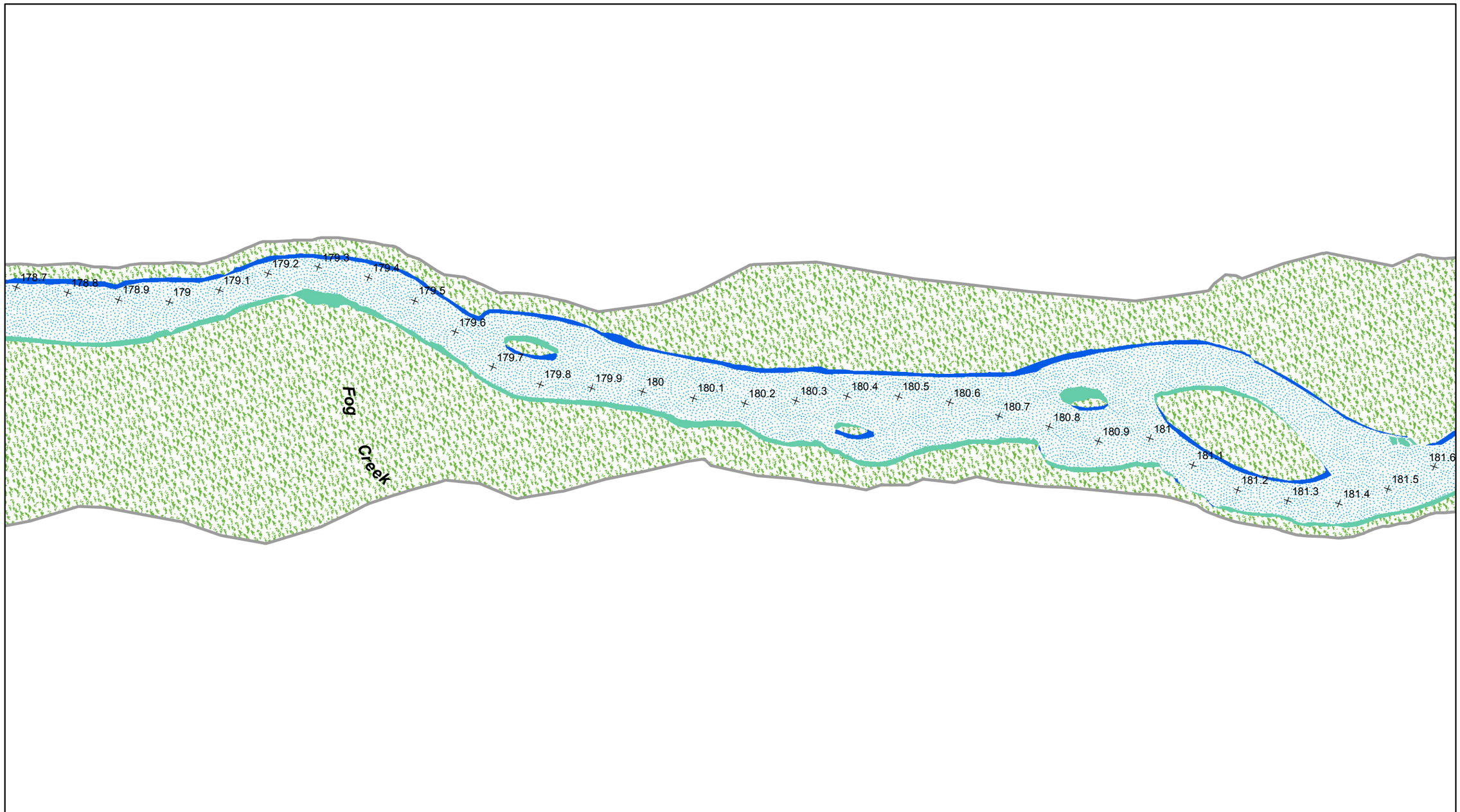
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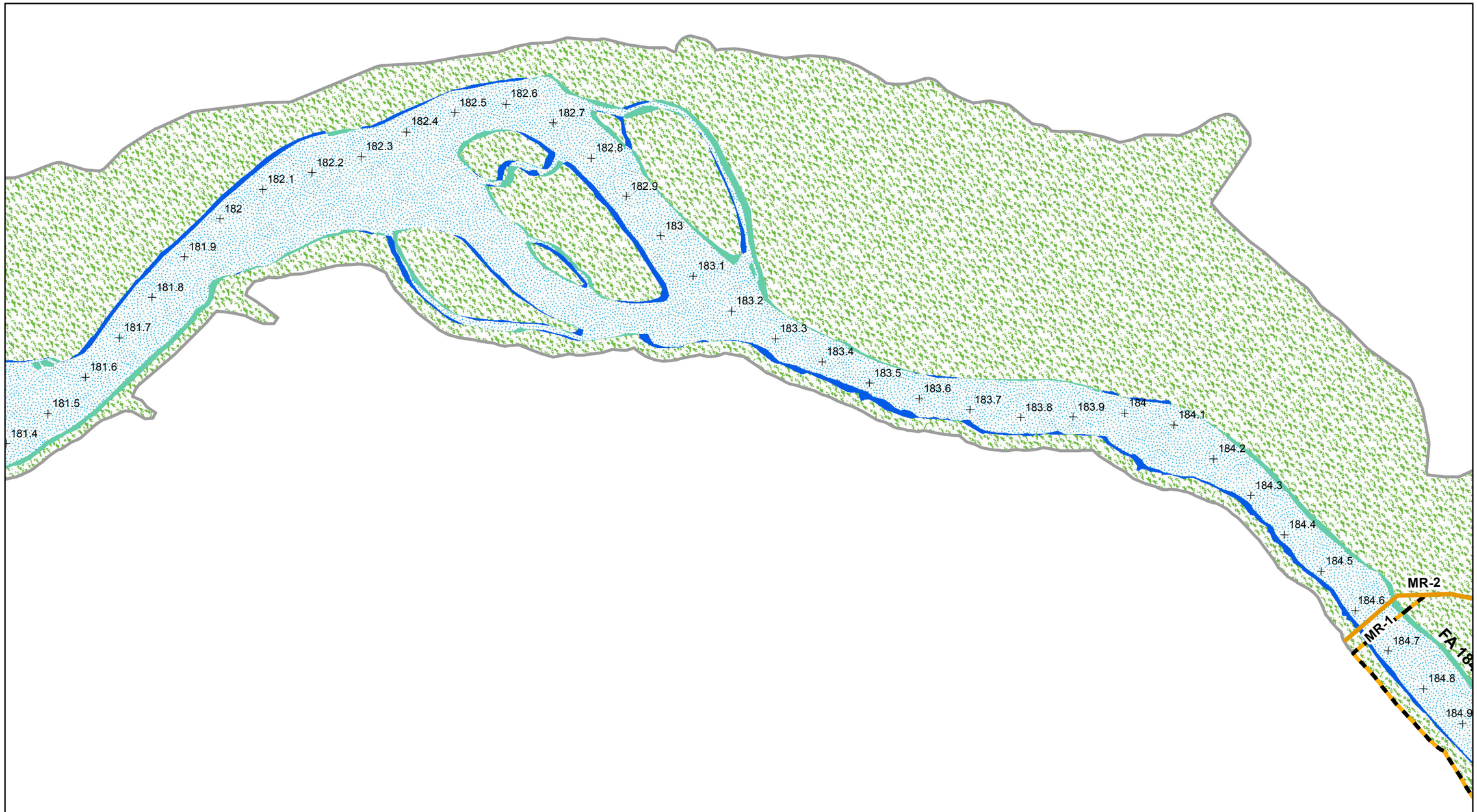
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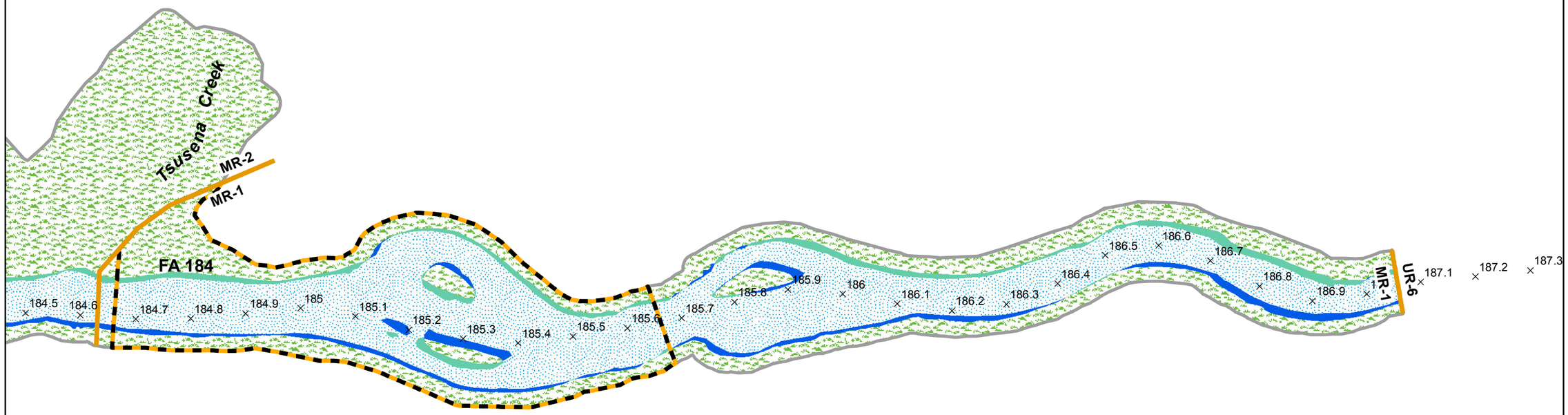
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0 1,000 2,000 Feet

1 inch = 1,000 feet

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