APPENDIX M. 1950s 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

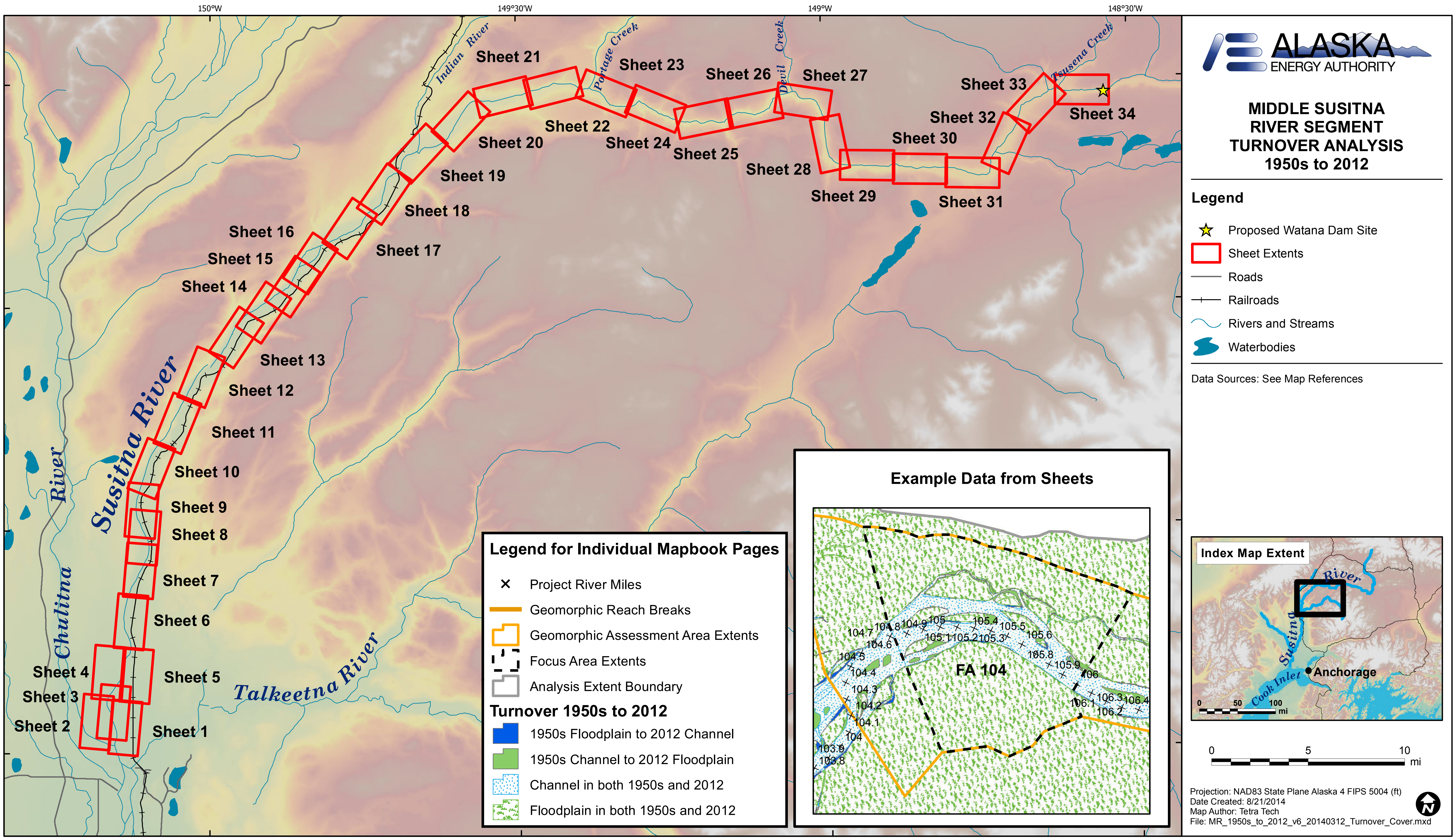
SUSITNA-WATANA HYDRO

Clean, reliable energy for the next 100 years.

Prepared by

Tetra Tech Inc.

September 2014



ALASKA ENERGY AUTHORITY
MIDDLE SUSITNA RIVER SEGMENT TURNOVER ANALYSIS 1950s to 2012
Legend
Proposed Watana Dam Site
Sheet Extents
Roads
Railroads
Rivers and Streams
Waterbodies
Data Sources: See Map References
Index Map Extent
Anchorage
Cook Inlet
Susitna
River
0 50 100 mi
0 5 10 mi
Projection: NAD83 State Plane Alaska 4 FIPS 5004 (ft)
Date Created: 8/21/2014
Map Author: Tetra Tech
File: MR_1950s_to_2012_v6_20140312_Turnover_Cover.mxd
150°W
149°30'W
149°W
148°30'W
62°50'N
62°40'N
62°30'N
62°20'N
Susitna River
Chulitna River
Talkeetna River
Indian River
Portage Creek
Devil Creek
Tsusena Creek
Sheet 1
Sheet 2
Sheet 3
Sheet 4
Sheet 5
Sheet 6
Sheet 7
Sheet 8
Sheet 9
Sheet 10
Sheet 11
Sheet 12
Sheet 13
Sheet 14
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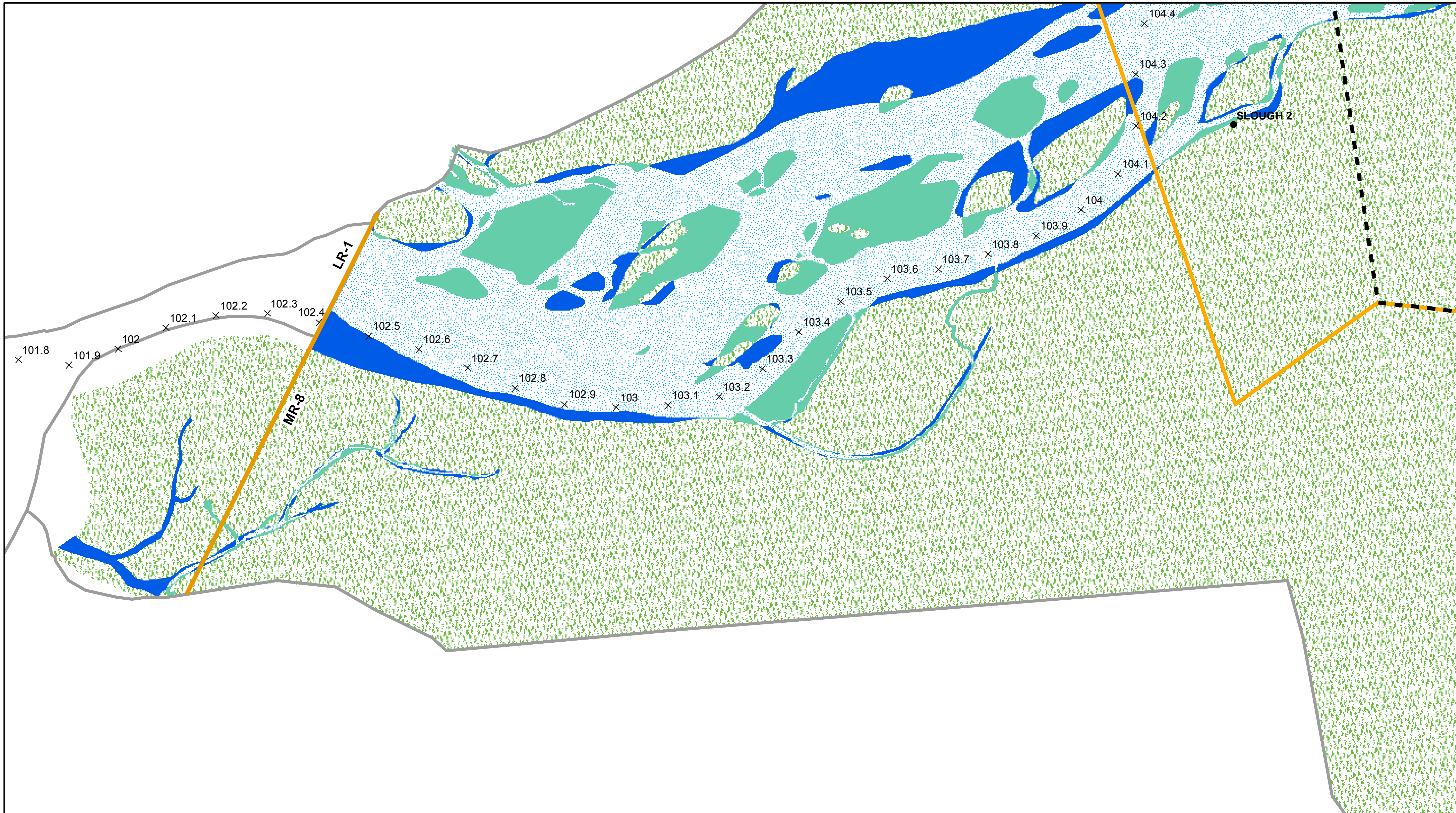
Sheet 31
Sheet 32
Sheet 33
Sheet 34
Legend for Individual Mapbook Pages
Project River Miles
Geomorphic Reach Breaks
Geomorphic Assessment Area Extents
Focus Area Extents
Analysis Extent Boundary
Turnover 1950s to 2012
1950s Floodplain to 2012 Channel
1950s Channel to 2012 Floodplain
Channel in both 1950s and 2012
Floodplain in both 1950s and 2012
Example Data from Sheets
FA 104



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1 inch = 1,000 feet

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1950s to 2012 TURNOVER ANALYSIS

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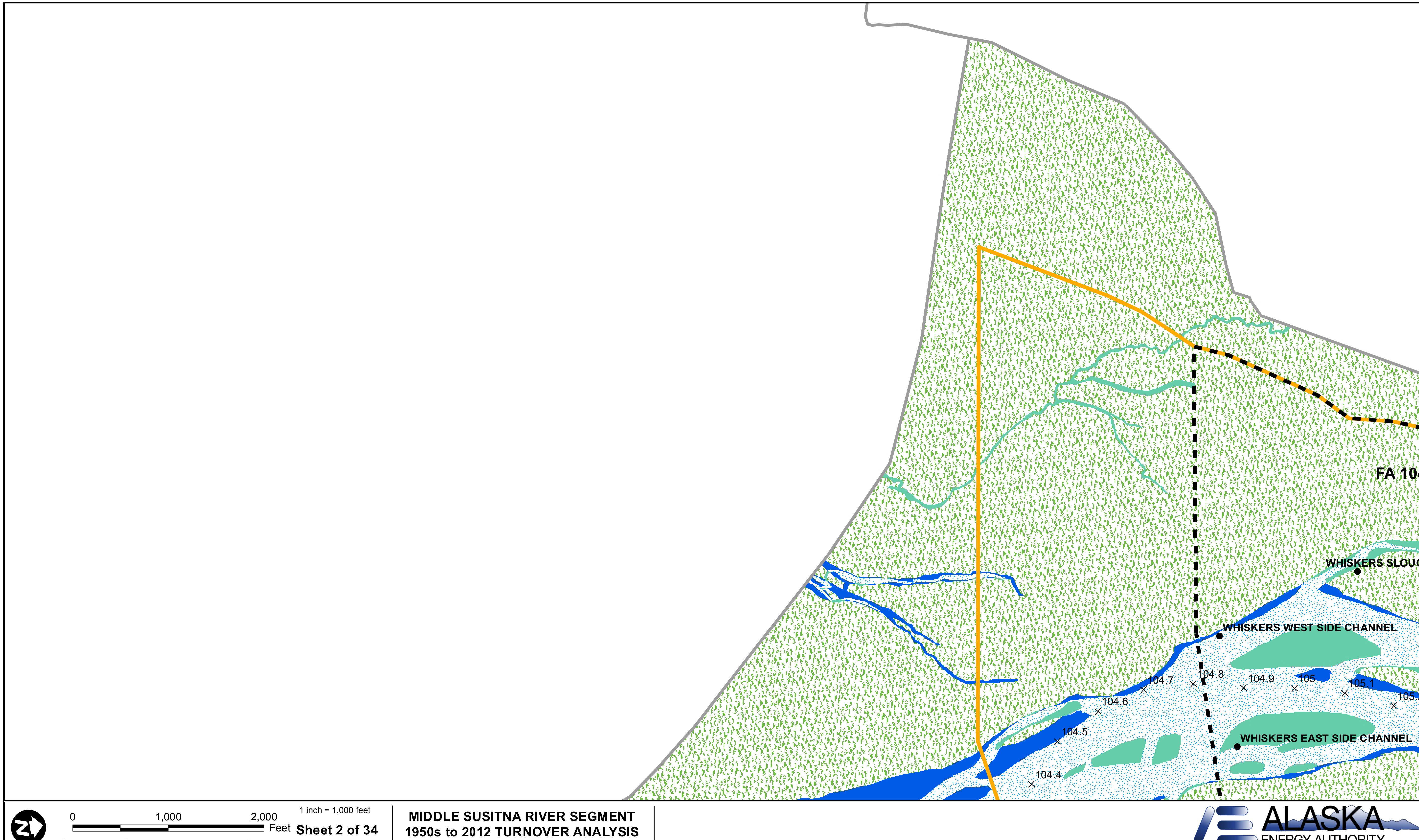

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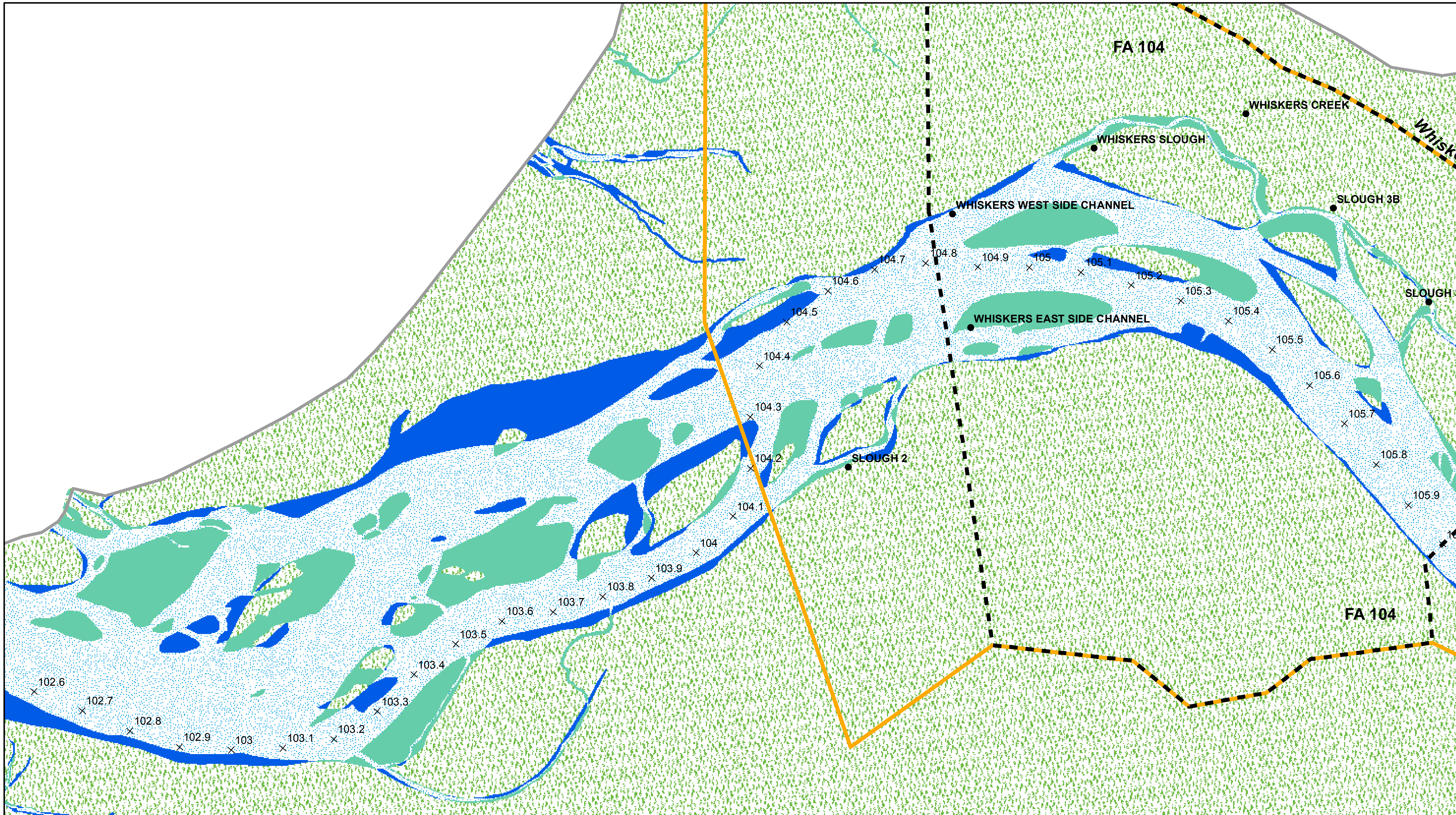

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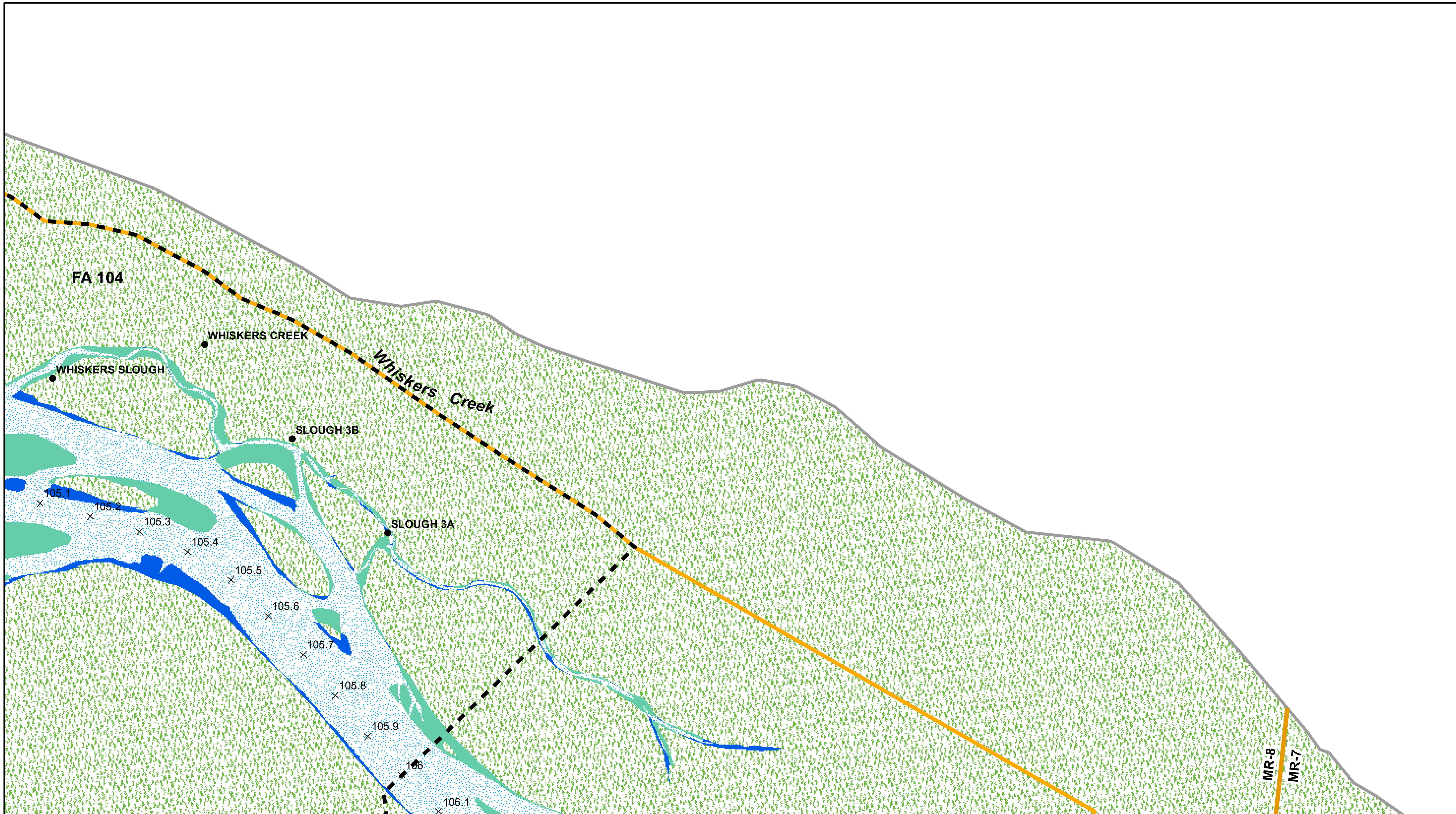

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MIDDLE SUSITNA RIVER SEGMENT
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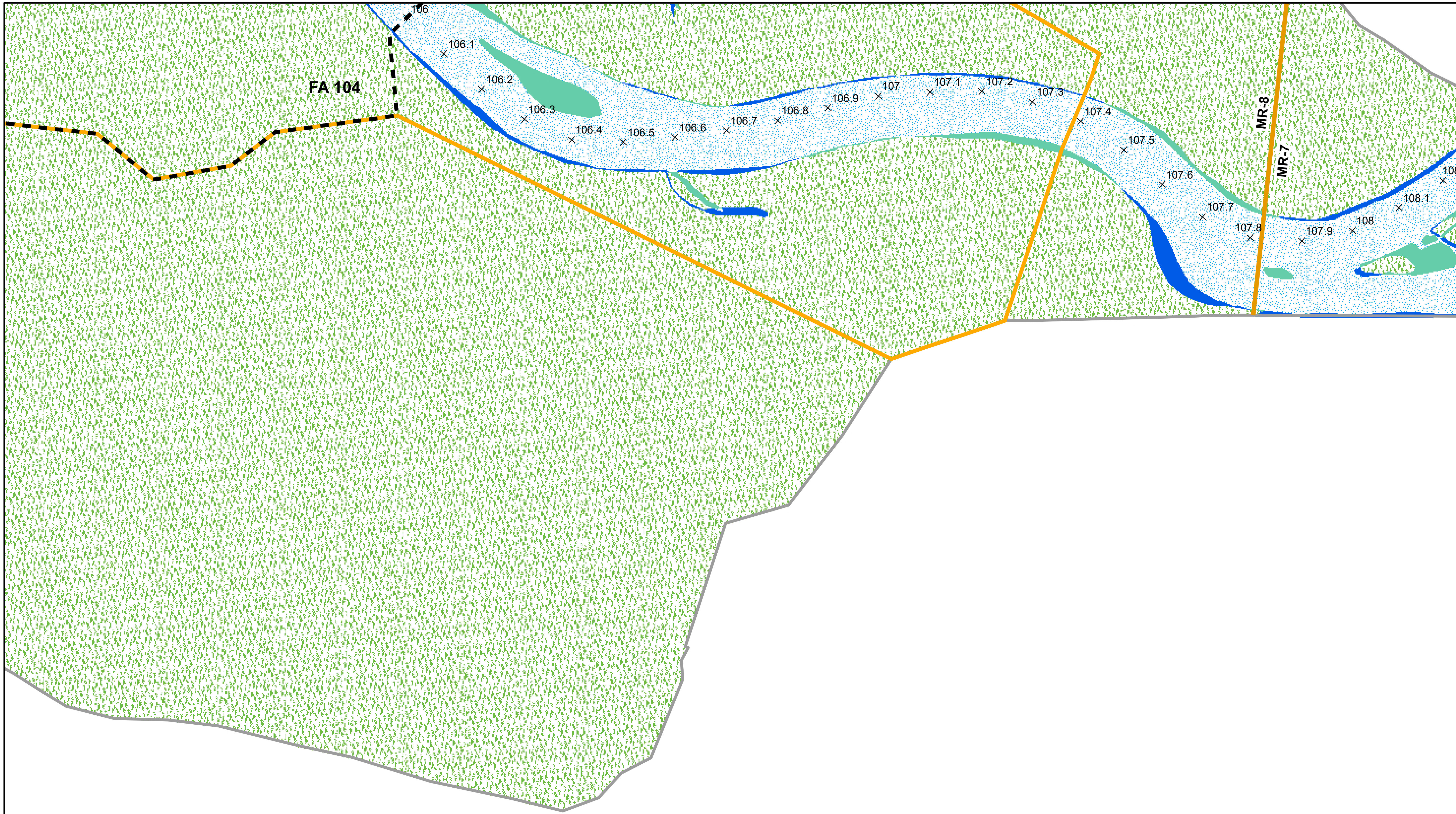

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1950s to 2012 TURNOVER ANALYSIS

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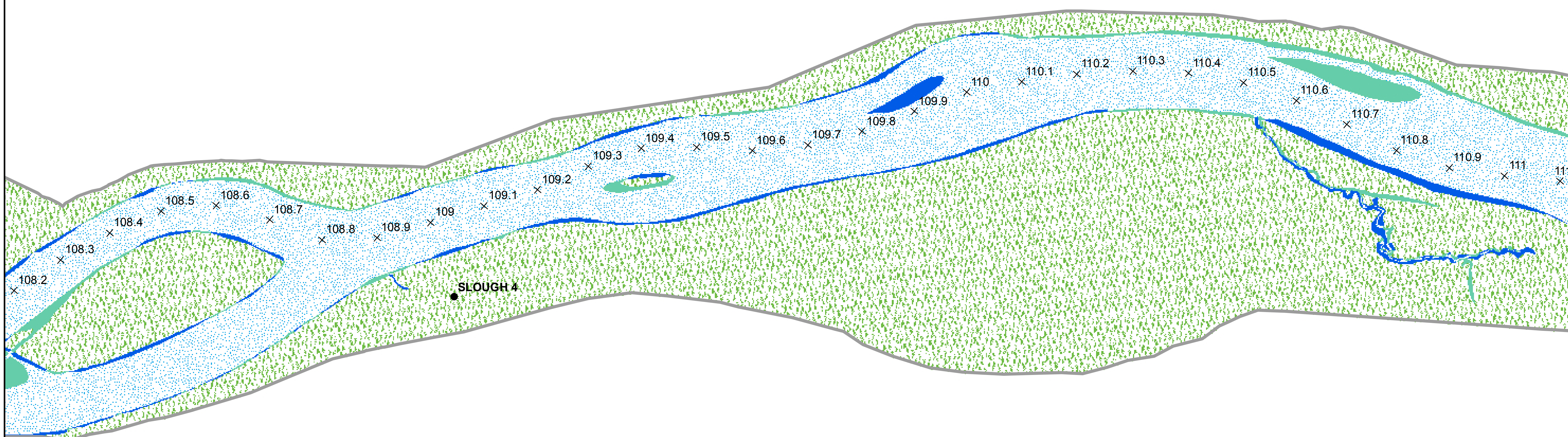

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1950s to 2012 TURNOVER ANALYSIS

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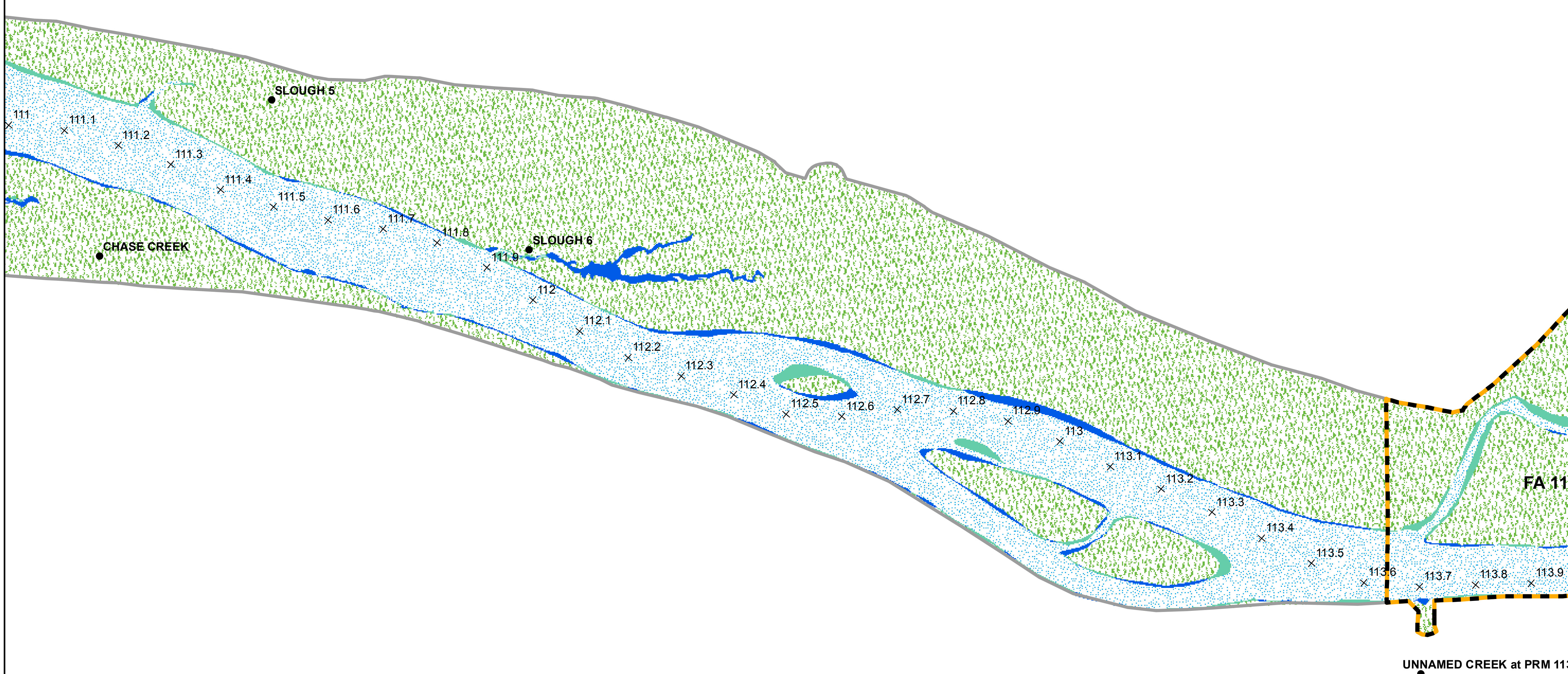

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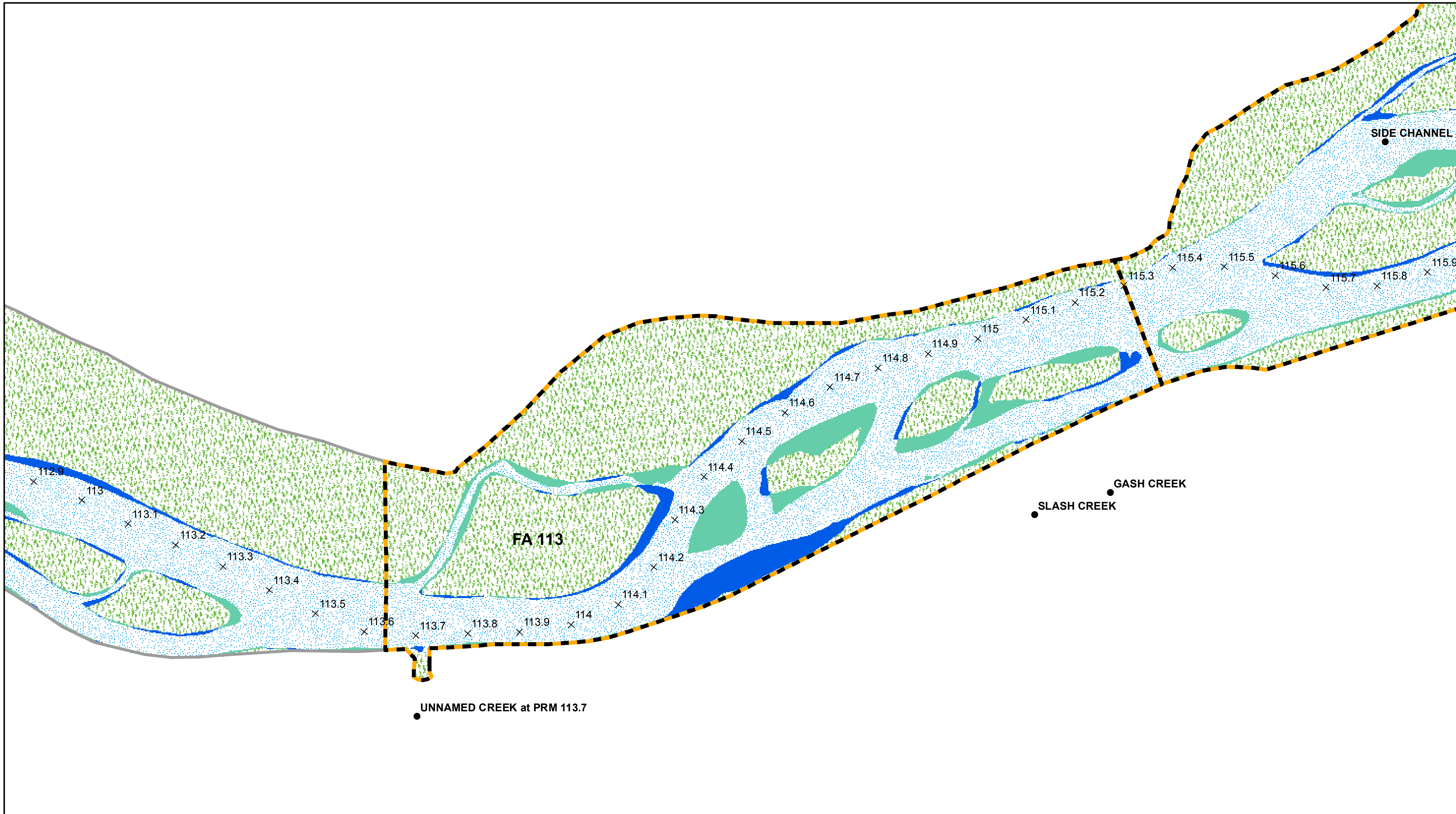
1950s to 2012 TURNOVER ANALYSIS



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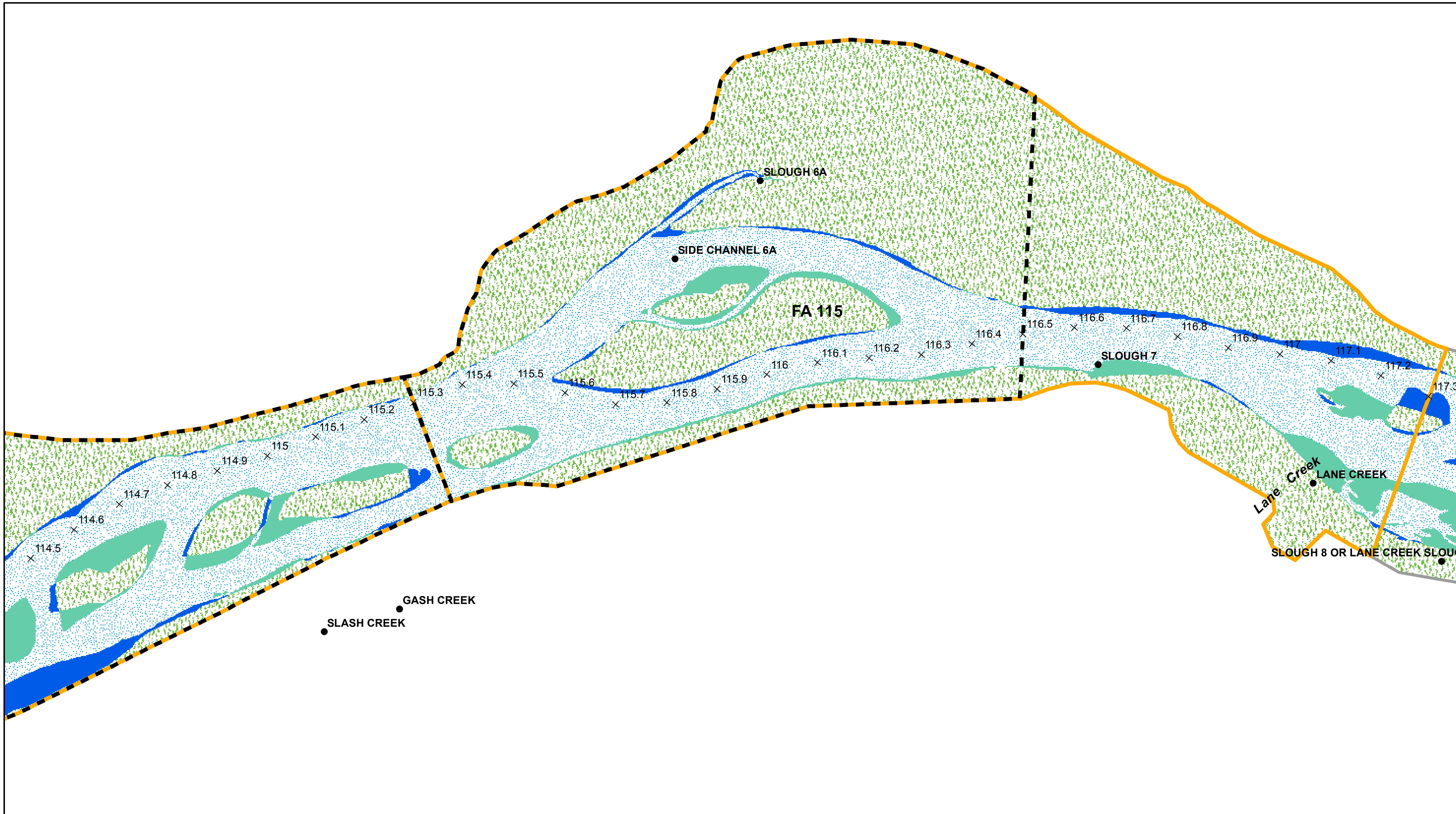

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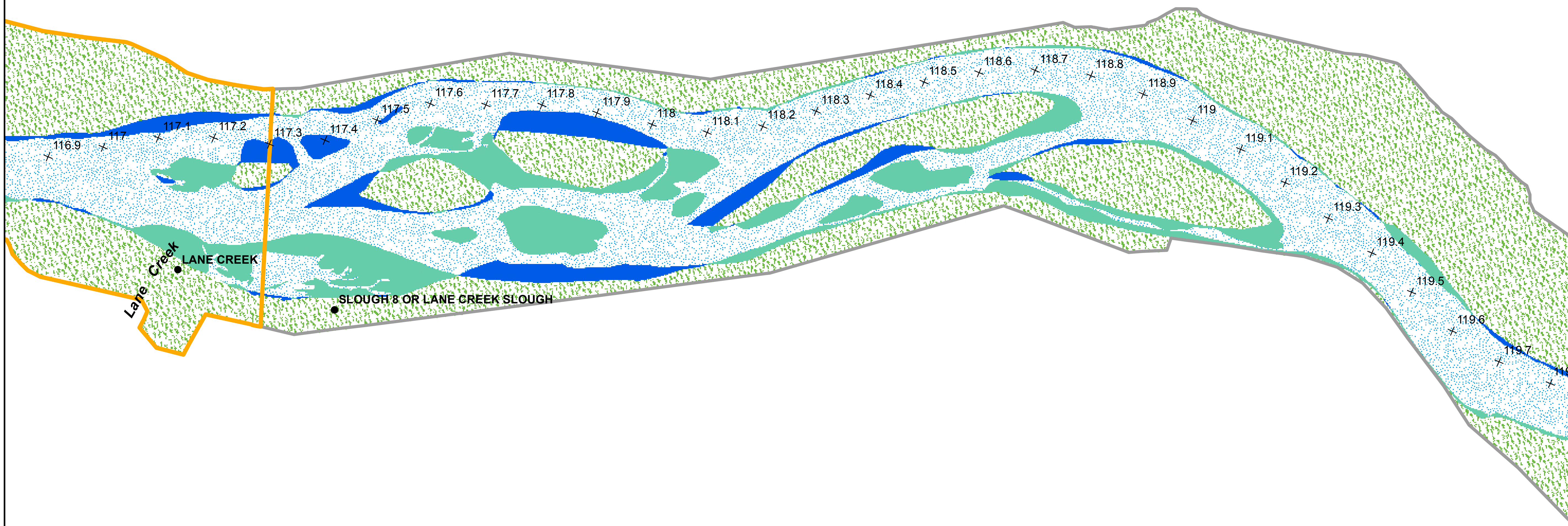

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1950s to 2012 TURNOVER ANALYSIS

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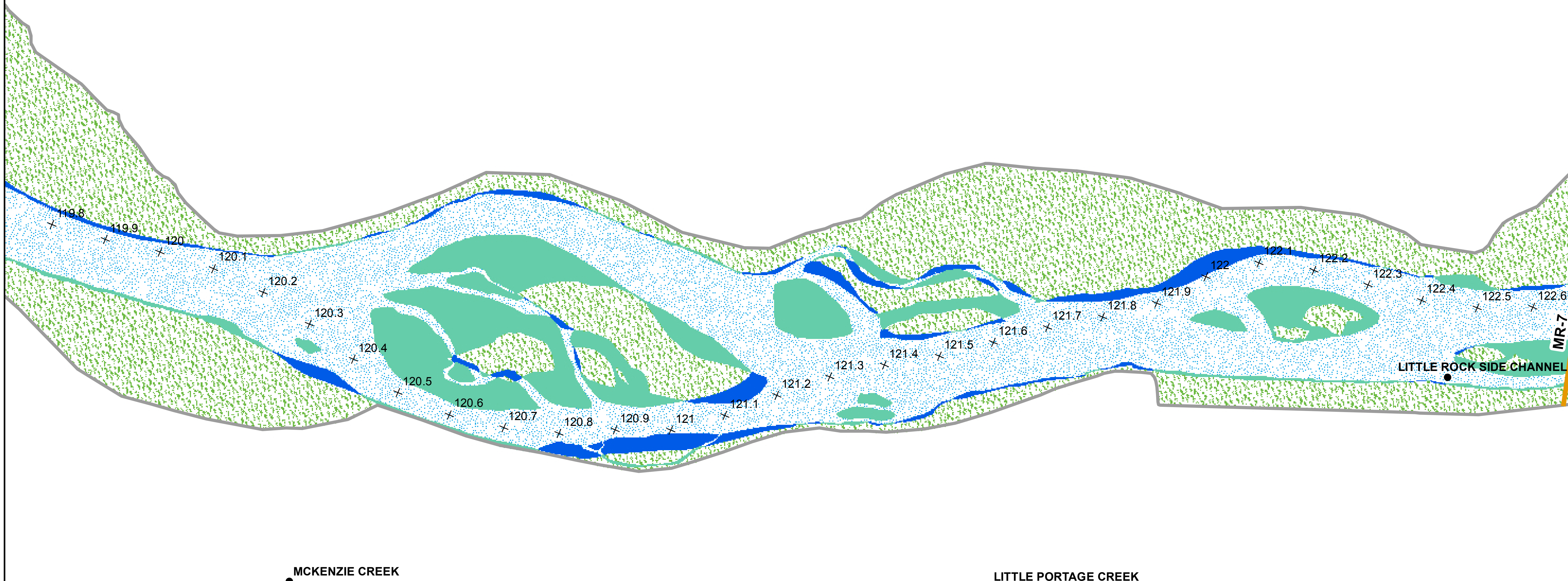

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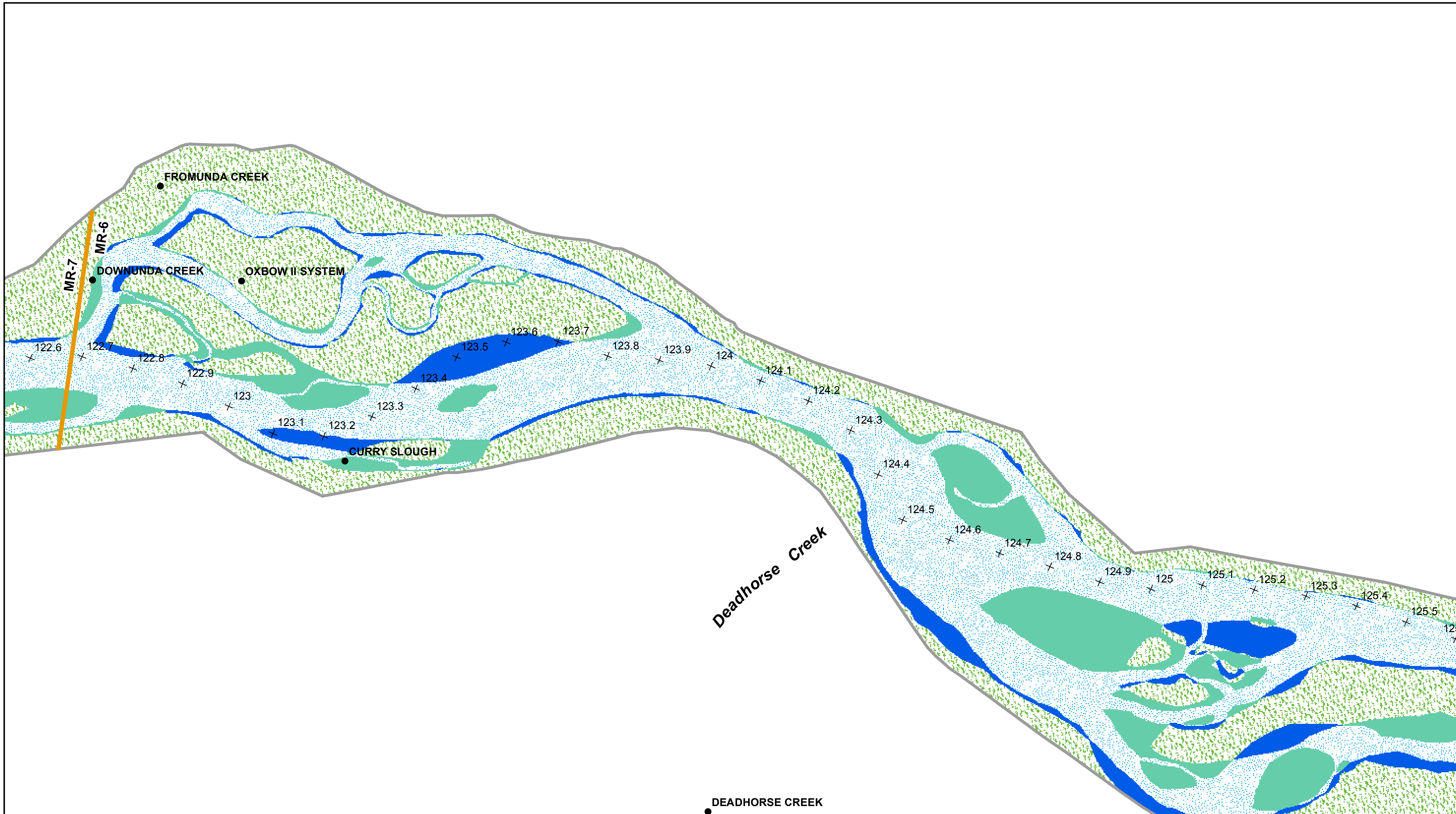

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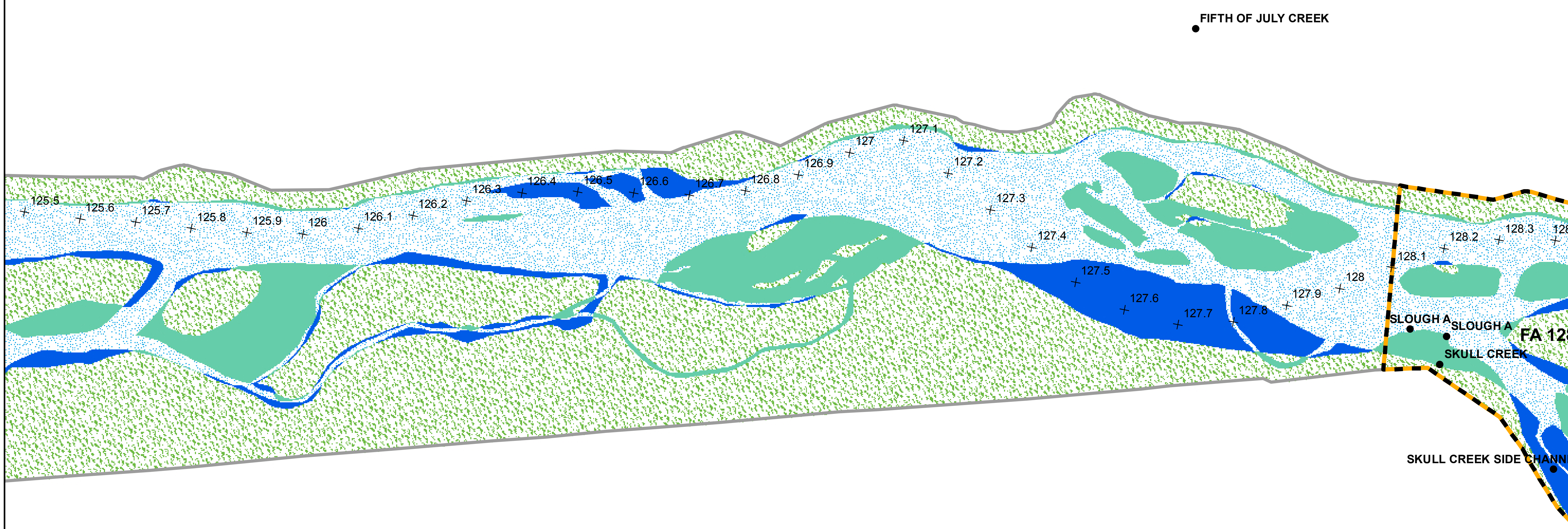

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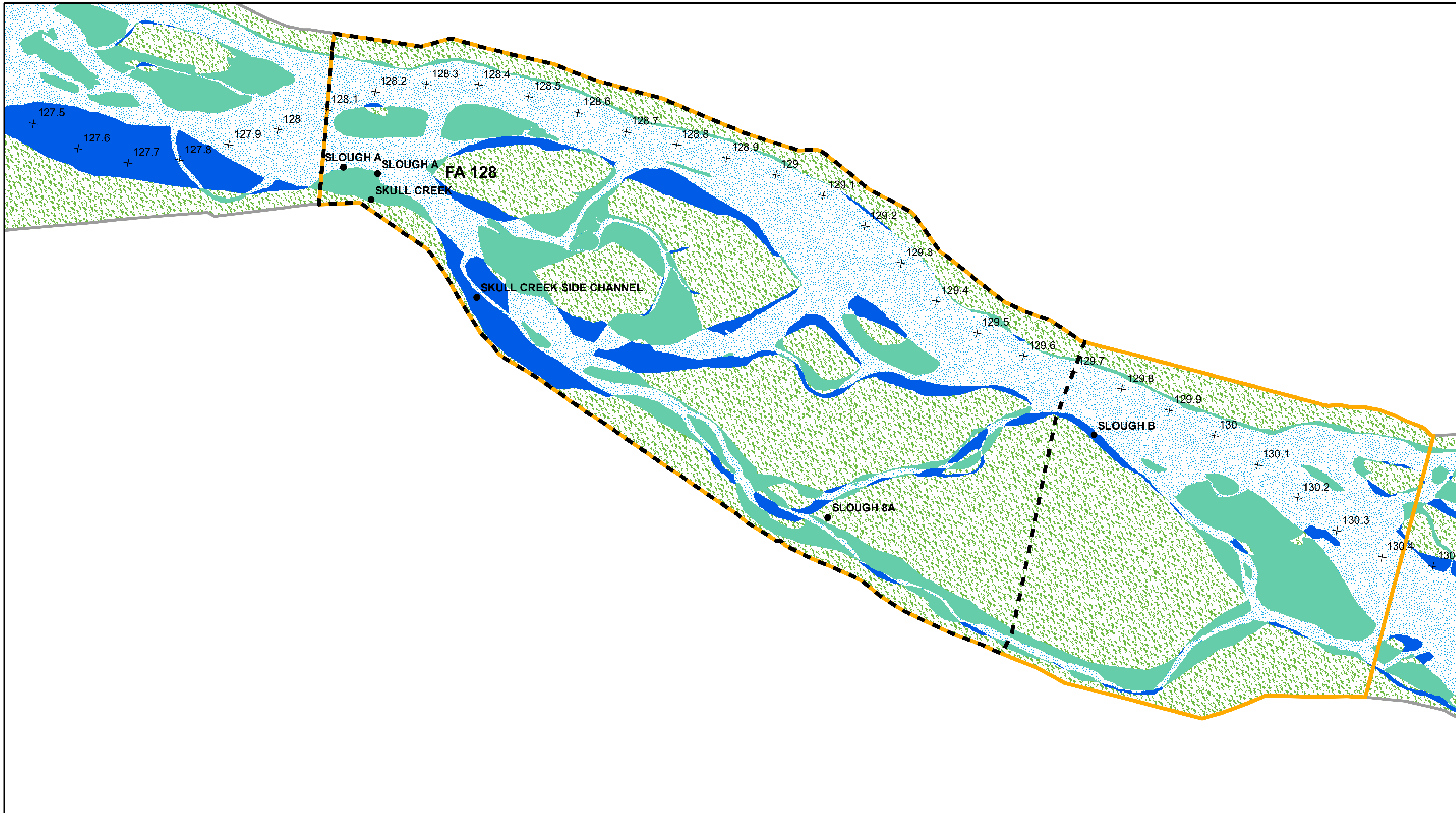

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1950s to 2012 TURNOVER ANALYSIS

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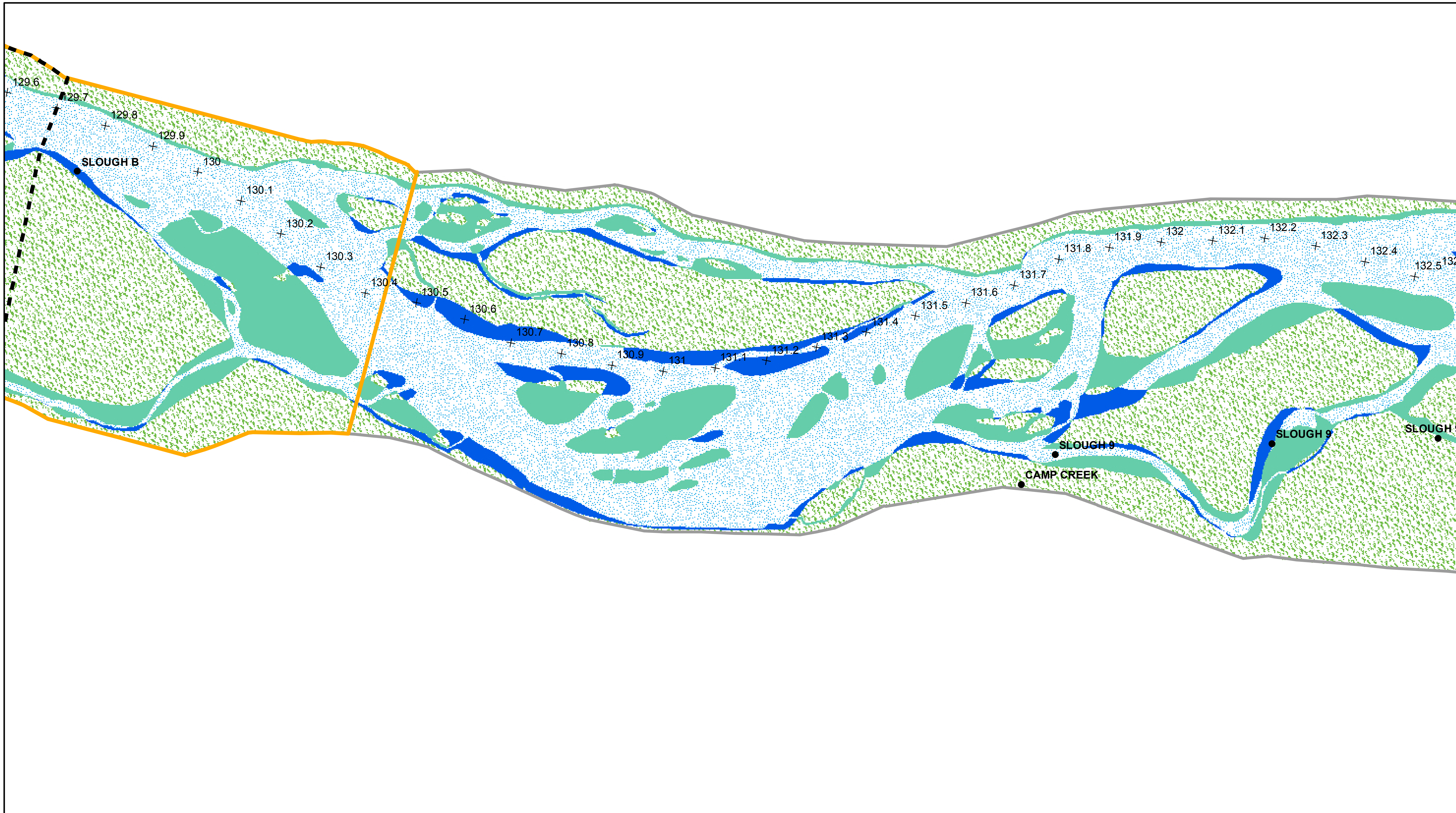

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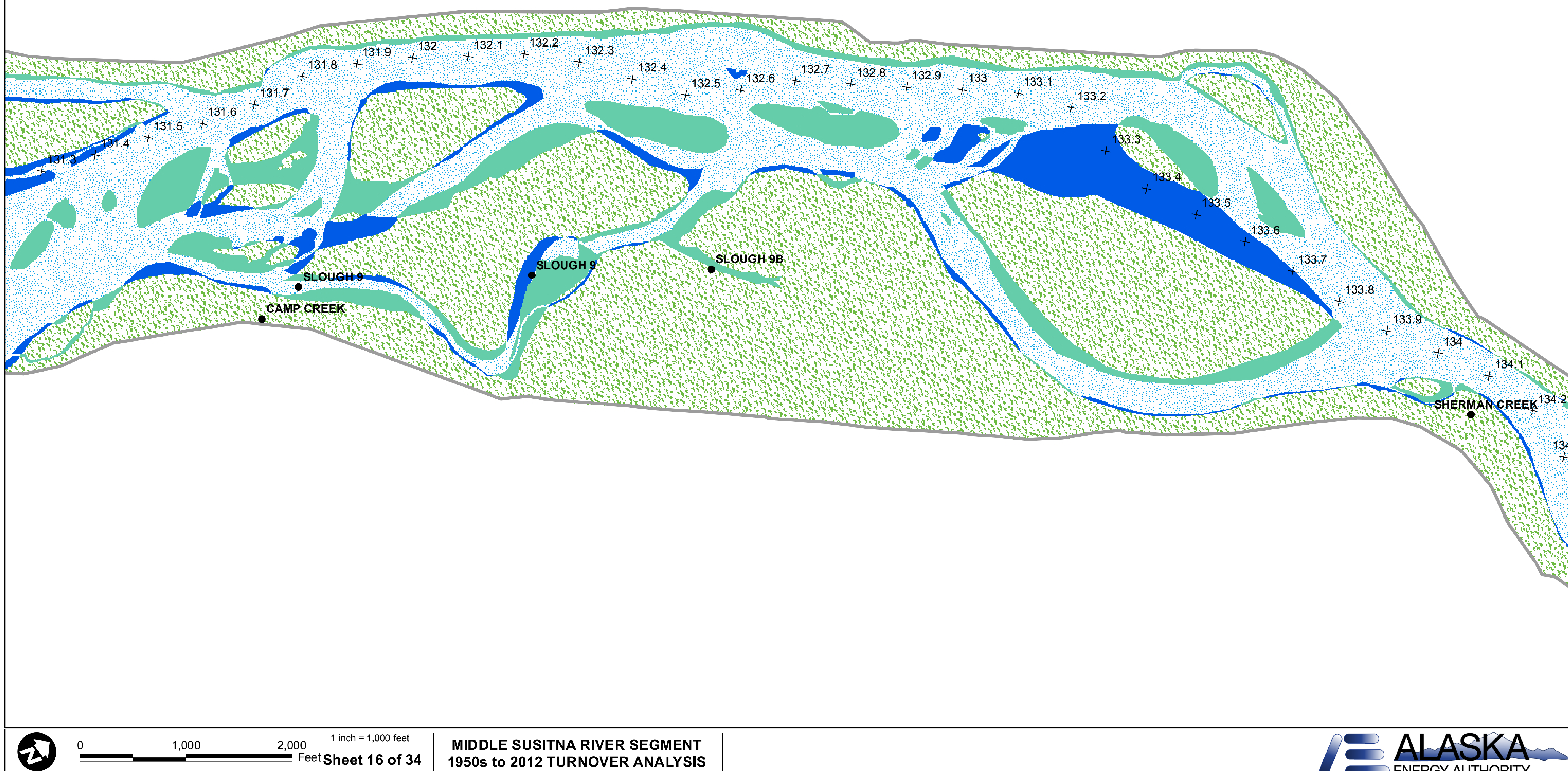

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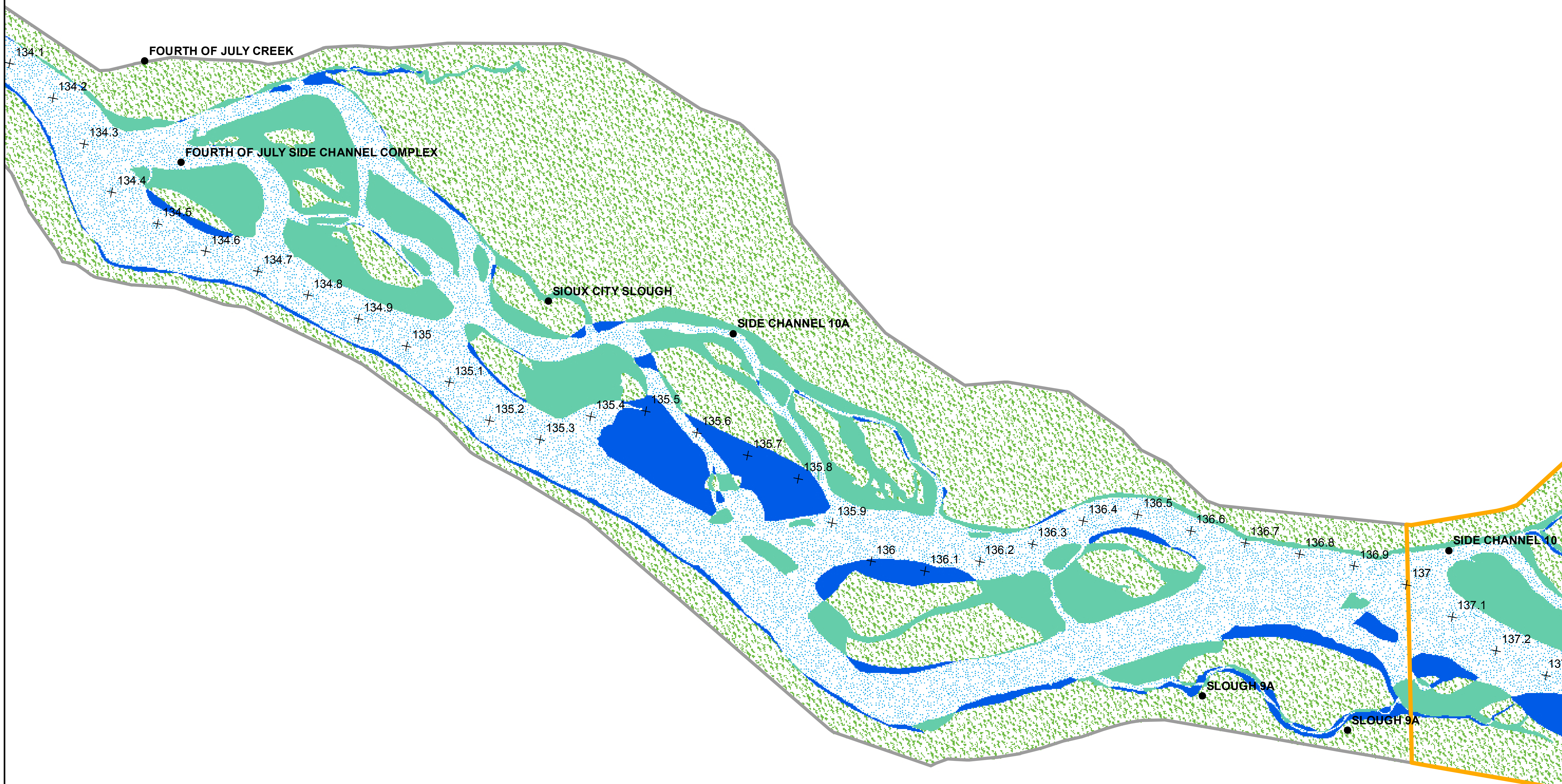

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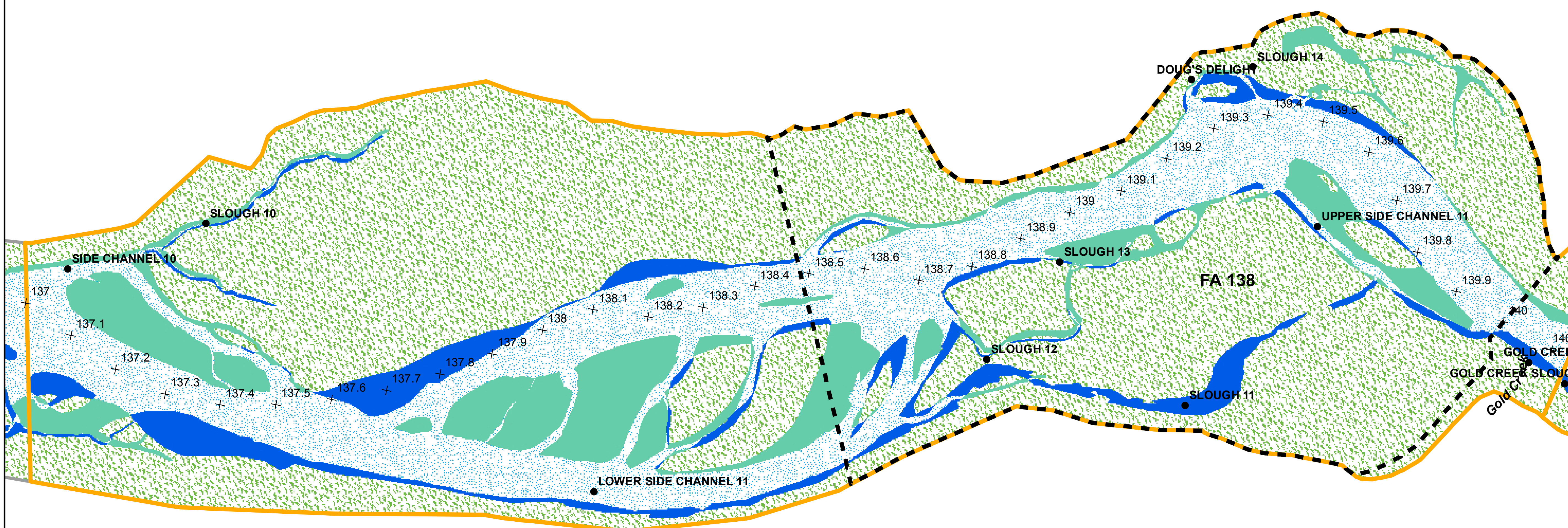

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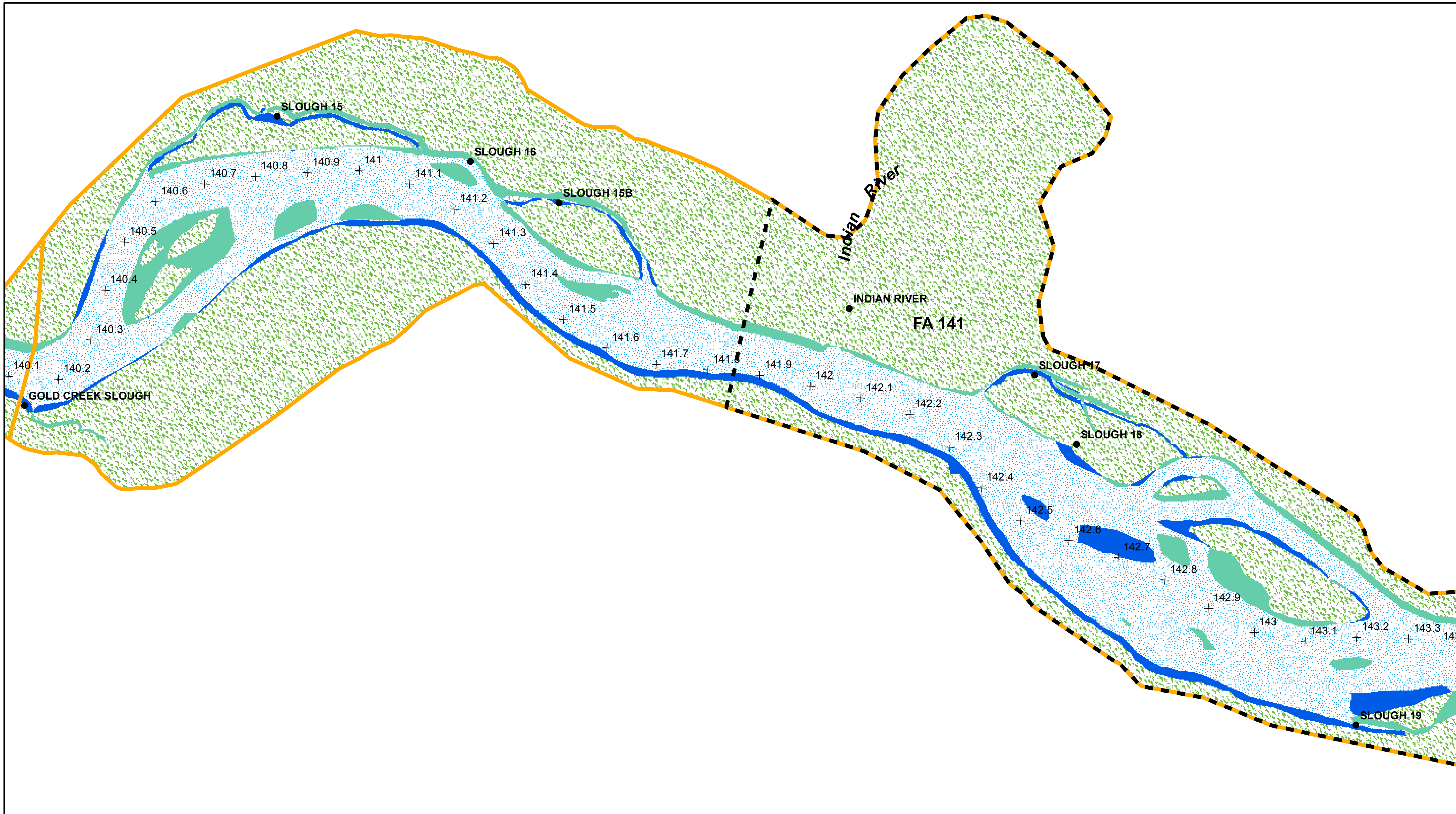

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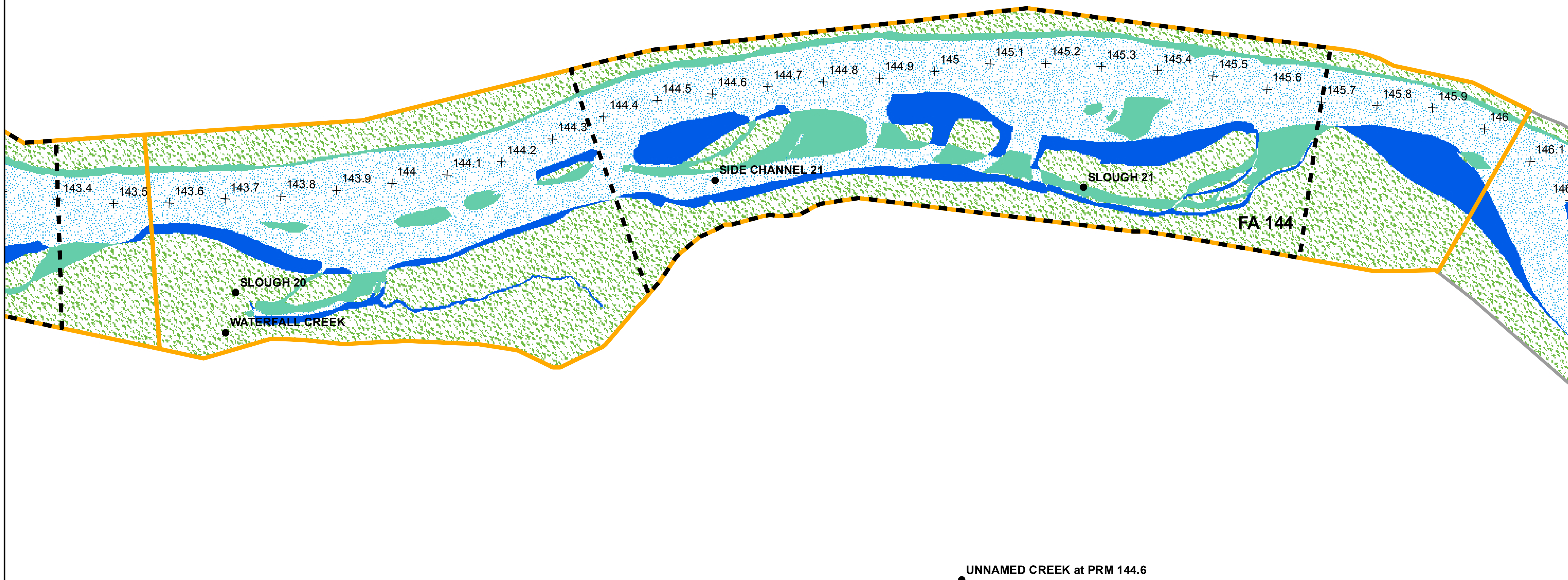

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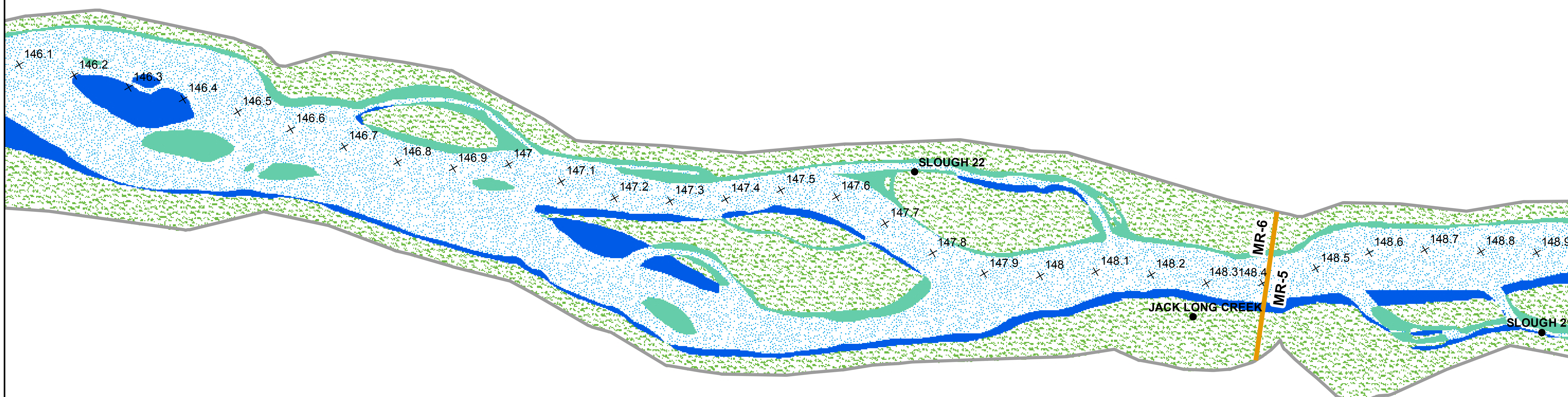

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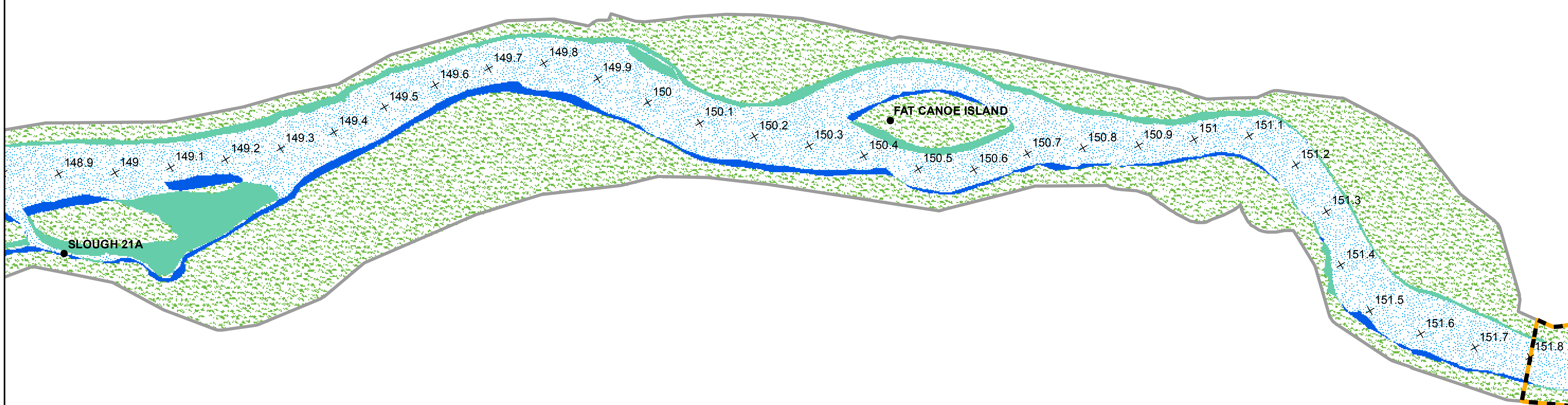

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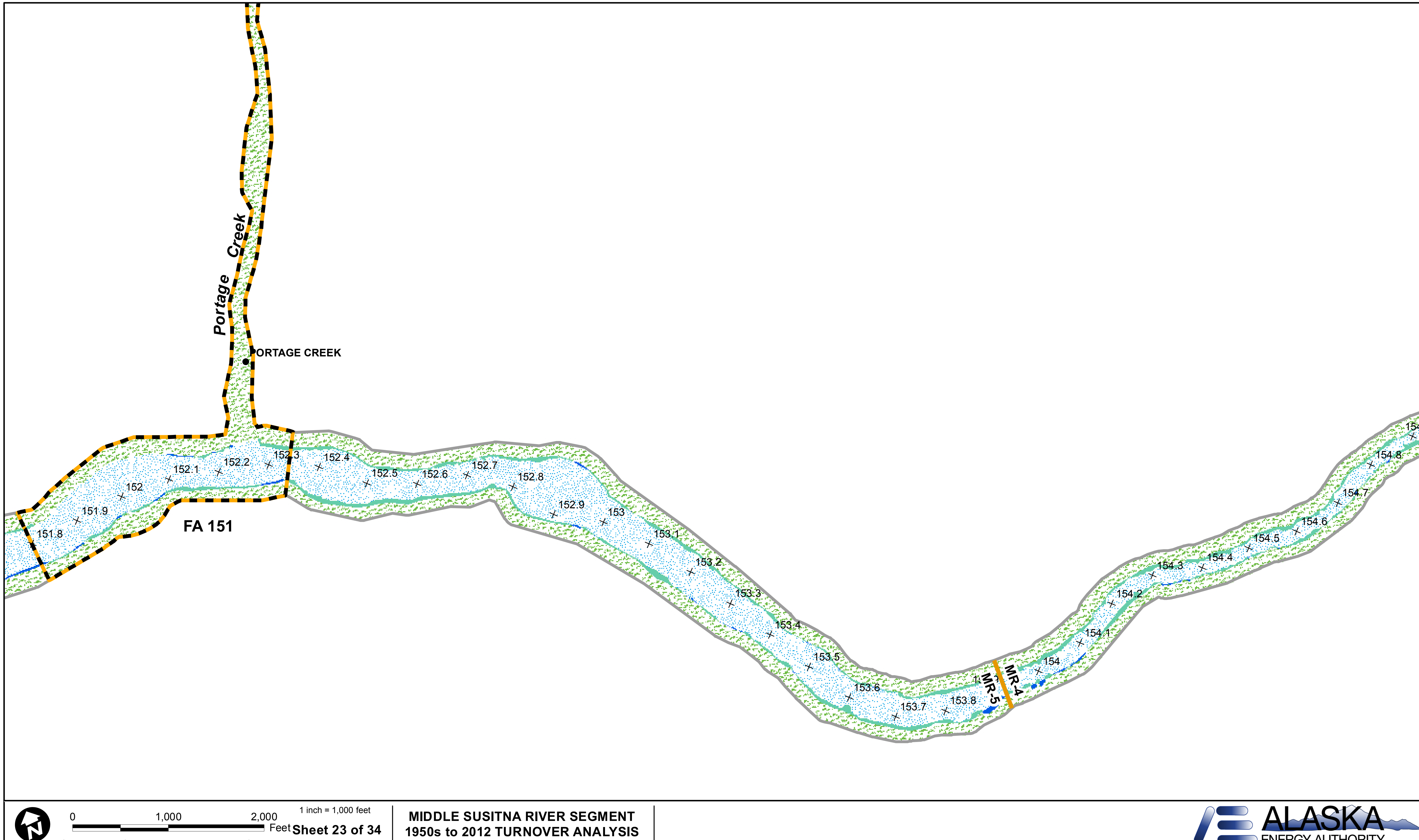

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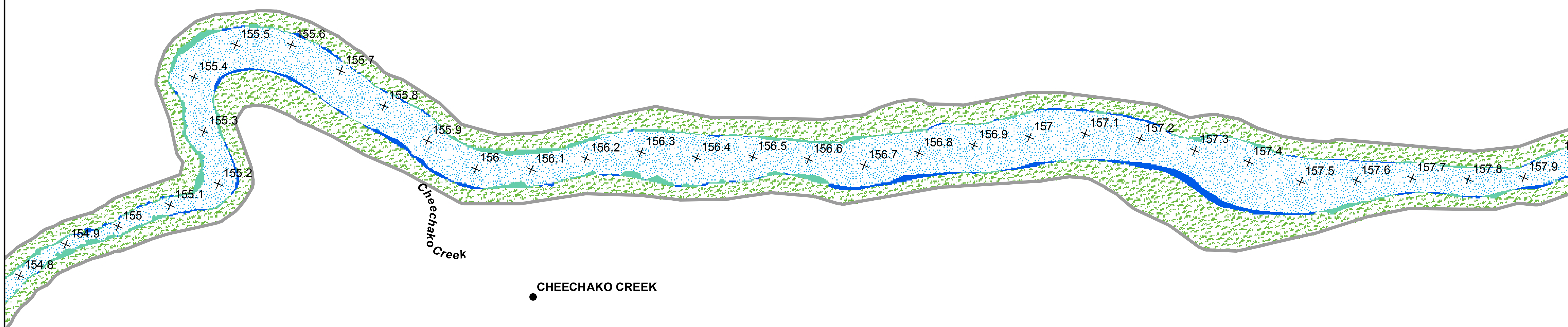

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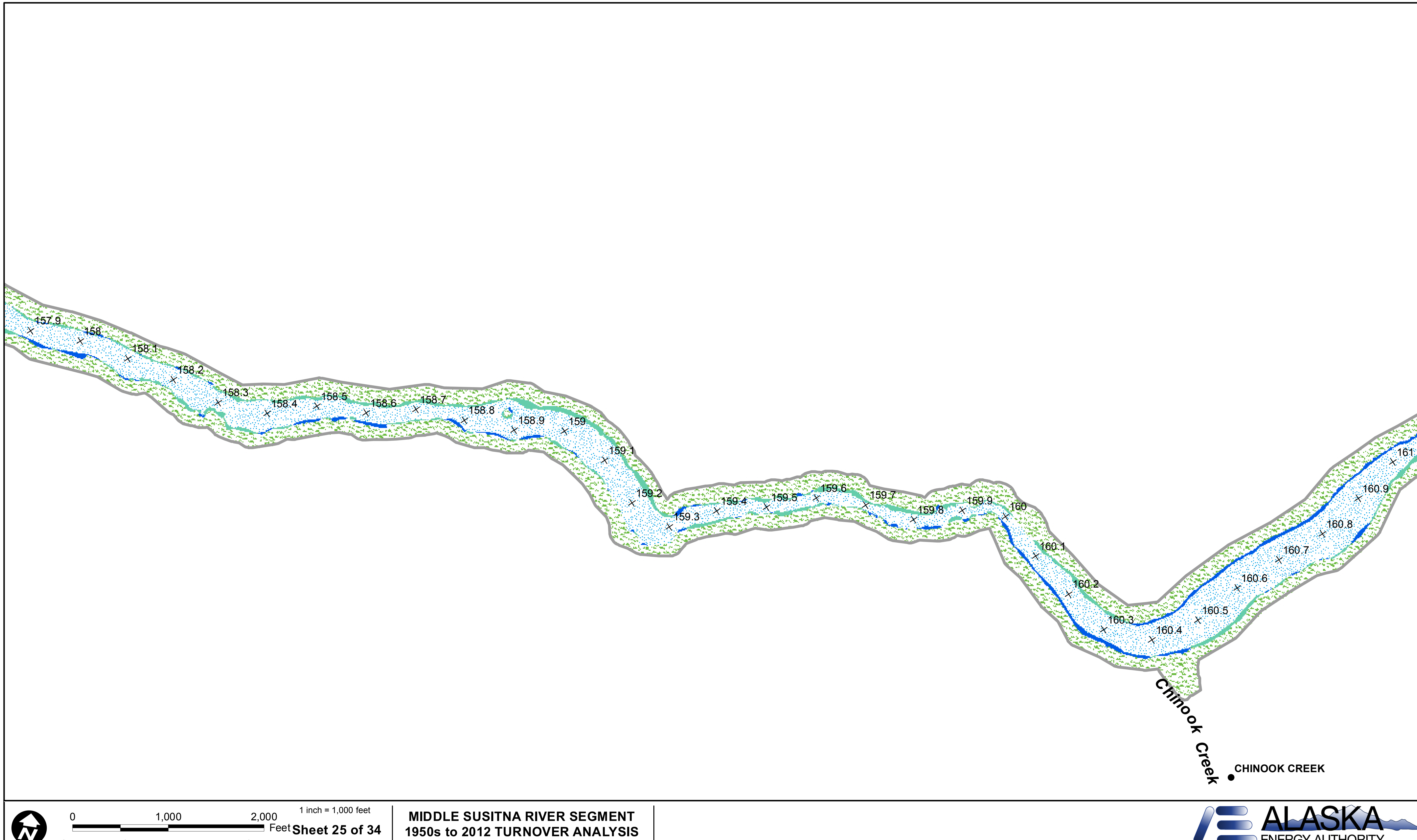

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MIDDLE SUSITNA RIVER SEGMENT
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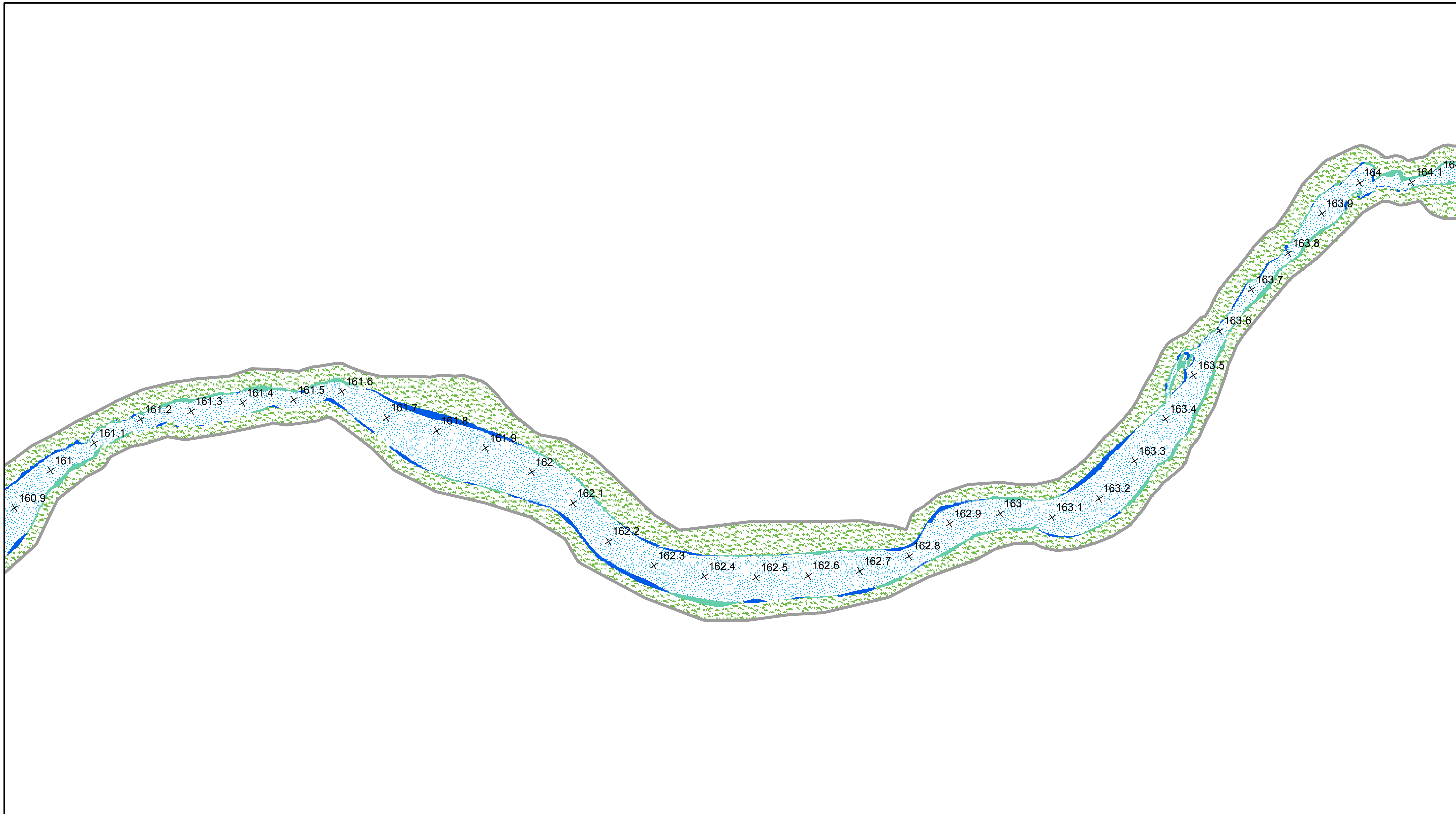

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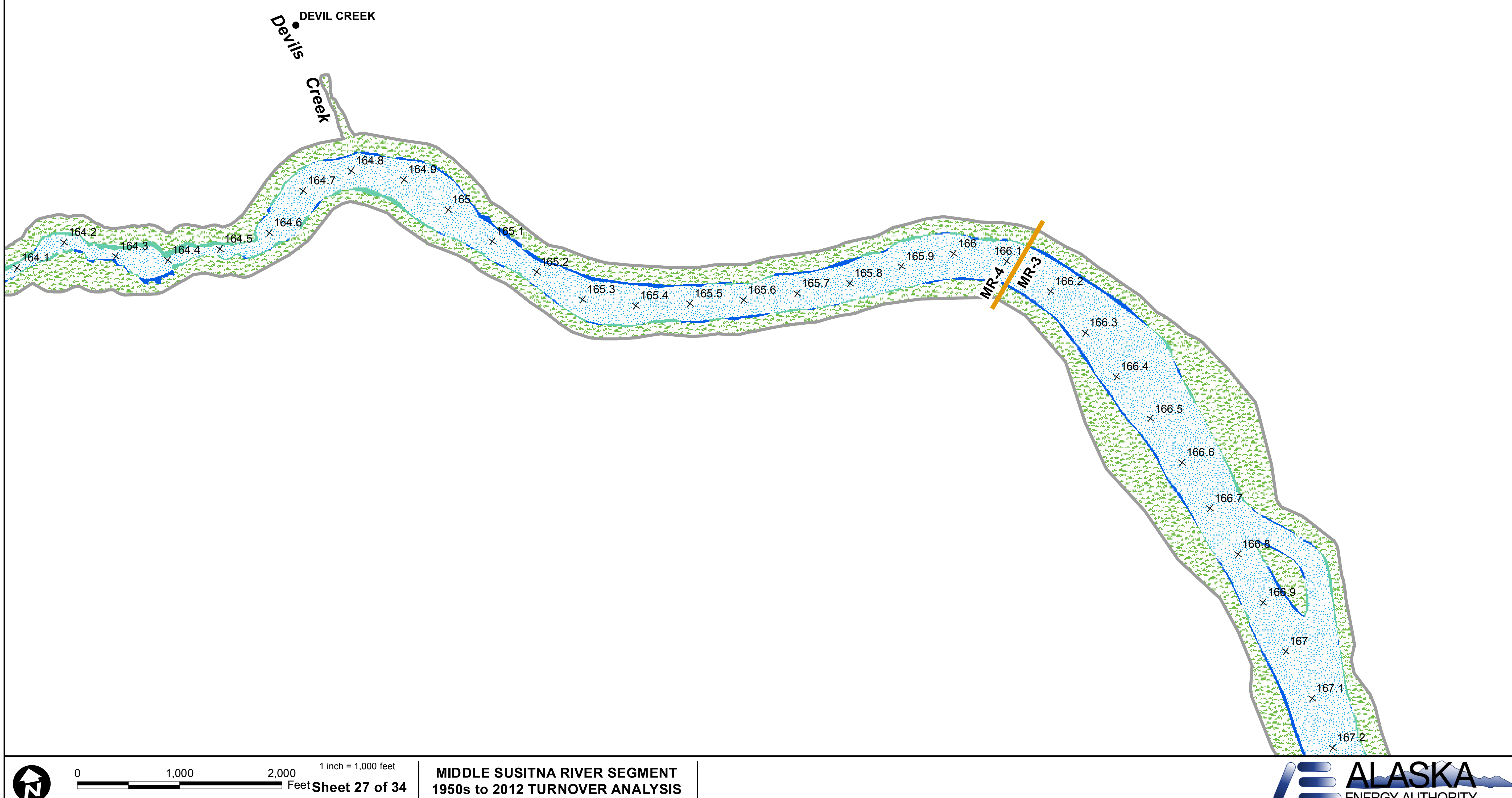

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MIDDLE SUSITNA RIVER SEGMENT
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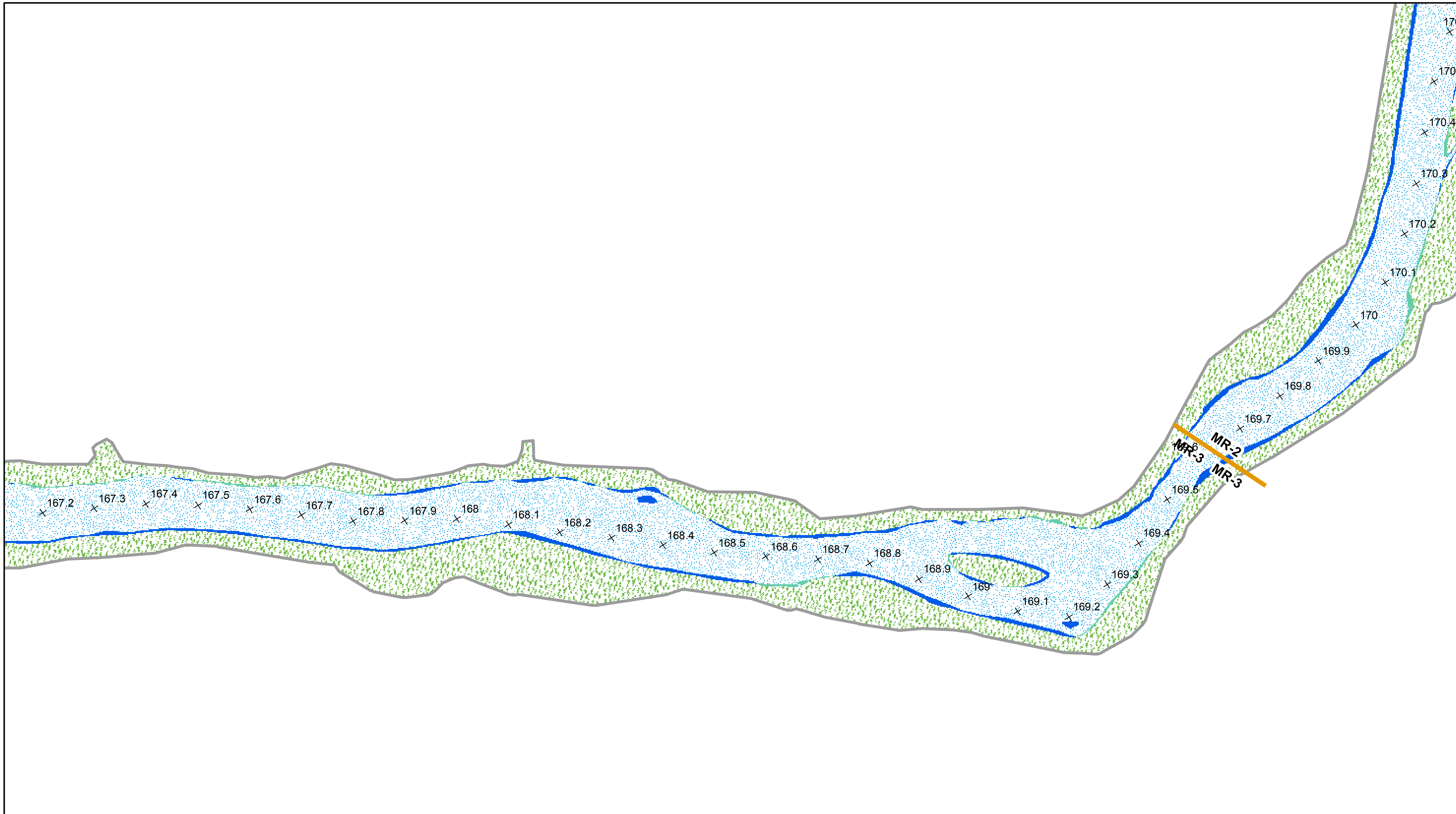

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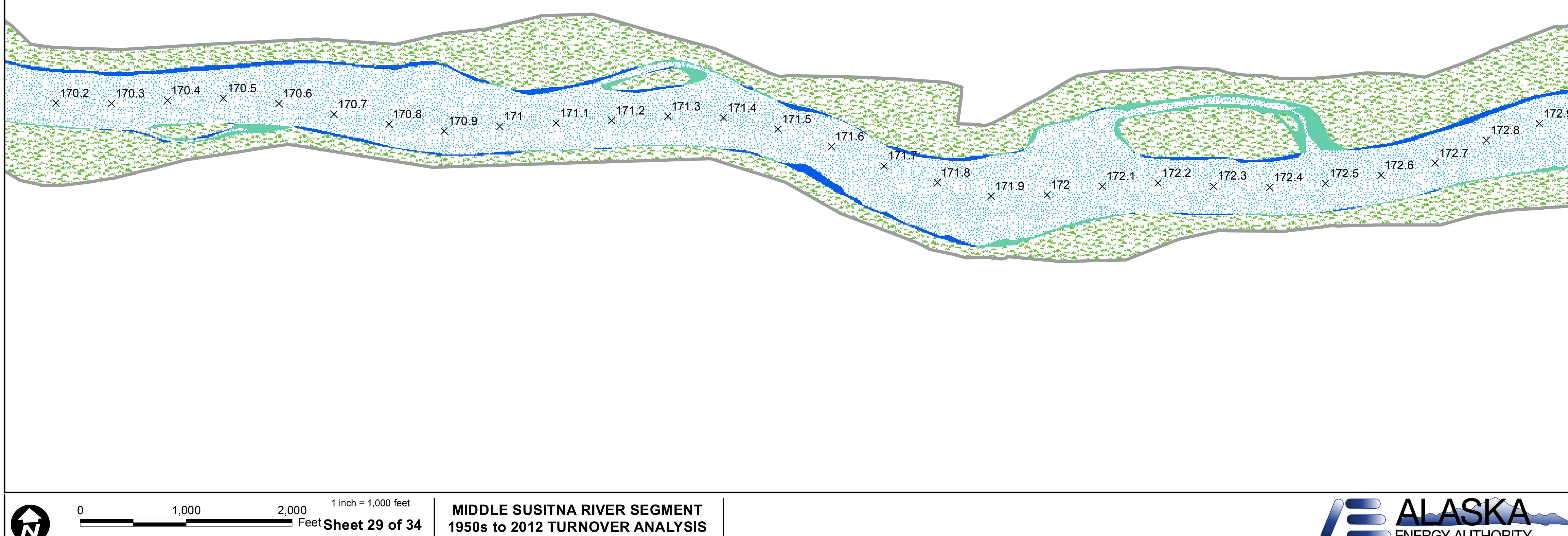

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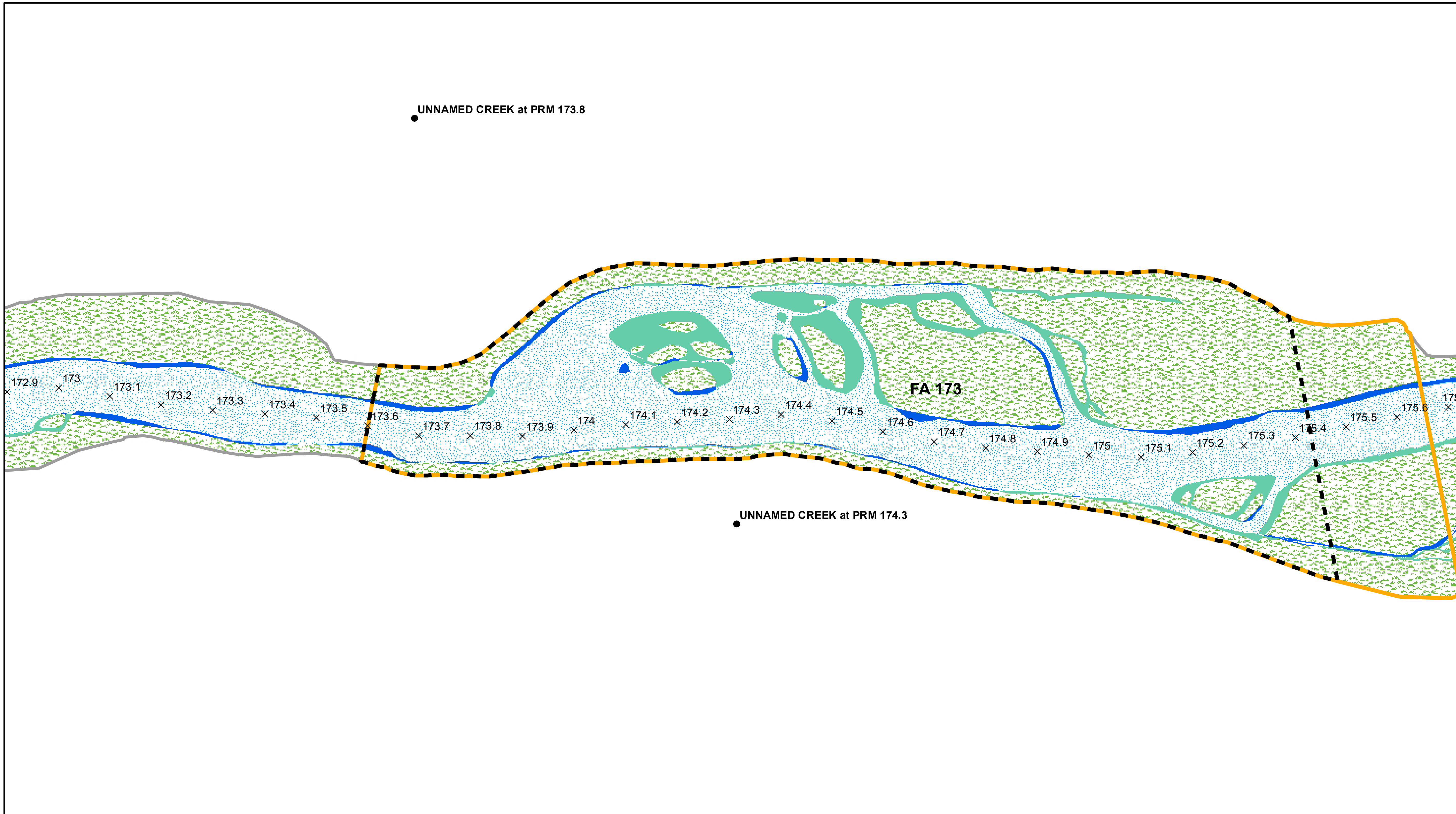

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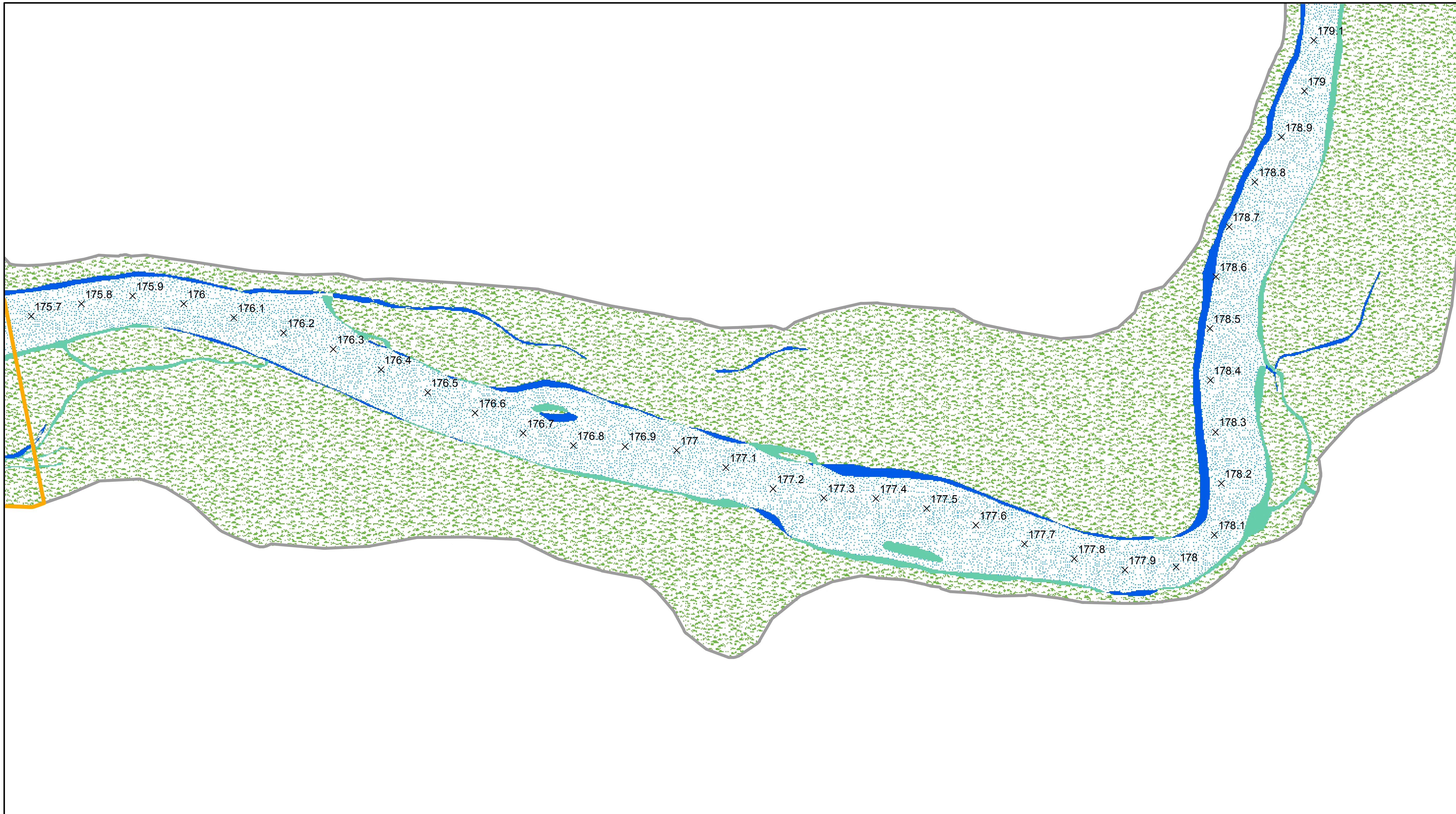

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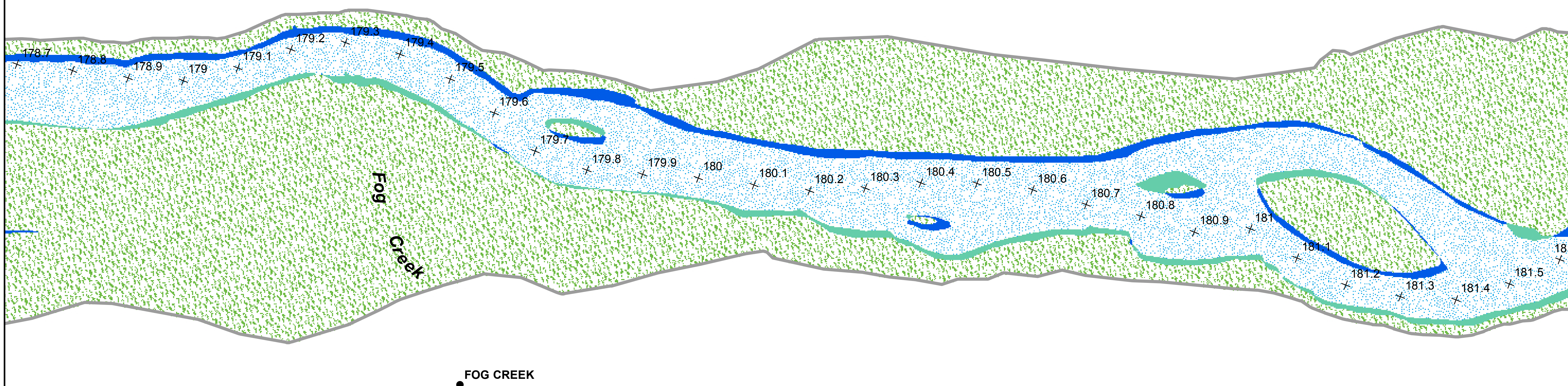

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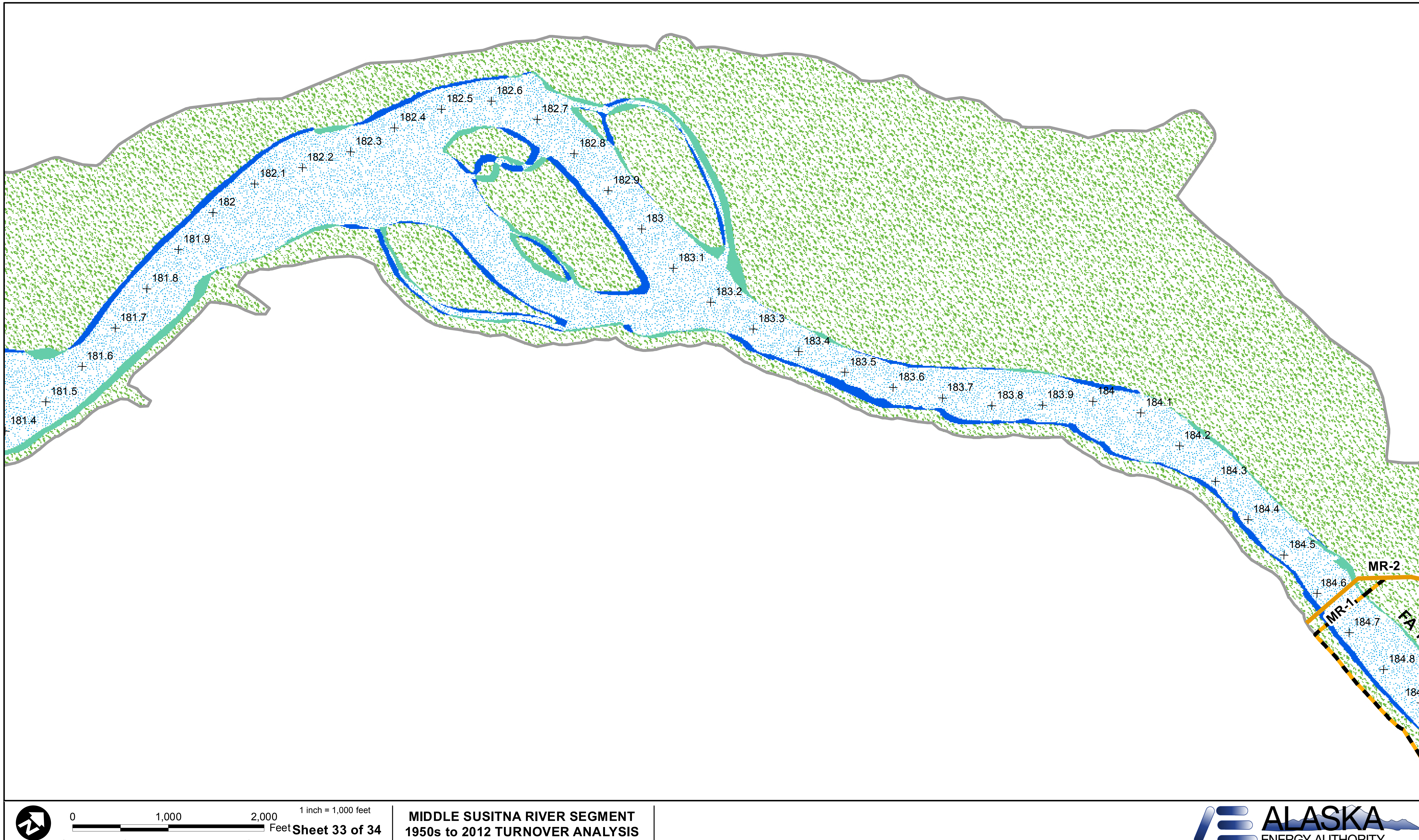

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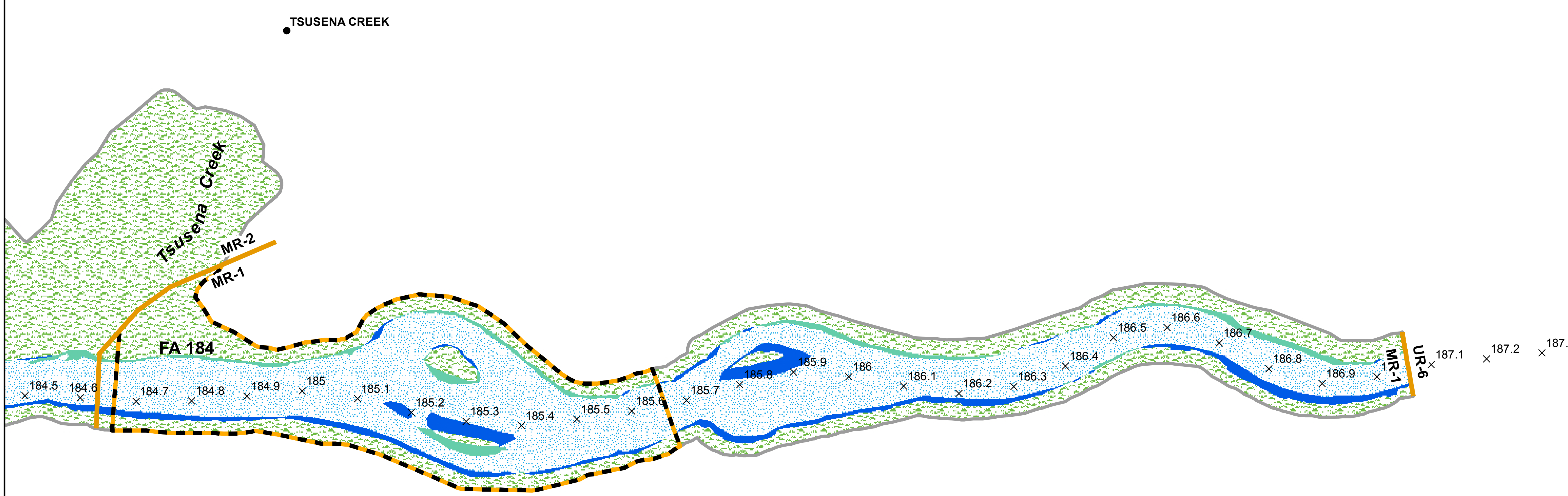

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