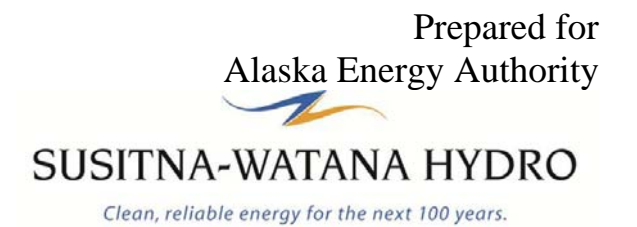


APPENDIX 4. 1983 LOWER SUSITNA RIVER SEGMENT GEOMORPHIC FEATURES

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

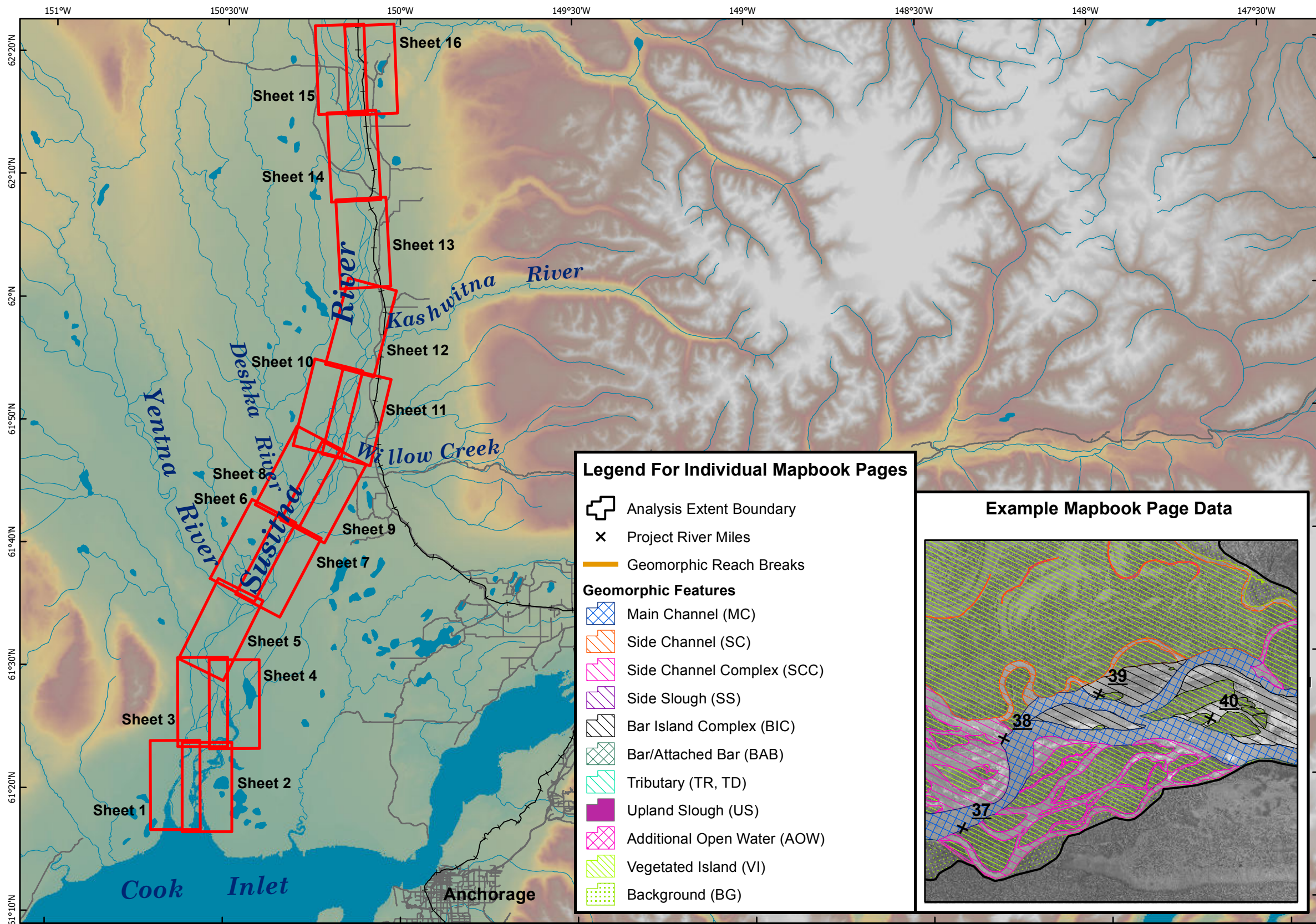
**Mapping of Geomorphic Features within the Middle and Lower  
Susitna River Segments from 1980s and 2012 Aerials**

**2012 Study Technical Memorandum**



Prepared by  
Tetra Tech Inc.

March 2013



## LOWER SUSITNA RIVER SEGMENT GEOMORPHIC FEATURES 1983

### Legend

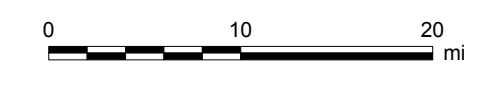
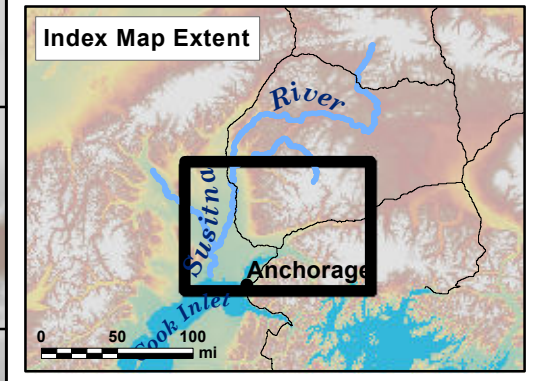
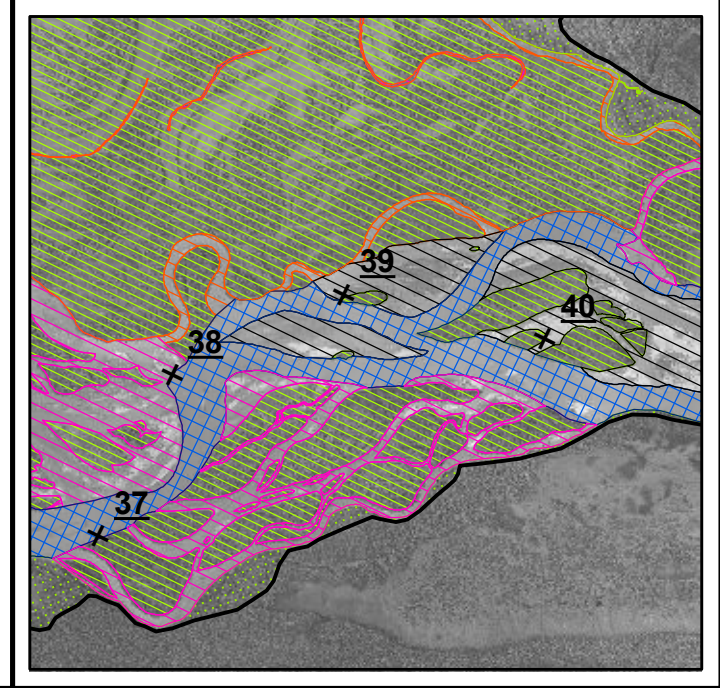
- Sheet Extents
- Roads
- +— Railroads
- ~ Rivers and Streams
- Waterbodies

Data Sources: See Map References

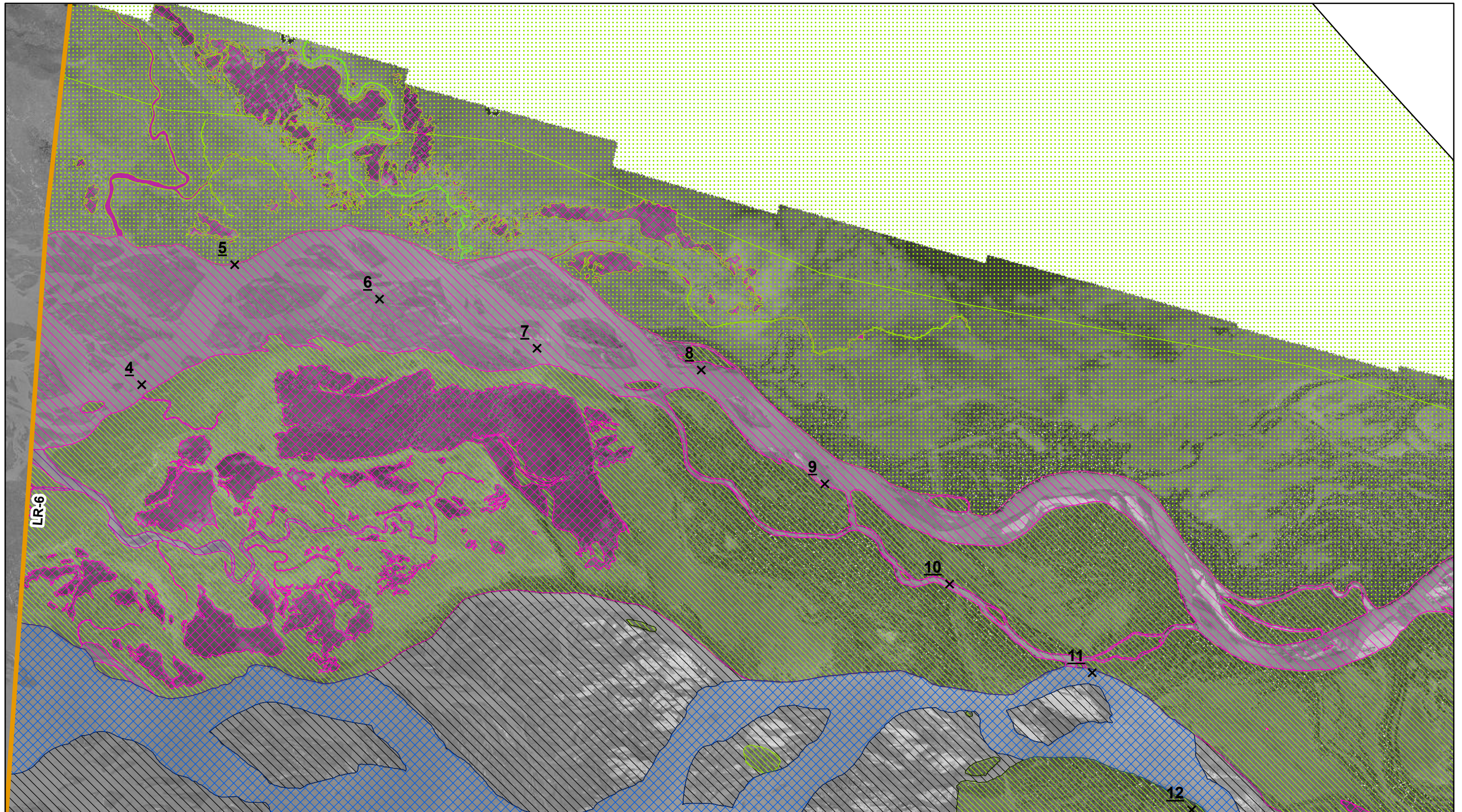
### Legend For Individual Mapbook Pages

- Analysis Extent Boundary
  - × Project River Miles
  - Geomorphic Reach Breaks
- Geomorphic Features**
- Main Channel (MC)
  - Side Channel (SC)
  - Side Channel Complex (SCC)
  - Side Slough (SS)
  - Bar Island Complex (BIC)
  - Bar/Attached Bar (BAB)
  - Tributary (TR, TD)
  - Upland Slough (US)
  - Additional Open Water (AOW)
  - Vegetated Island (VI)
  - Background (BG)

### Example Mapbook Page Data



Projection: NAD83 State Plane Alaska 4 FIPS 5004 (ft)  
 Date Created: 3/14/2013  
 Map Author: Tetra Tech  
 File: 1983\_MapbookGeomorph\_Lower\_v1.mxd



LR-6

4 x

5 x

6 x

7 x

8 x

9 x

10 x

11 x

12 x



0 3,000 6,000 Feet

See index page for legend and additional data information.

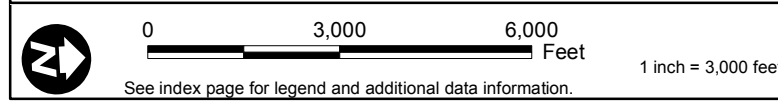
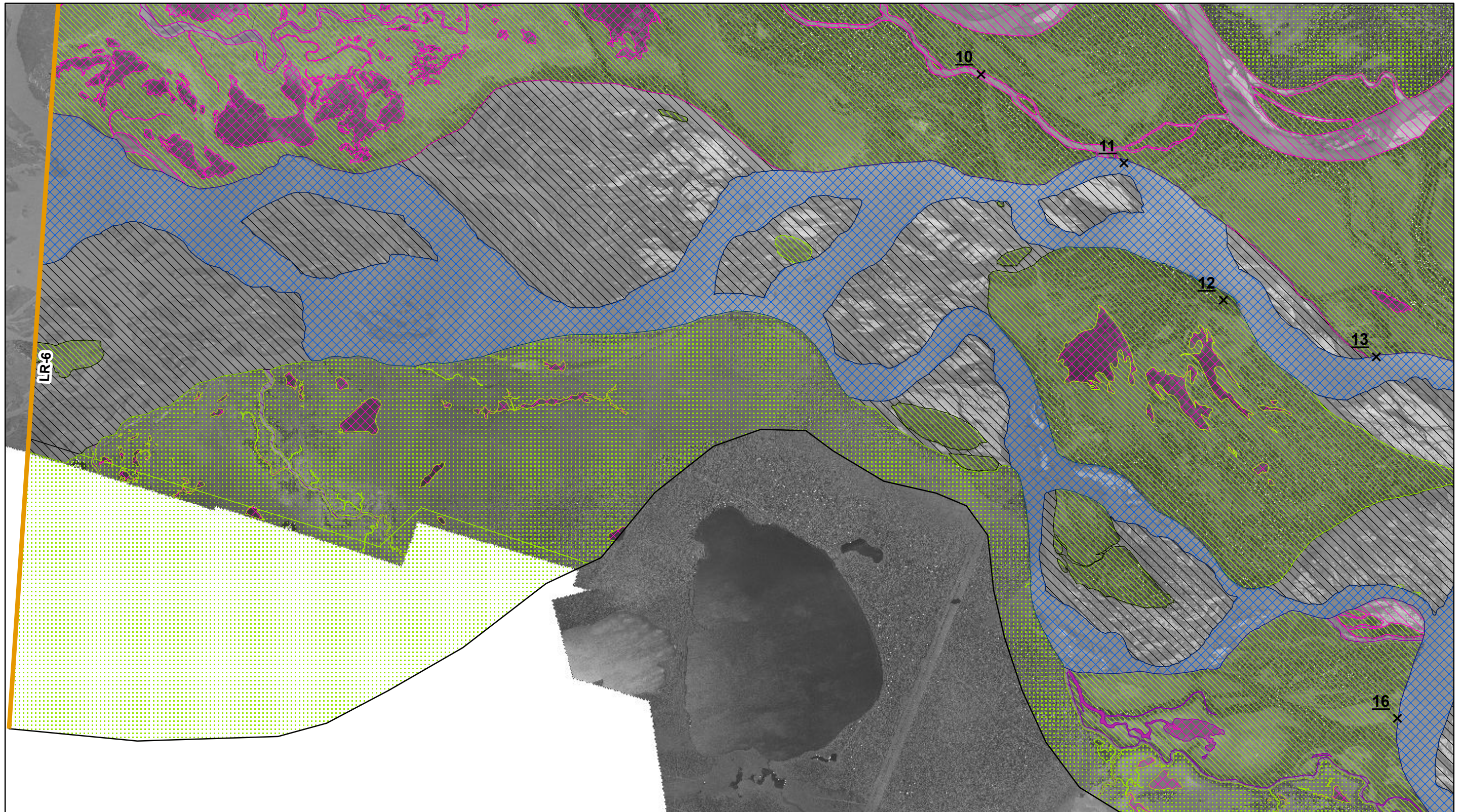
1 inch = 3,000 feet

Sheet 1 of 16

**LOWER SUSITNA RIVER SEGMENT  
1983 GEOMORPHIC FEATURES**

Location: Imagery Date, Discharge (Sunshine)  
PRM 0 - 102: 09/06/1983, 36,600 cfs



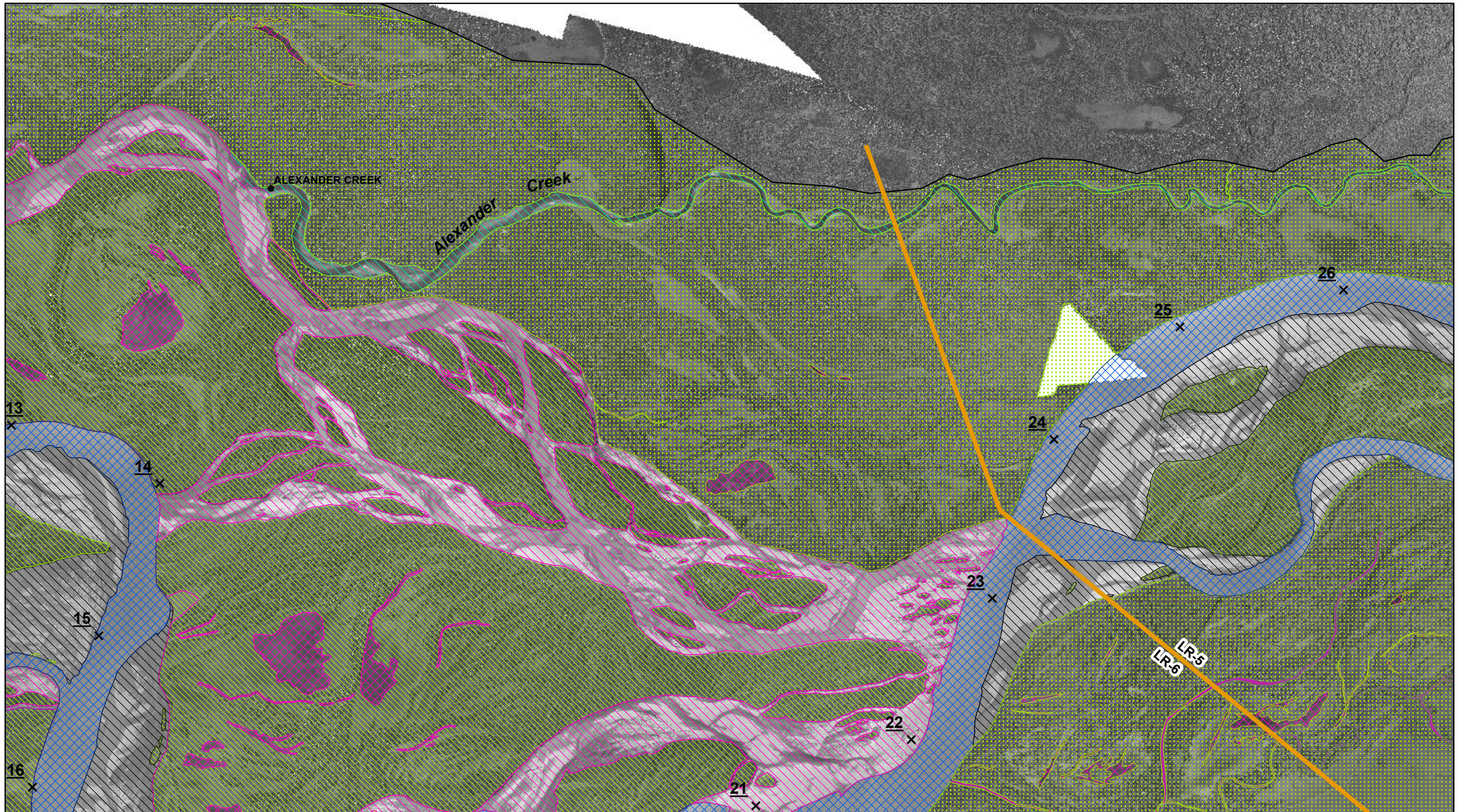


Sheet 2 of 16

**LOWER SUSITNA RIVER SEGMENT  
1983 GEOMORPHIC FEATURES**

Location: Imagery Date, Discharge (Sunshine)  
PRM 0 - 102: 09/06/1983, 36,600 cfs







0 3,000 6,000  
 Feet

1 inch = 3,000 feet

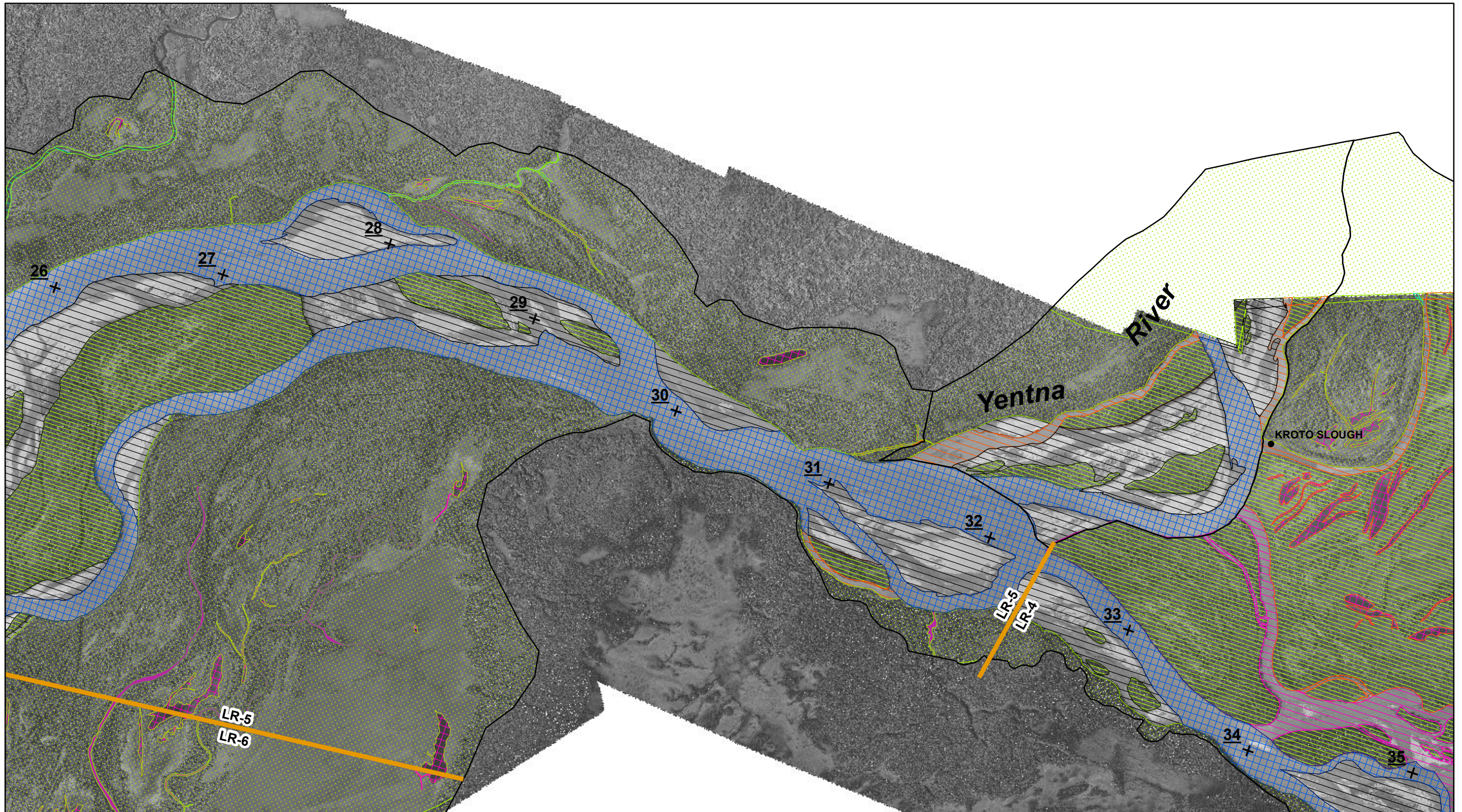
See index page for legend and additional data information.

Sheet 4 of 16

**LOWER SUSITNA RIVER SEGMENT  
 1983 GEOMORPHIC FEATURES**

Location: Imagery Date, Discharge (Sunshine)  
 PRM 0 - 102: 09/06/1983, 36,600 cfs





0 3,000 6,000 Feet

1 inch = 3,000 feet

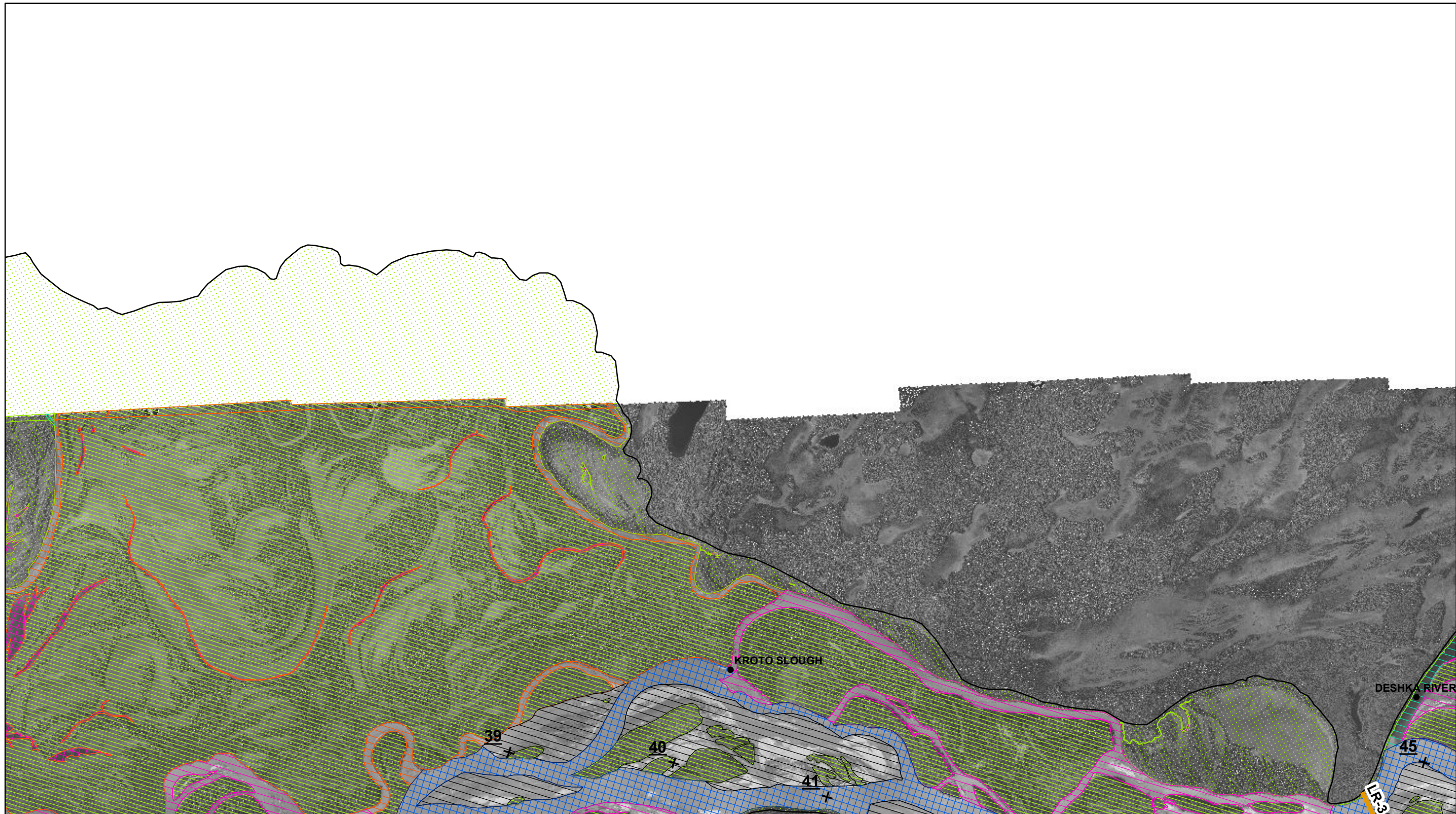
See index page for legend and additional data information.

Sheet 5 of 16

**LOWER SUSITNA RIVER SEGMENT  
1983 GEOMORPHIC FEATURES**

Location: Imagery Date, Discharge (Sunshine)  
PRM 0 - 102: 09/06/1983, 36,600 cfs





0 3,000 6,000 Feet

1 inch = 3,000 feet

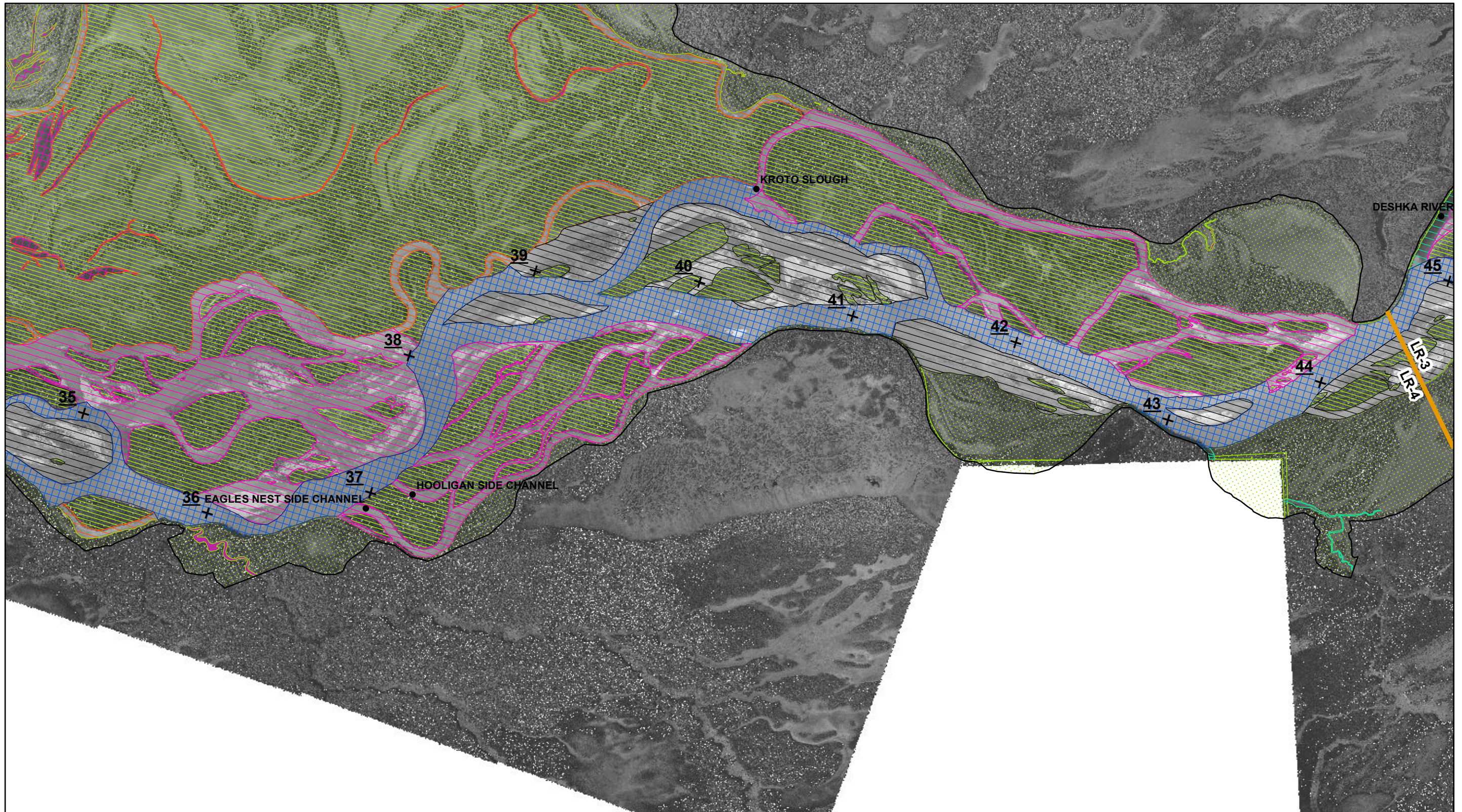
Sheet 6 of 16

**LOWER SUSITNA RIVER SEGMENT  
1983 GEOMORPHIC FEATURES**

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PRM 0 - 102: 09/06/1983, 36,600 cfs







0 3,000 6,000 Feet

See index page for legend and additional data information.

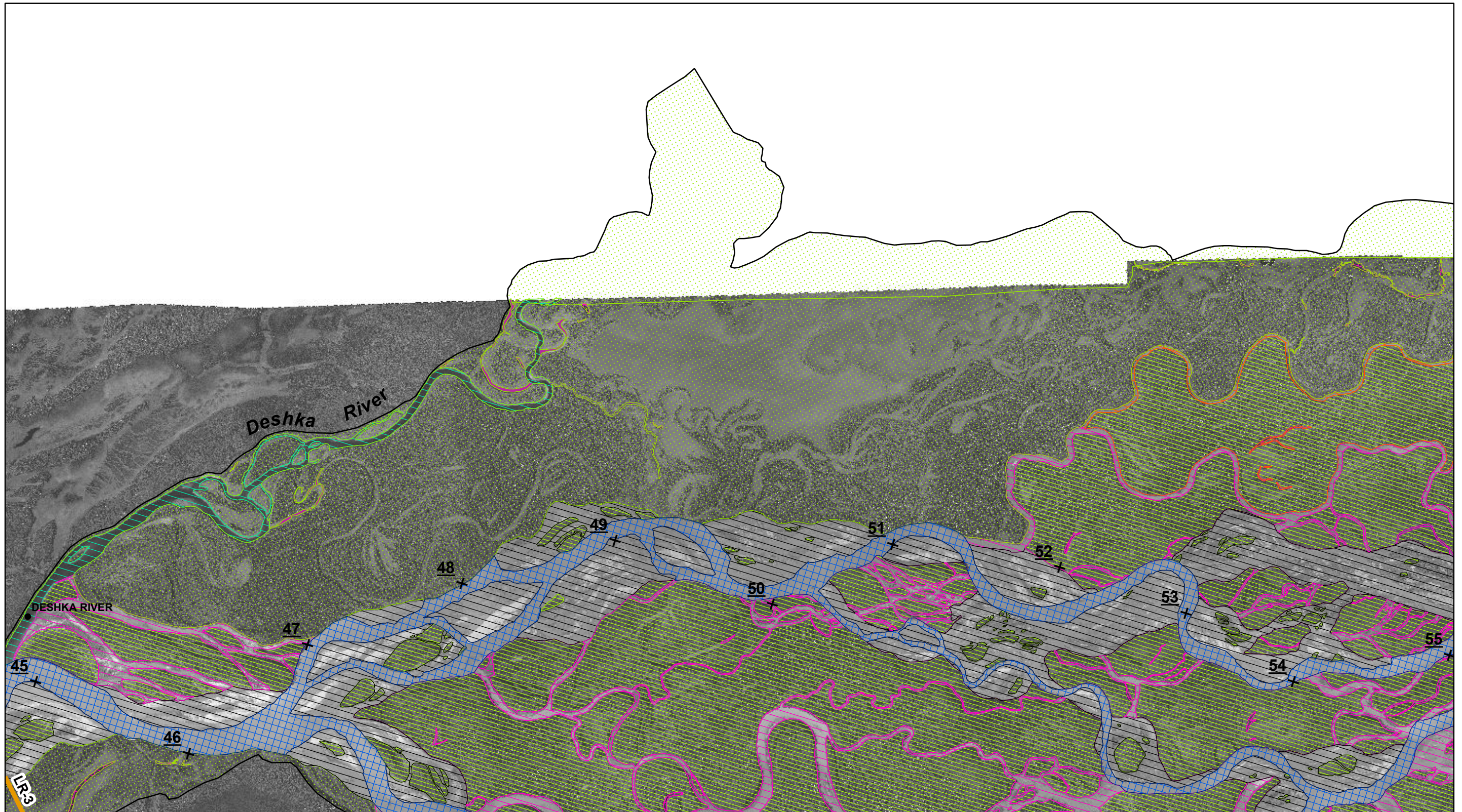
1 inch = 3,000 feet


Sheet 7 of 16

**LOWER SUSITNA RIVER SEGMENT  
1983 GEOMORPHIC FEATURES**

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PRM 0 - 102: 09/06/1983, 36,600 cfs





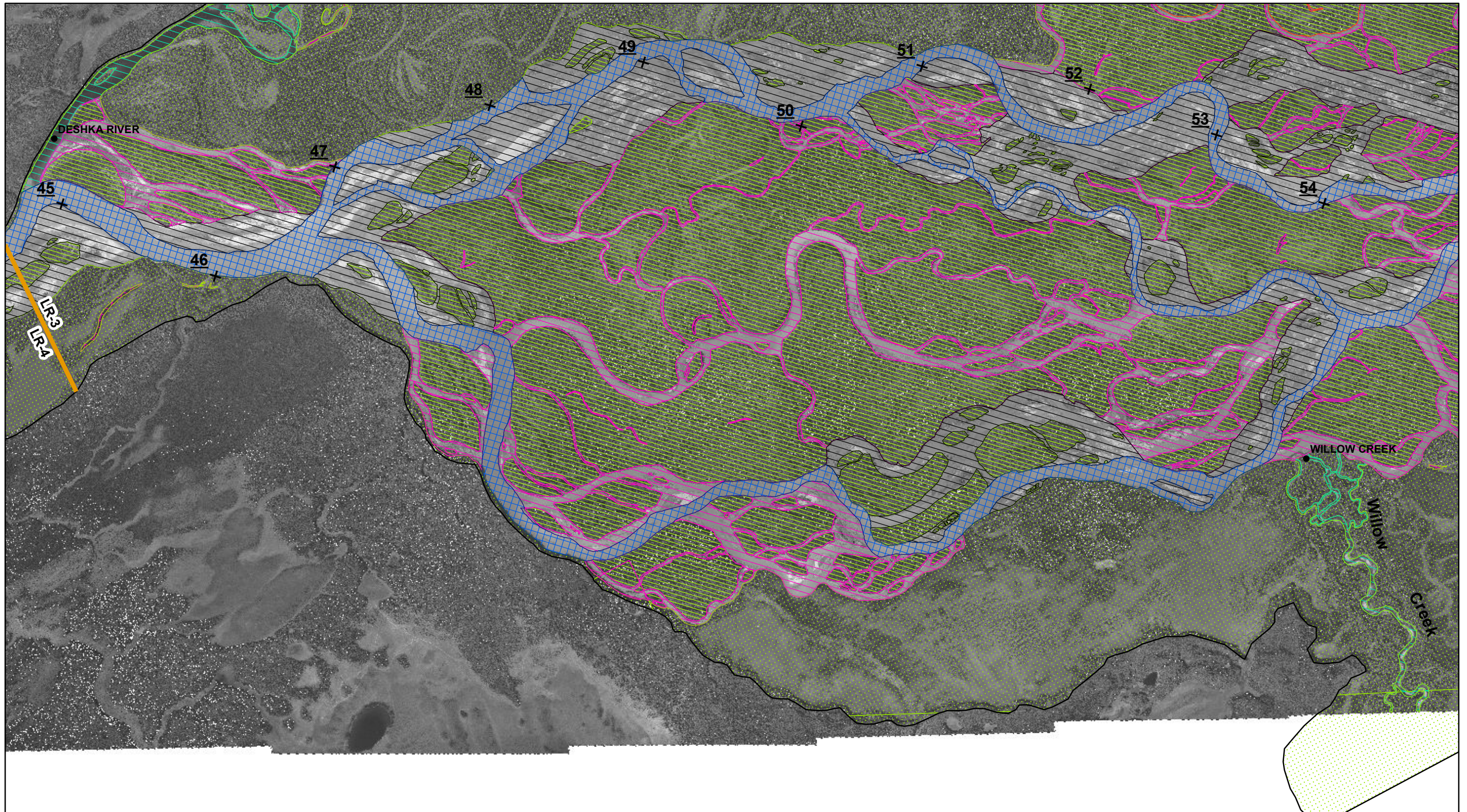

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 1 inch = 3,000 feet  
 See index page for legend and additional data information.

Sheet 8 of 16

**LOWER SUSITNA RIVER SEGMENT  
1983 GEOMORPHIC FEATURES**

Location: \_\_\_\_\_ Imagery Date: \_\_\_\_\_ Discharge (Sunshine)  
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Feet

1 inch = 3,000 feet

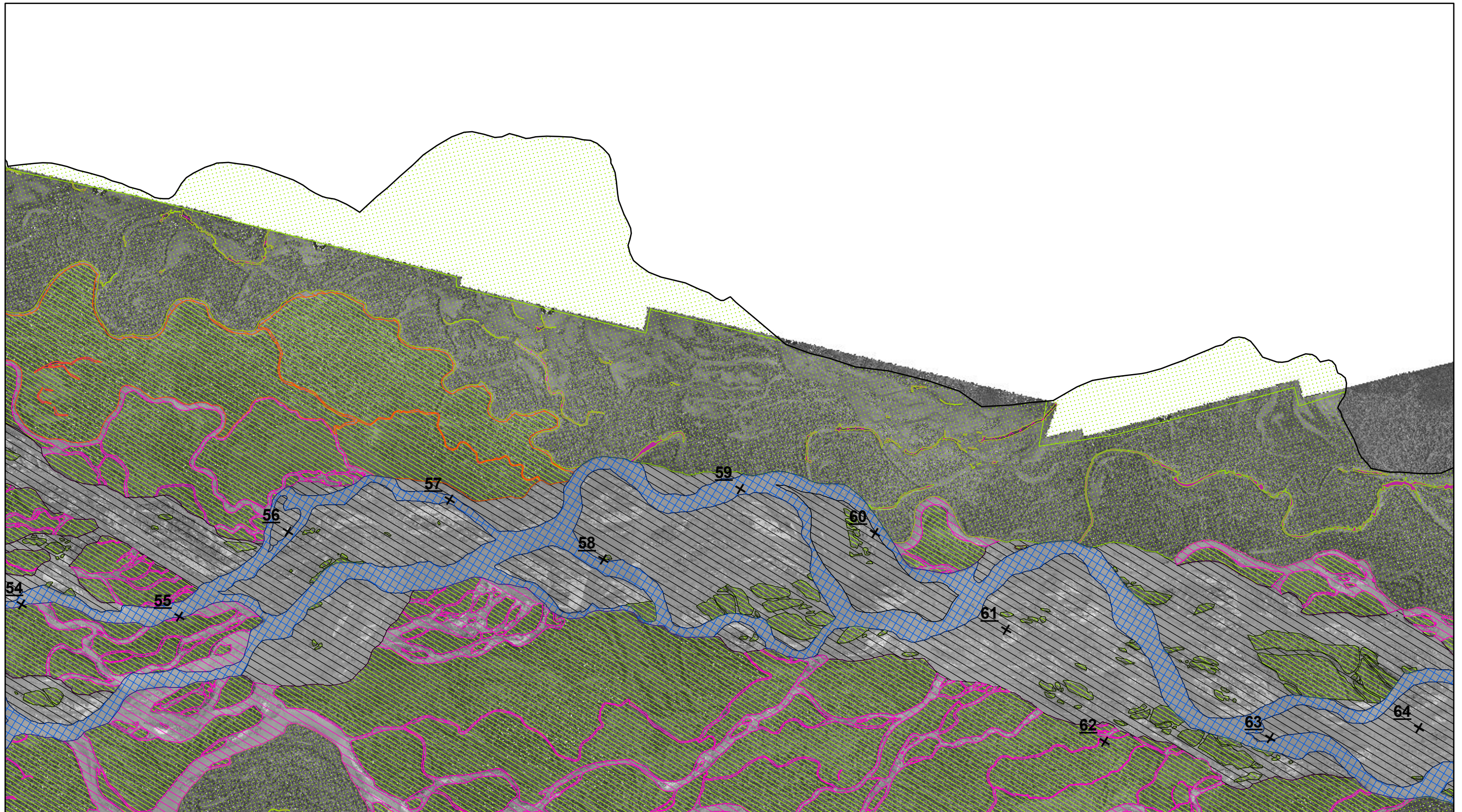
See index page for legend and additional data information.

Sheet 9 of 16

**LOWER SUSITNA RIVER SEGMENT  
1983 GEOMORPHIC FEATURES**

Location: Imagery Date, Discharge (Sunshine)  
PRM 0 - 102: 09/06/1983, 36,600 cfs





0 3,000 6,000  
Feet

1 inch = 3,000 feet

Sheet 10 of 16

**LOWER SUSITNA RIVER SEGMENT  
1983 GEOMORPHIC FEATURES**

Location: \_\_\_\_\_ Imagery Date: \_\_\_\_\_ Discharge (Sunshine)  
PRM 0 - 102: 09/06/1983, 36,600 cfs



See index page for legend and additional data information.



0 3,000 6,000 Feet

See index page for legend and additional data information.

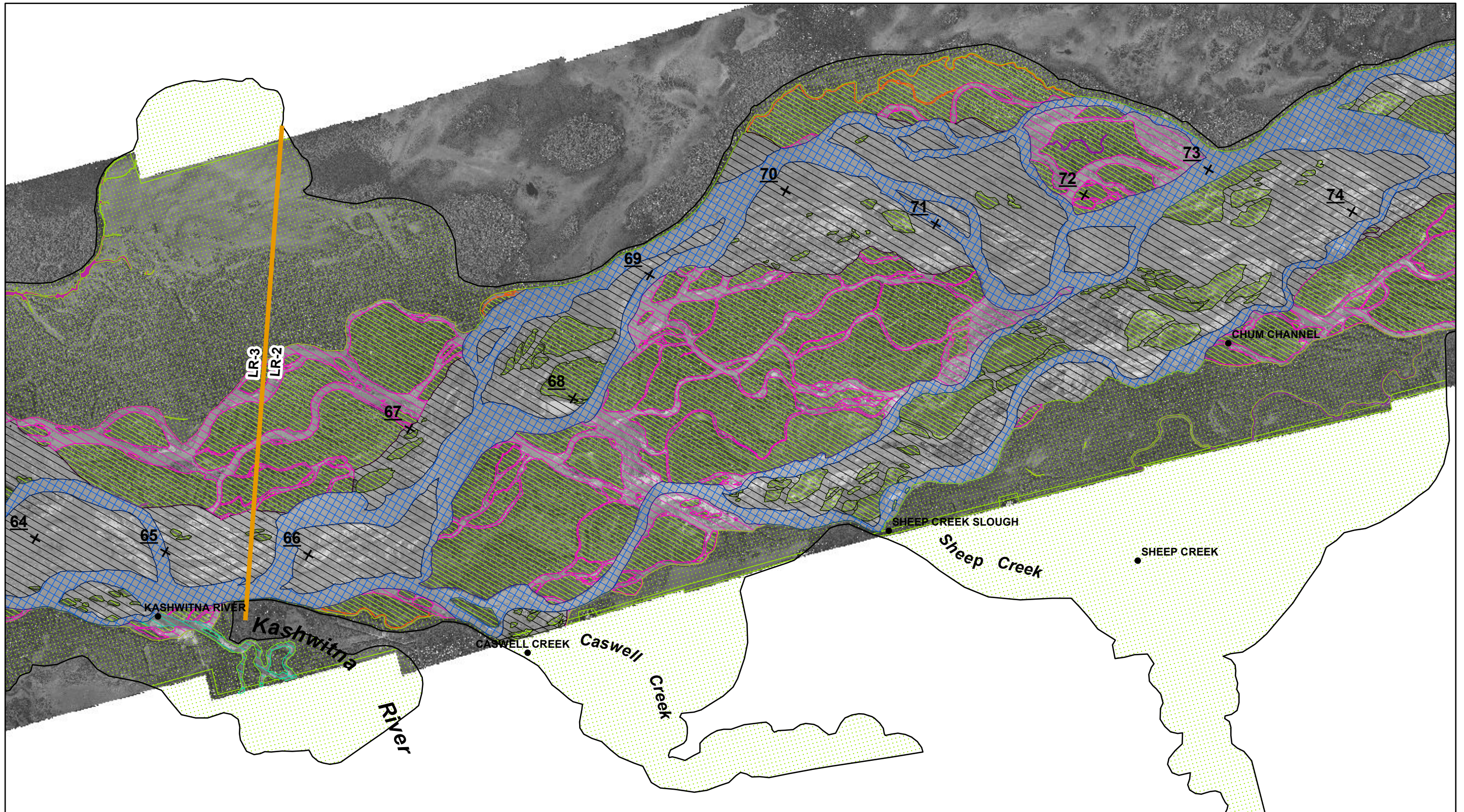
1 inch = 3,000 feet

Sheet 11 of 16

**LOWER SUSITNA RIVER SEGMENT  
1983 GEOMORPHIC FEATURES**

Location: Imagery Date, Discharge (Sunshine)  
PRM 0 - 102: 09/06/1983, 36,600 cfs





0 3,000 6,000 Feet

1 inch = 3,000 feet

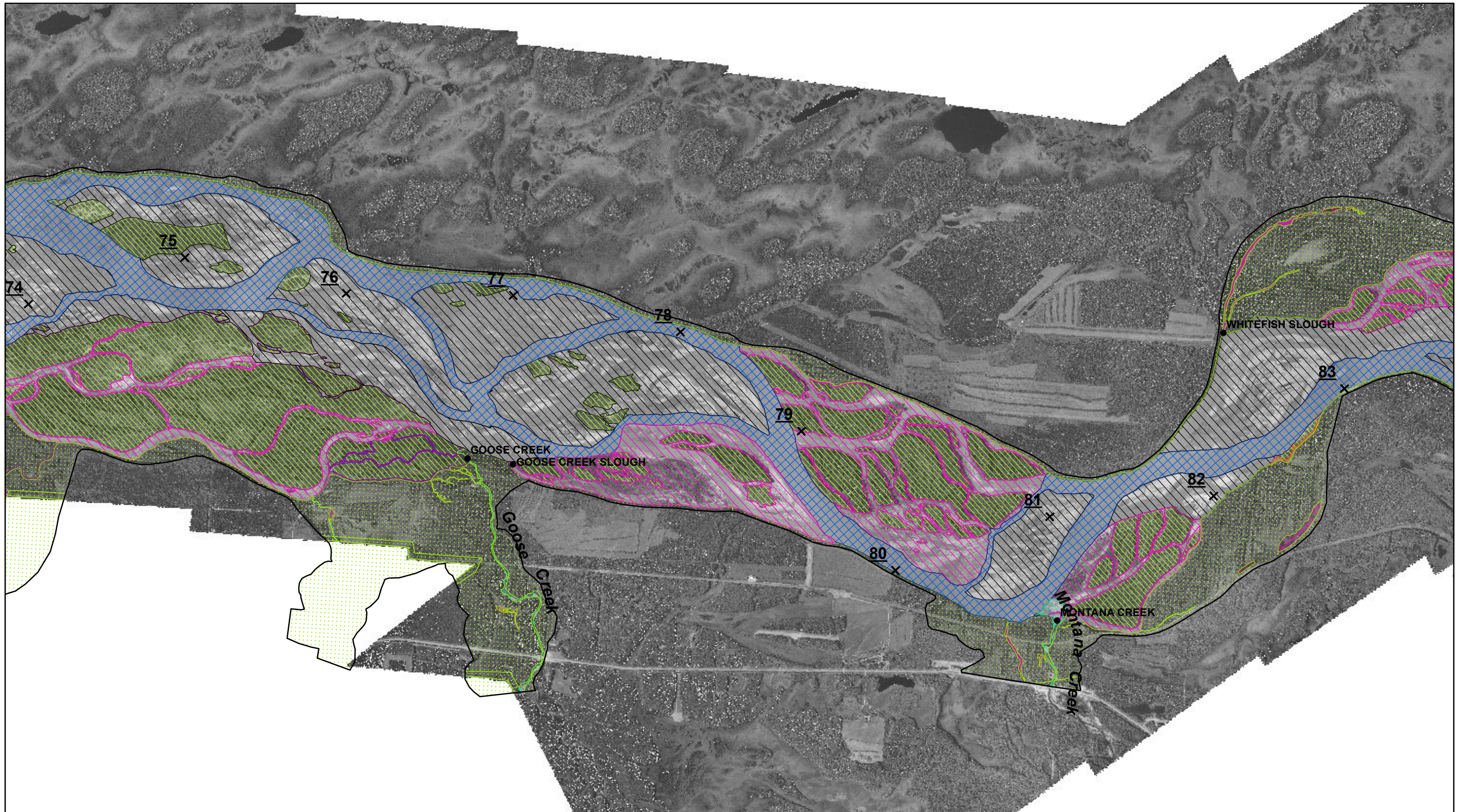
See index page for legend and additional data information.

Sheet 12 of 16

**LOWER SUSITNA RIVER SEGMENT  
1983 GEOMORPHIC FEATURES**

Location: \_\_\_\_\_ Imagery Date: \_\_\_\_\_ Discharge (Sunshine)  
PRM 0 - 102: 09/06/1983, 36,600 cfs





0 3,000 6,000  
Feet

See index page for legend and additional data information.

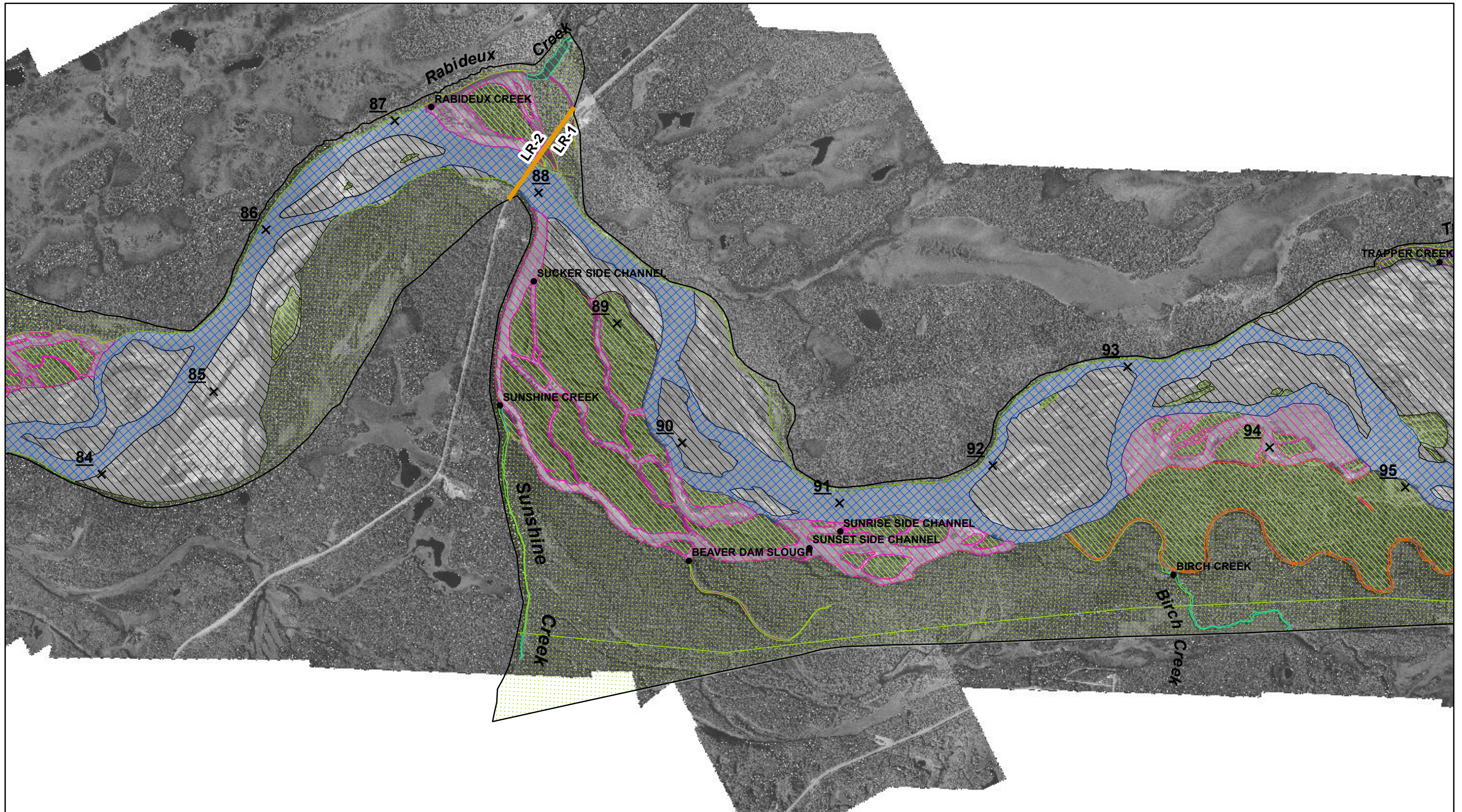
1 inch = 3,000 feet

Sheet 13 of 16

**LOWER SUSITNA RIVER SEGMENT  
1983 GEOMORPHIC FEATURES**

Location: Imagery Date, Discharge (Sunshine)  
PRM 0 - 102: 09/06/1983, 36,600 cfs





0 3,000 6,000 Feet  
1 inch = 3,000 feet

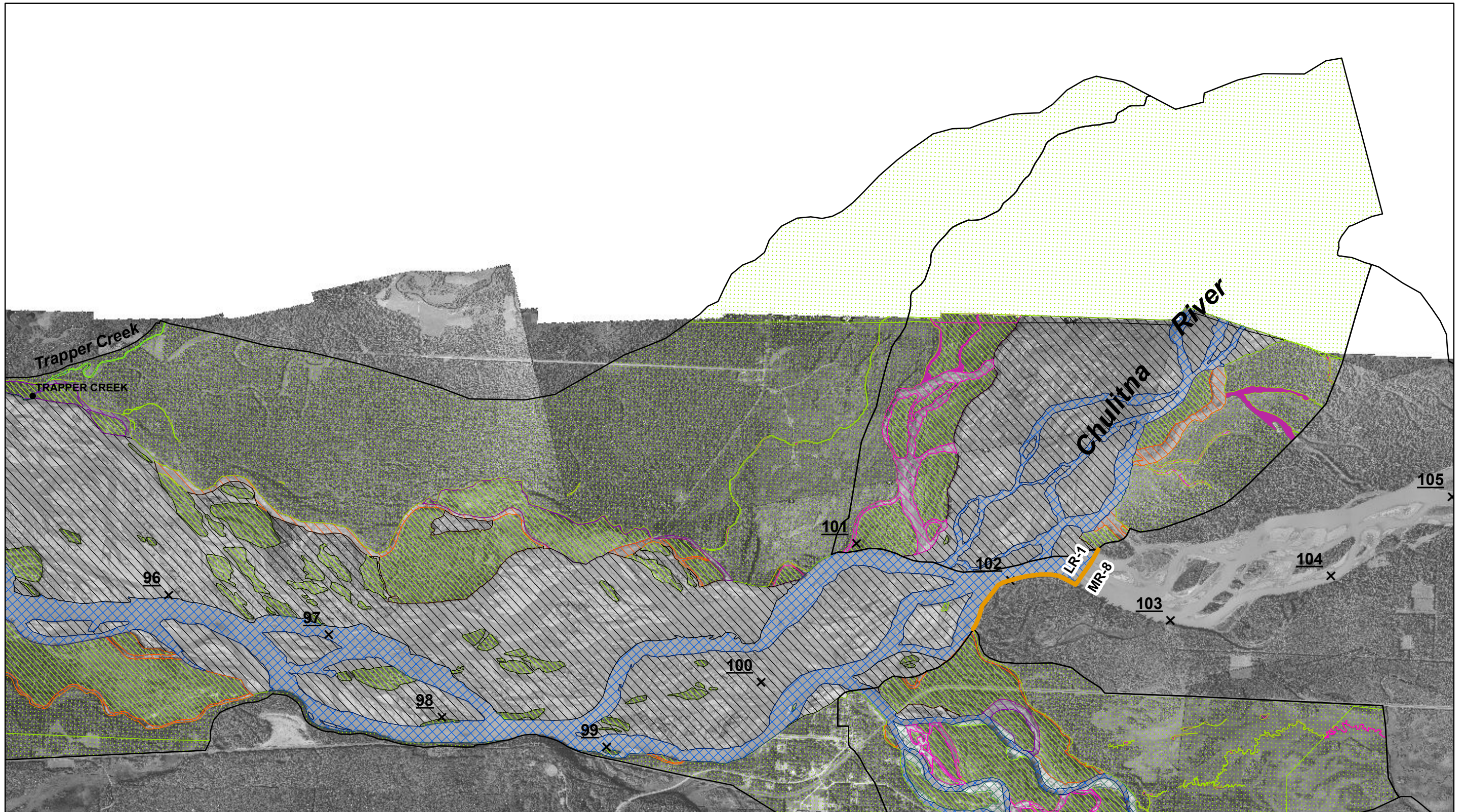
Sheet 14 of 16

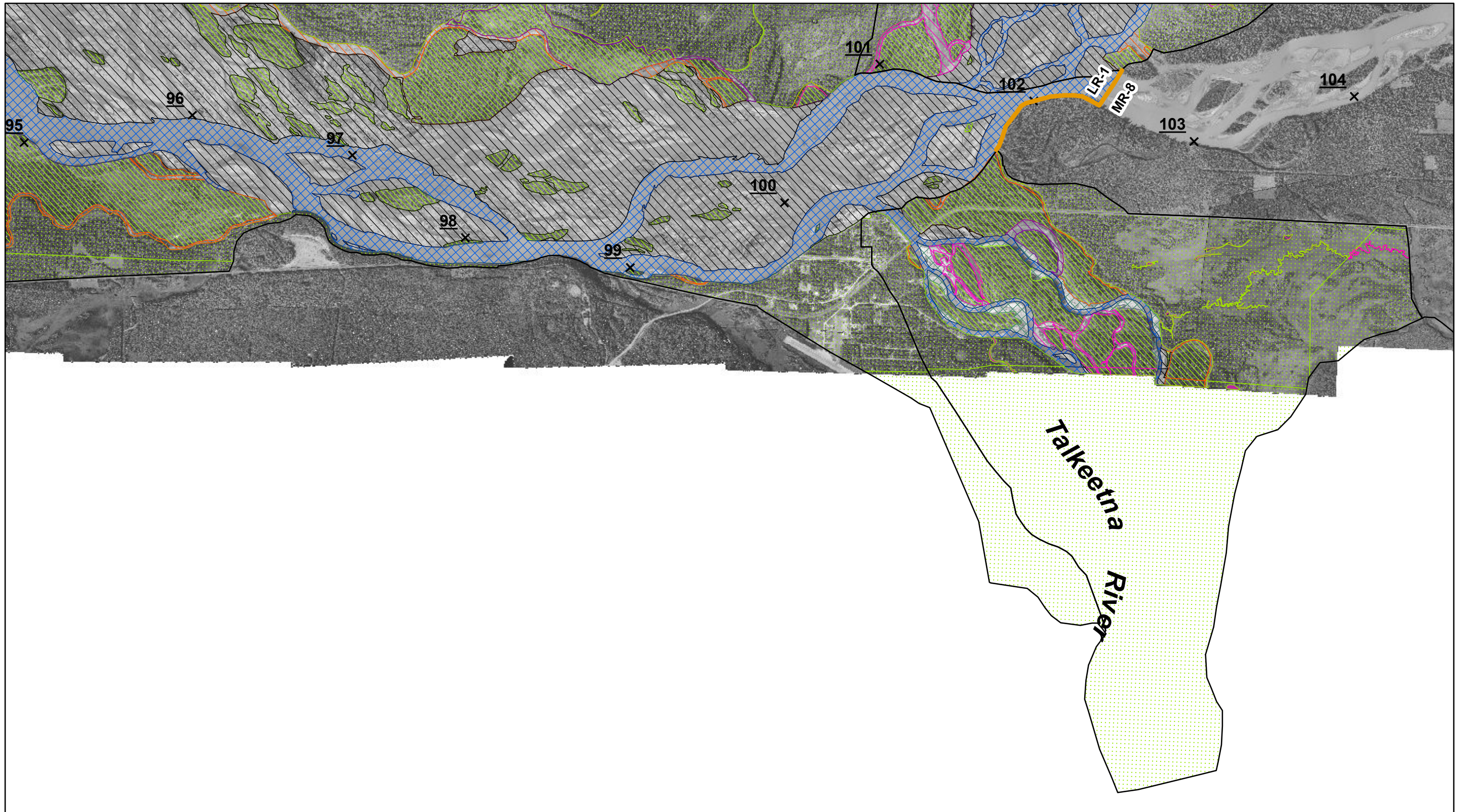
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1983 GEOMORPHIC FEATURES**

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PRM 0 - 102: 09/06/1983, 36,600 cfs









0 3,000 6,000 Feet  
 1 inch = 3,000 feet  
 See index page for legend and additional data information.

Sheet 16 of 16

**LOWER SUSITNA RIVER SEGMENT  
 1983 GEOMORPHIC FEATURES**

Location: Imagery Date, Discharge (Sunshine)  
 PRM 0 - 102: 09/06/1983, 36,600 cfs

