

# WC Stopover/Flyover Update


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April 2025 TAC Meeting



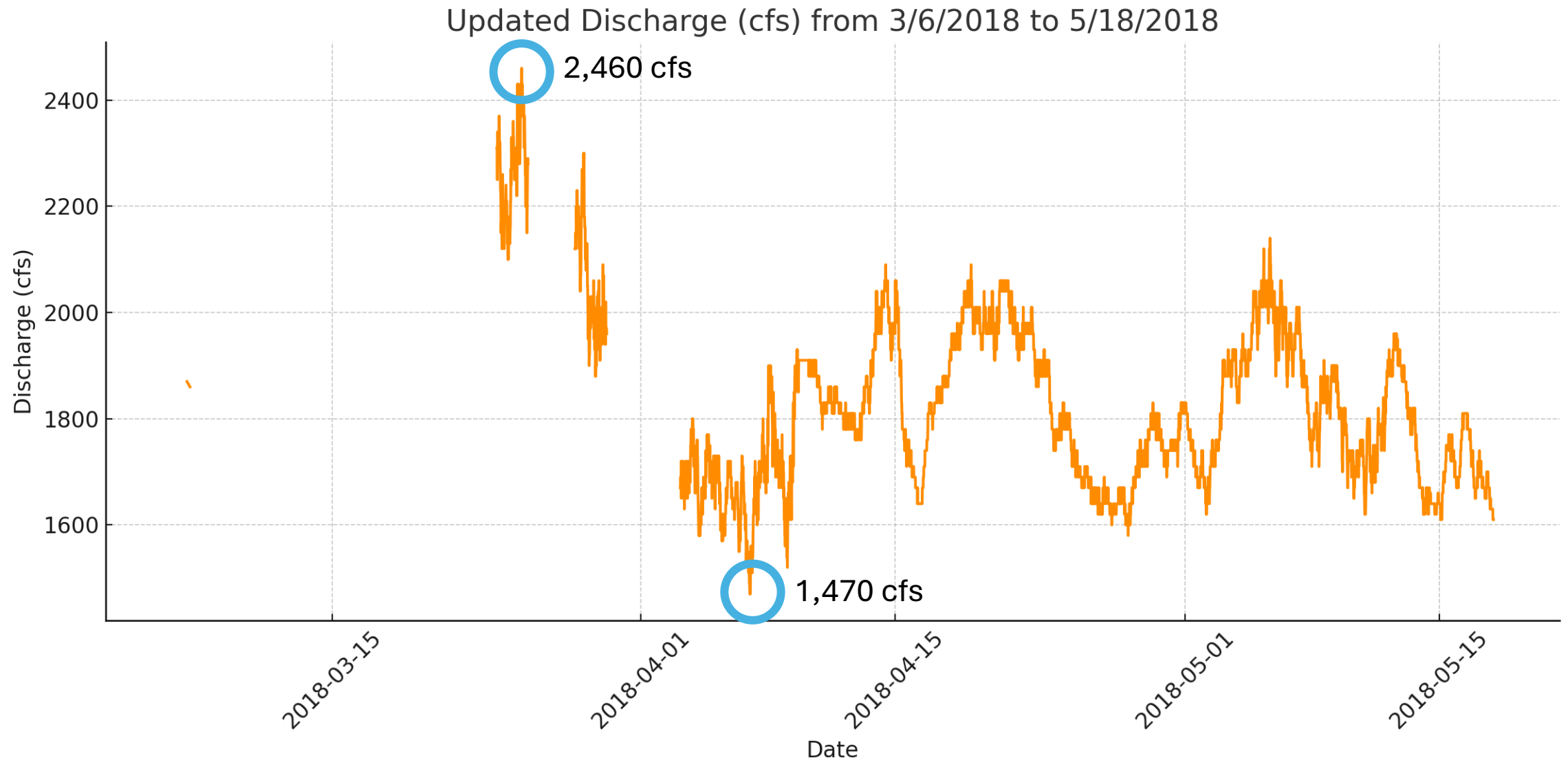


# On-Channel Variables

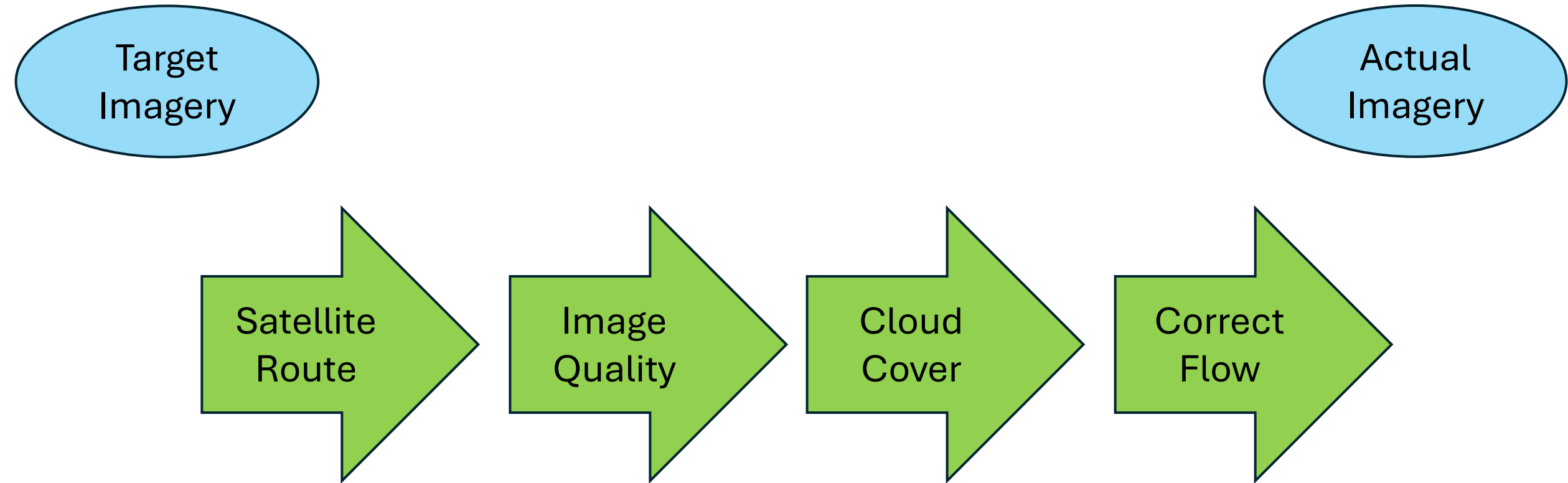
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- An aerial photograph of a wide, braided river system. The river consists of multiple interconnected channels separated by sandbars and small islands. The water is a light blue-grey color, and the sandbars are a light tan color. The surrounding landscape is flat and appears to be a mix of bare earth and sparse vegetation. In the upper right, there is a small cluster of trees with yellow and orange foliage, suggesting an autumn setting. The overall scene illustrates a natural river channel with significant sediment deposition and channel migration.
- Unforested Channel Width
  - Unvegetated Channel Width\*
  - Wetted Channel Width

# Goals for Land Cover Classification

- Low and High flows within a migration season



# Challenges to Acquire Imagery



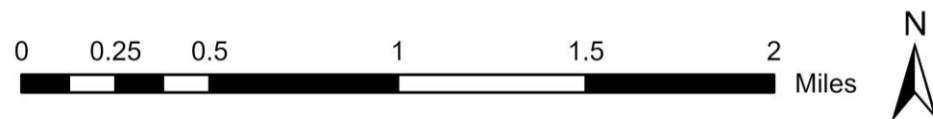
# Minimum Flow Imagery – Spring 2018

Target Imagery Date: 4/7/2018

Actual Imagery Dates: 6/2/18 – 6/8/18

Target Flow: 1470 cfs

Actual Flow: 1200 – 1600 cfs

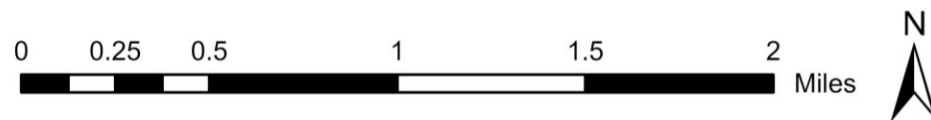




# Imagery Acquisition for Spring and Fall 2018 – Results

Imagery during growing season can be 30-45 days from target date

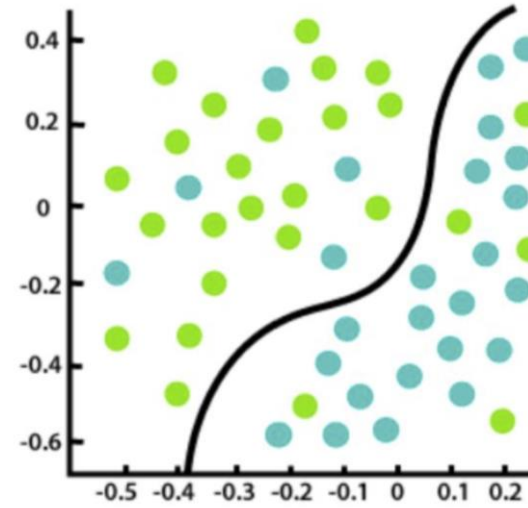
Flows within 20% of actual low or high flows



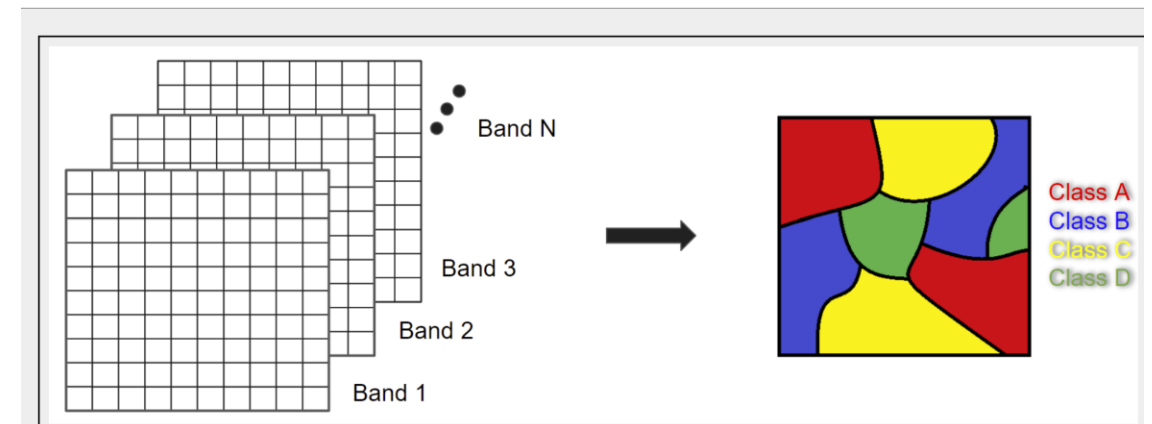
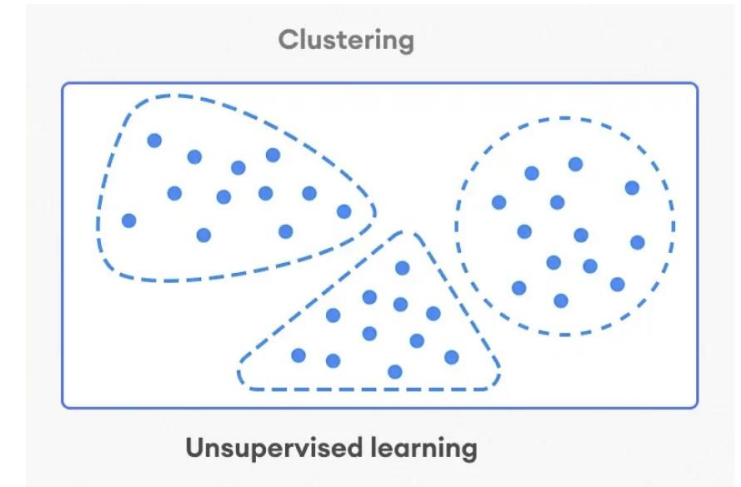
# Imagery Classification

Supervised classification

Unsupervised classification



Classification

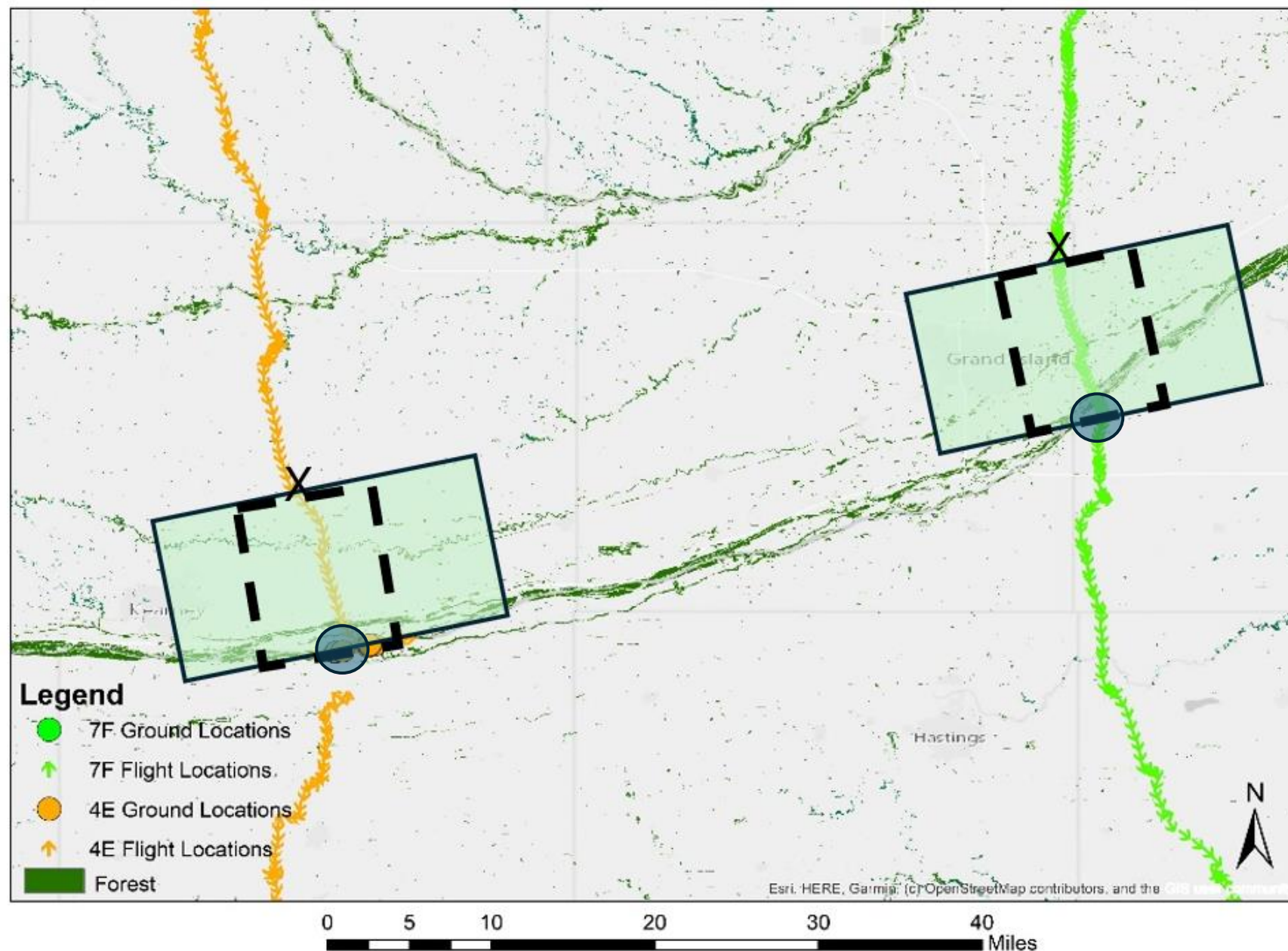


# Minimum Flow – Spring 2018





# Multiple Scales to Assess Variables



# Minimum Flow – Spring 2018 (Unvegetated Widths)

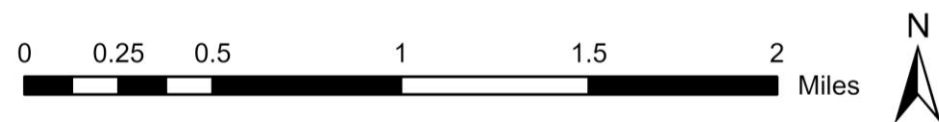
Auto Generated Max Unveg Width: 768 ft

Photo-Interpreted Max Unveg Width: 794 ft





# Assessing Wetted Width – Spring 2018



# Wetted Width – Spring 2018

Minimum Wetted Width – 571 ft (1200 – 1600 cfs)

Maximum Wetted Width – 696 ft (2000 – 2200 cfs)





# Next Steps

- Imagery and landcover for each river throughout period
- On-channel variables for each stopover and flyover
- Analysis using non-habitat variables and on-channel variables
- Off-channel variables