

Instream Flow Reservations: Protecting Fish & Wildlife Habitat in the Mat-Su Basin



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A scenic view of a river with a rocky bed and lush green banks. The water is clear, reflecting the surrounding vegetation. The sky is not visible, but the overall atmosphere is peaceful and natural.

Instream Flow Program

To sustain healthy fish and wildlife habitat by protecting **instream flow**

Reservation of Water

Alaska Statute 46.15.145

- **Water management tool** to protect stream flow and lake levels
- **Instream flow**: volume of water needed to protect resources and values
 - Fish and wildlife habitat, migration, and propagation
 - Recreational activities
 - Navigation and transportation
 - Sanitation and water quality



June 18, 2019



August 22, 2017

Kroto Creek



May 20, 2019



May 29, 2018



14 cfs

June 18, 2019



67 cfs

August 22, 2017

Kroto Creek



104 cfs

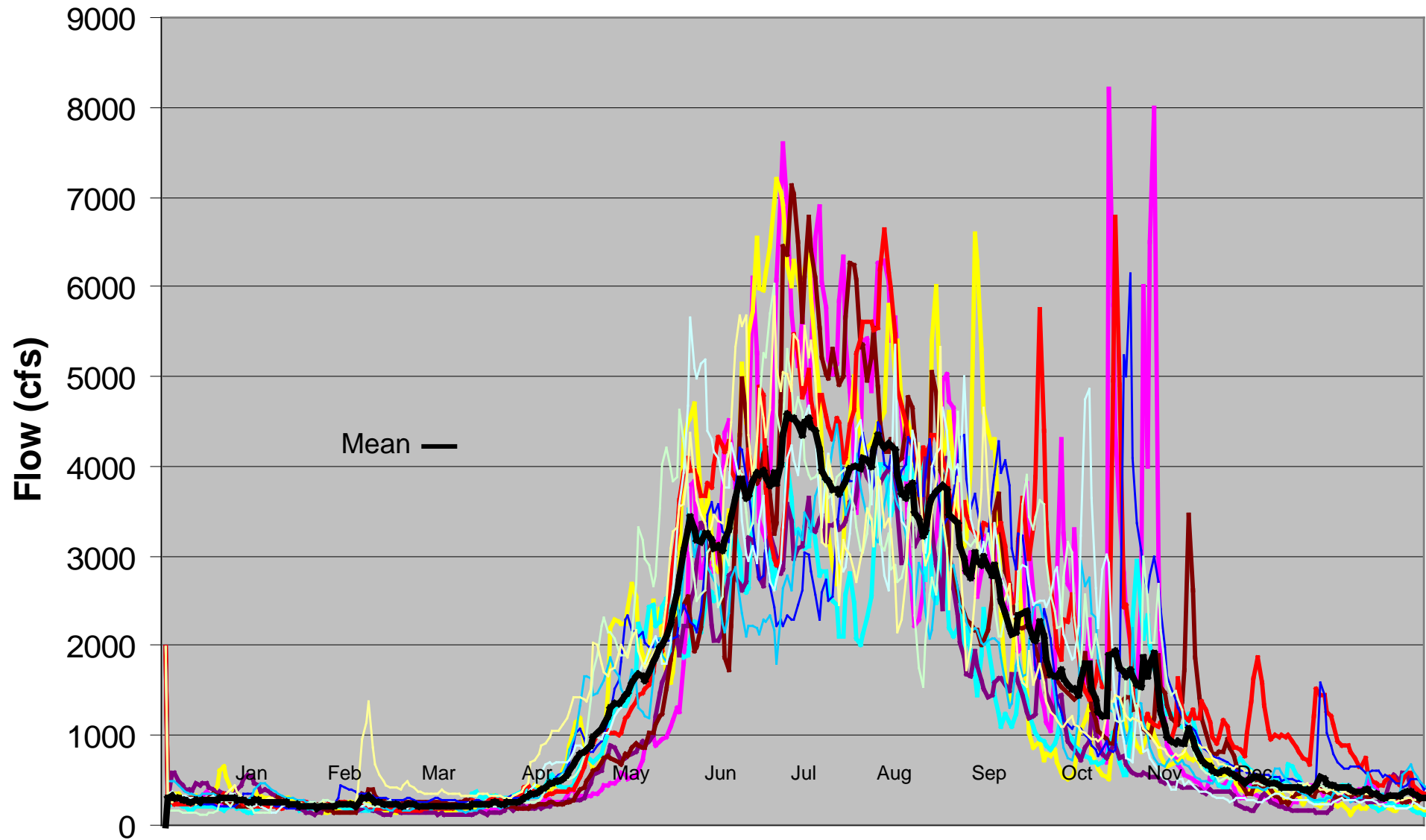
May 20, 2019



140 cfs




May 29, 2018

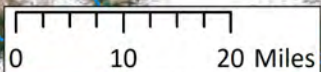
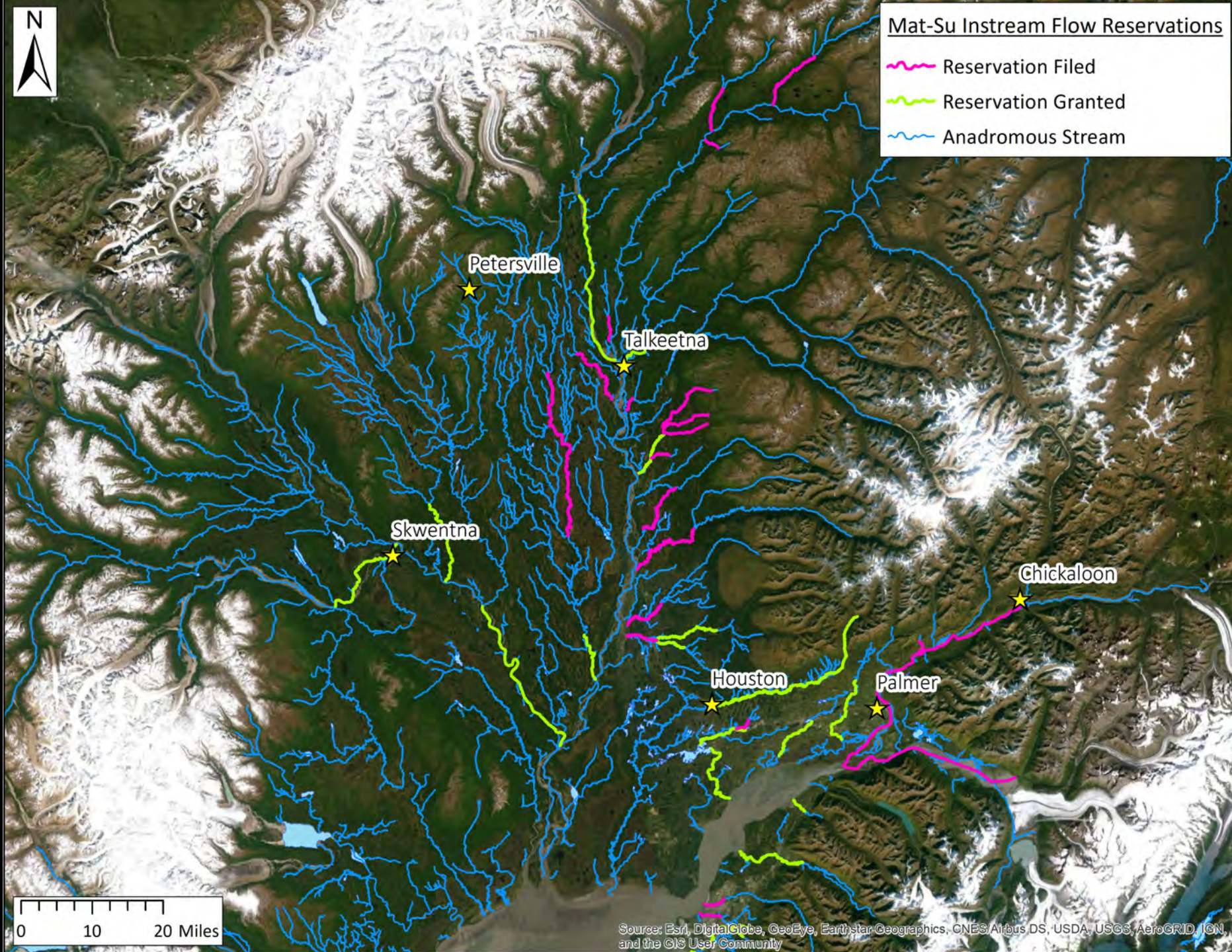
Seasonal and Annual Variation in Streamflow





Mat-Su Instream Flow Reservations

-  Reservation Filed
-  Reservation Granted
-  Anadromous Stream



Current Projects: Little Susitna Streamgage



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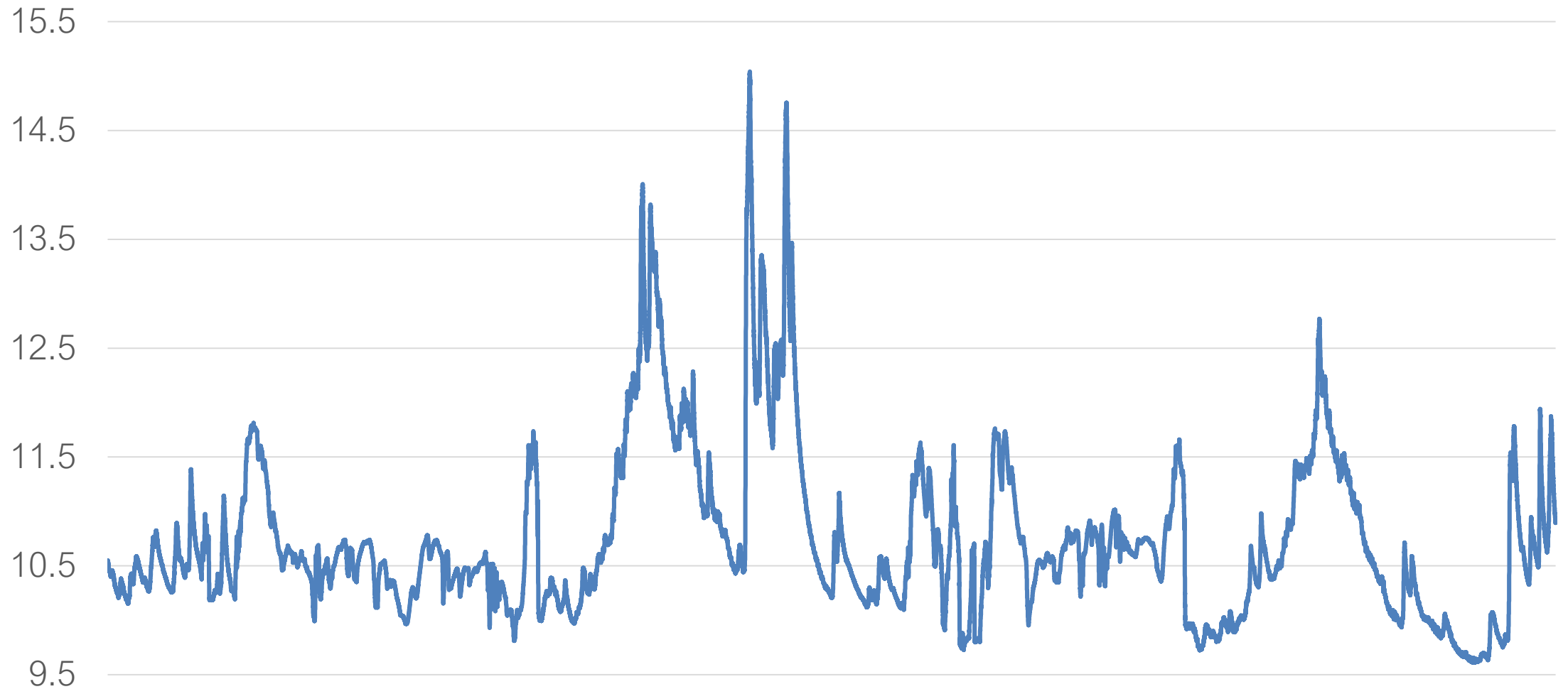


Current Projects: Little Susitna Streamgage



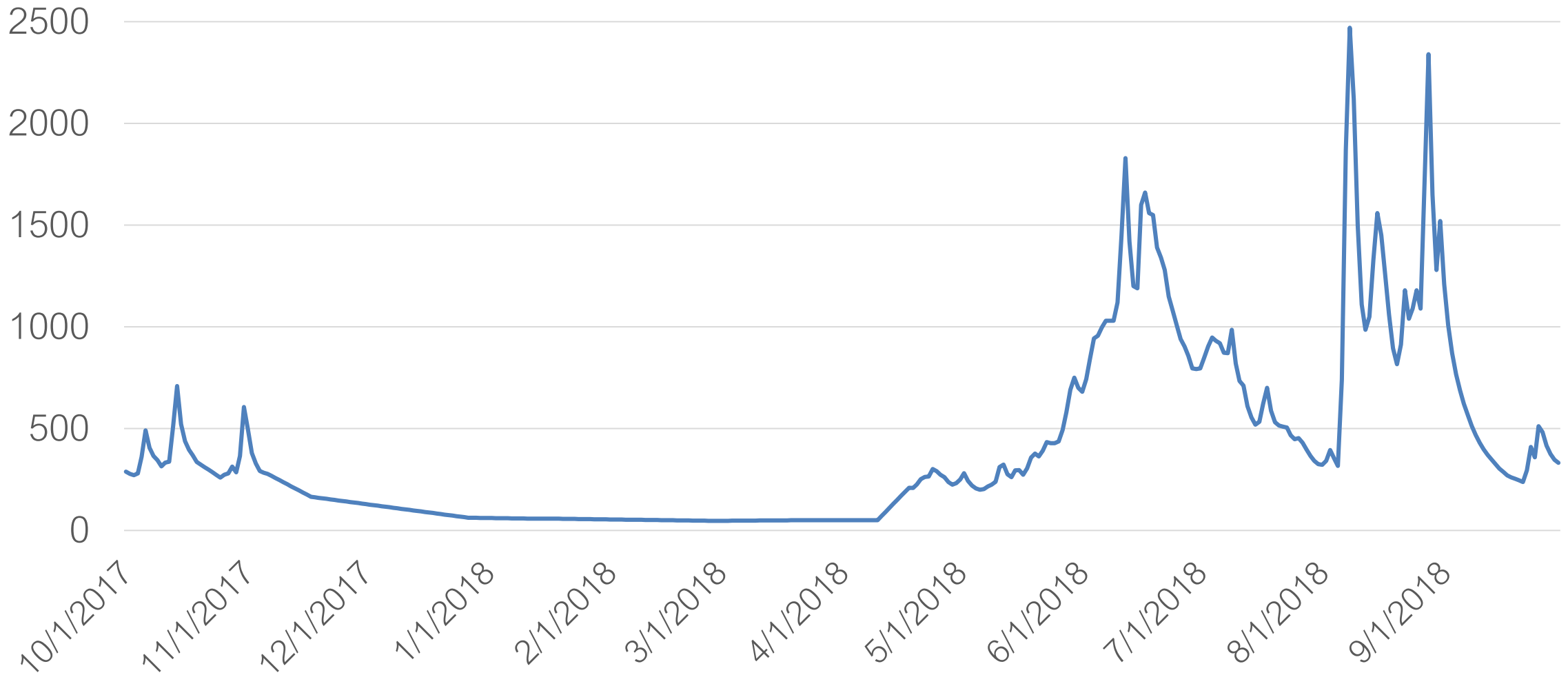
Current Projects: Little Susitna Streamgage

Raw Transducer Data: 74,000 data points

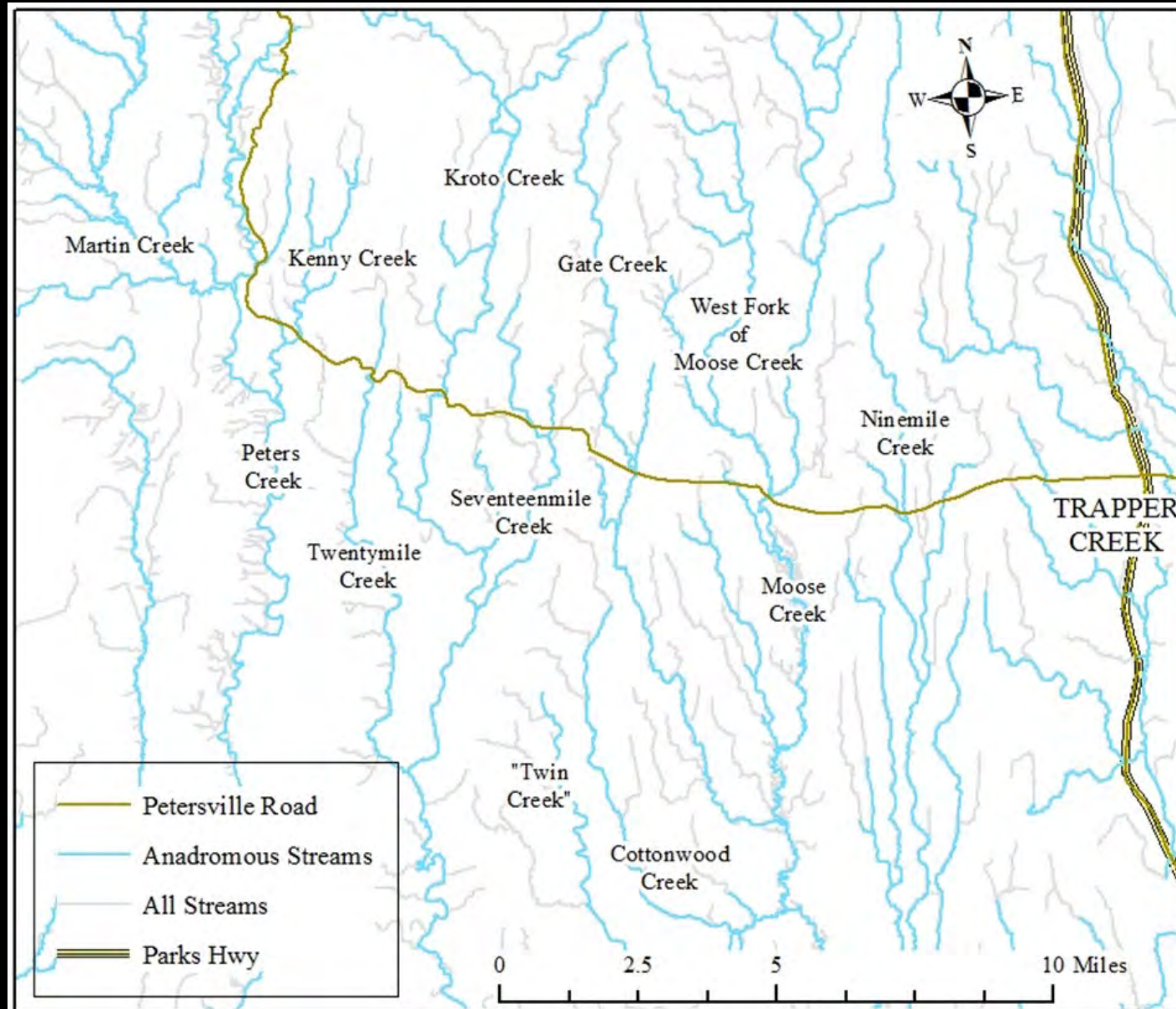


Current Projects: Little Susitna Streamgauge

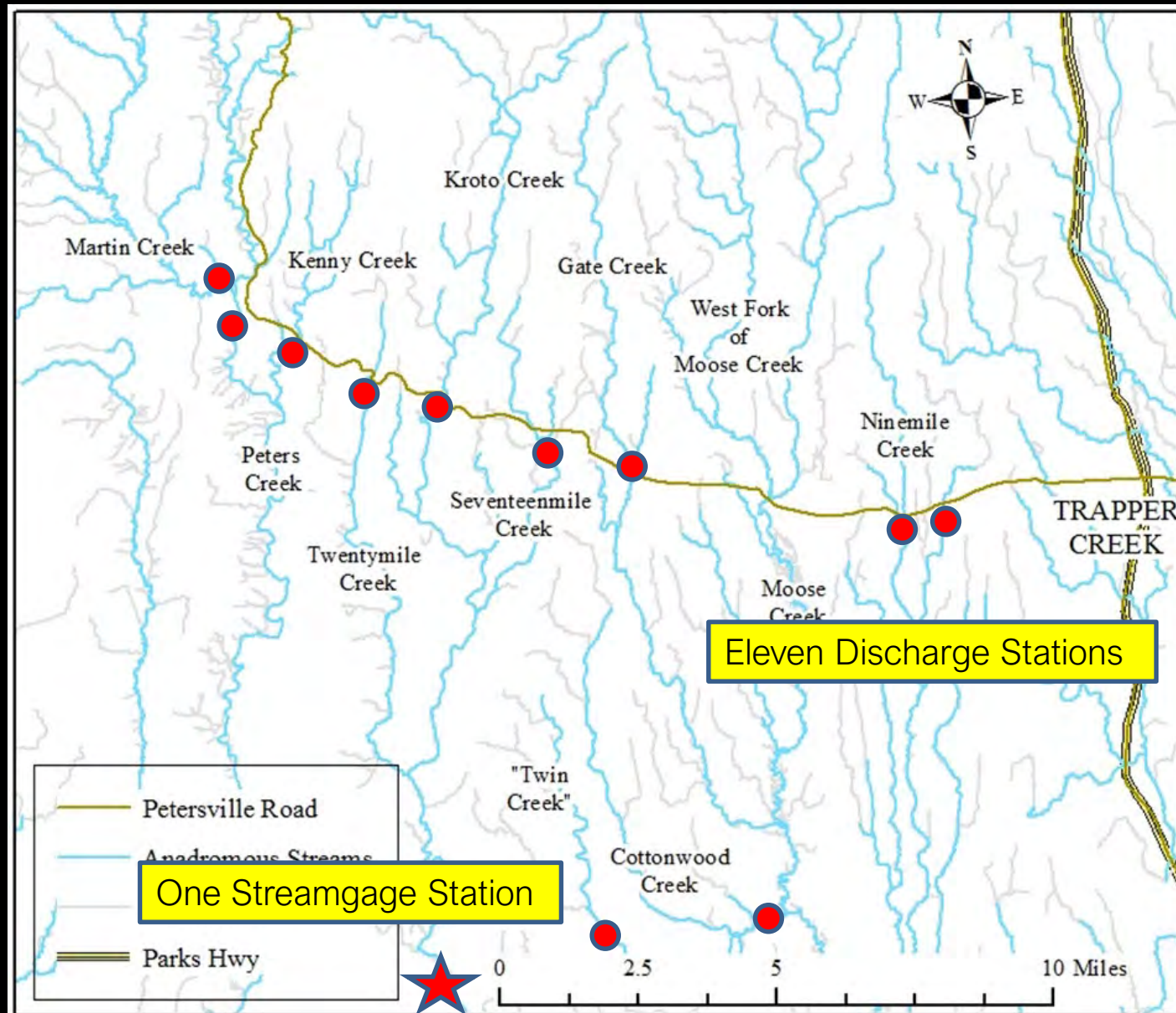
Mean Daily Flow (cfs)



Current Projects: Petersville Road Streamgauge Network



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Peters Creek

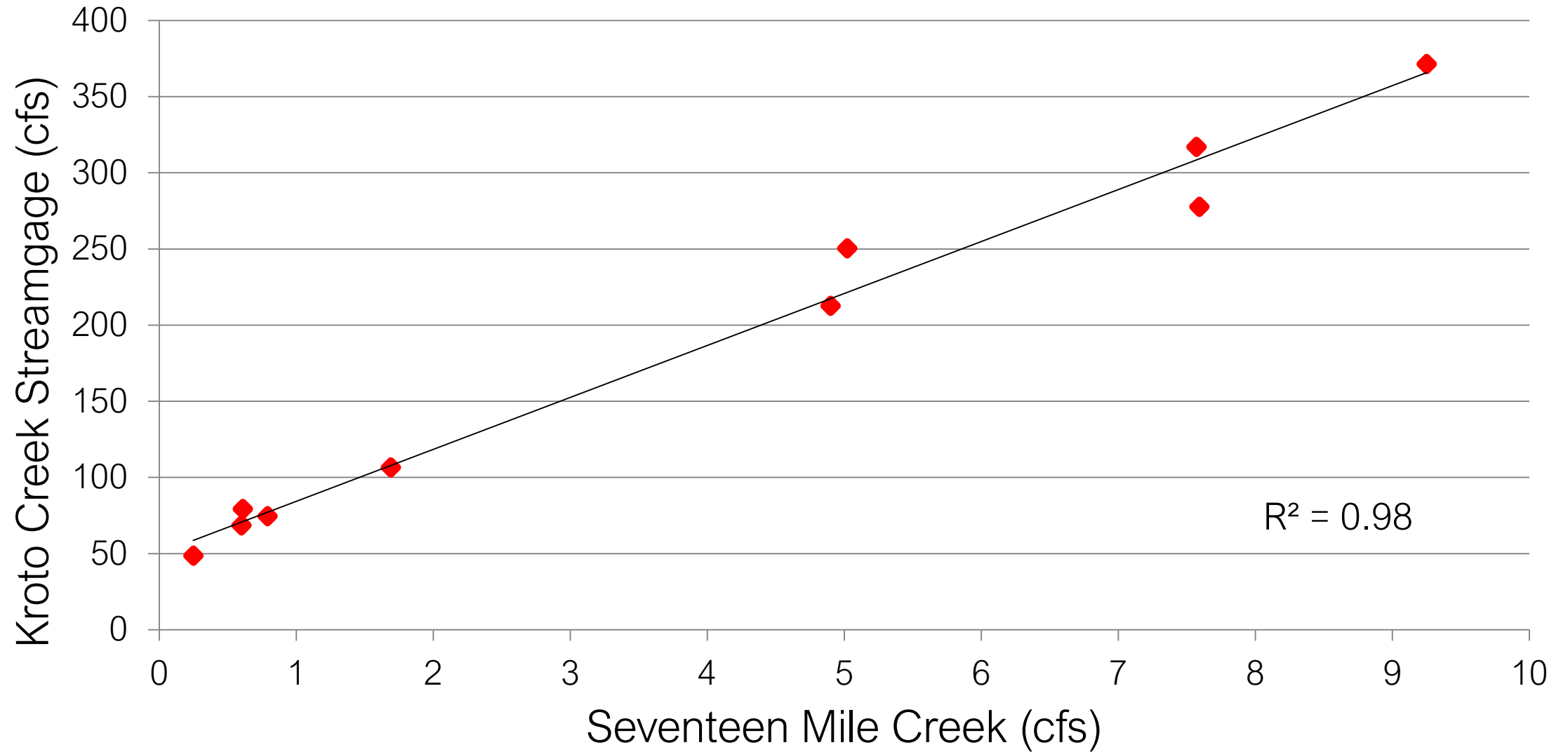


Current Projects: Petersville Road Streamgage Network

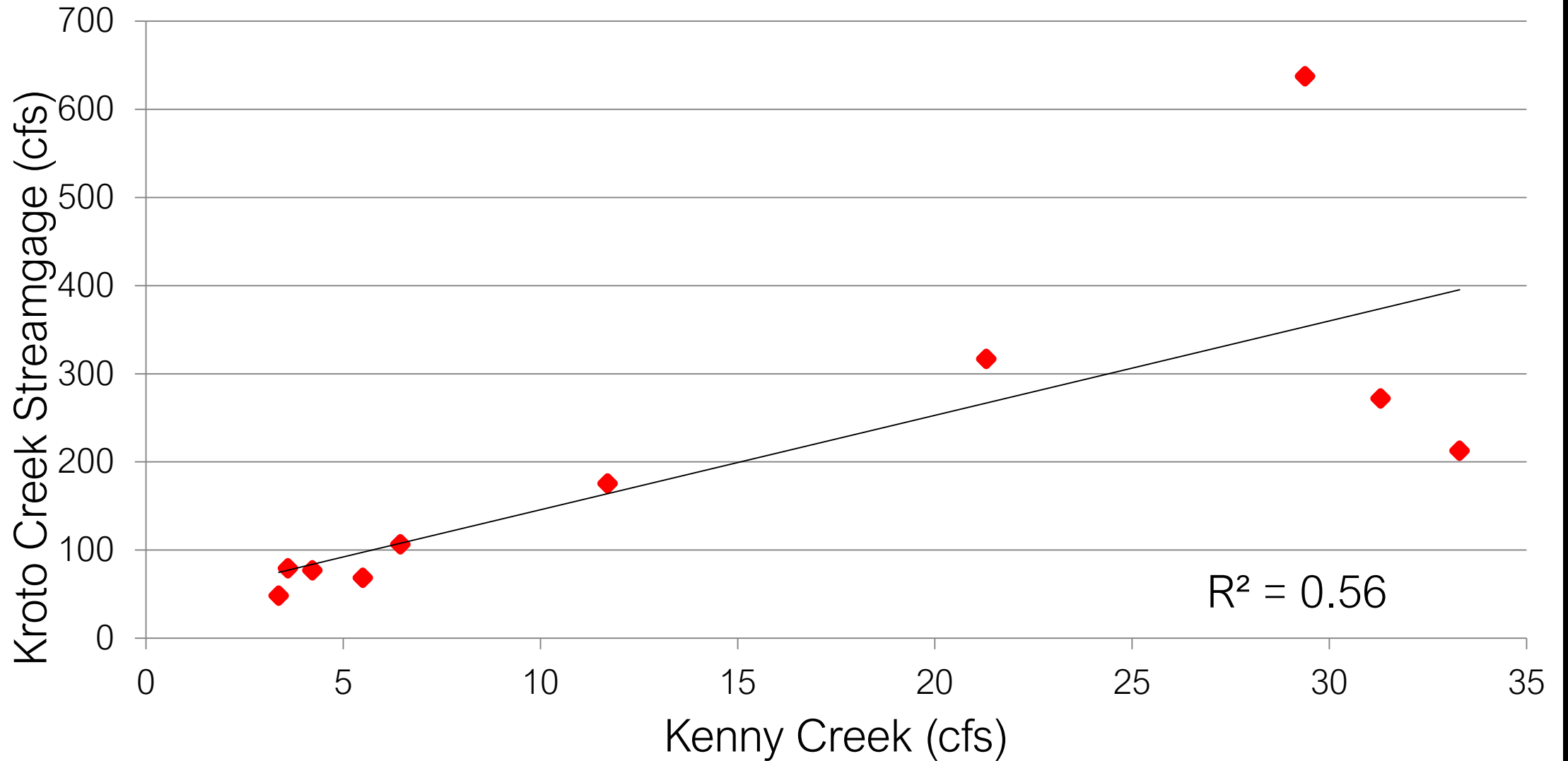
Seventeenmile Creek



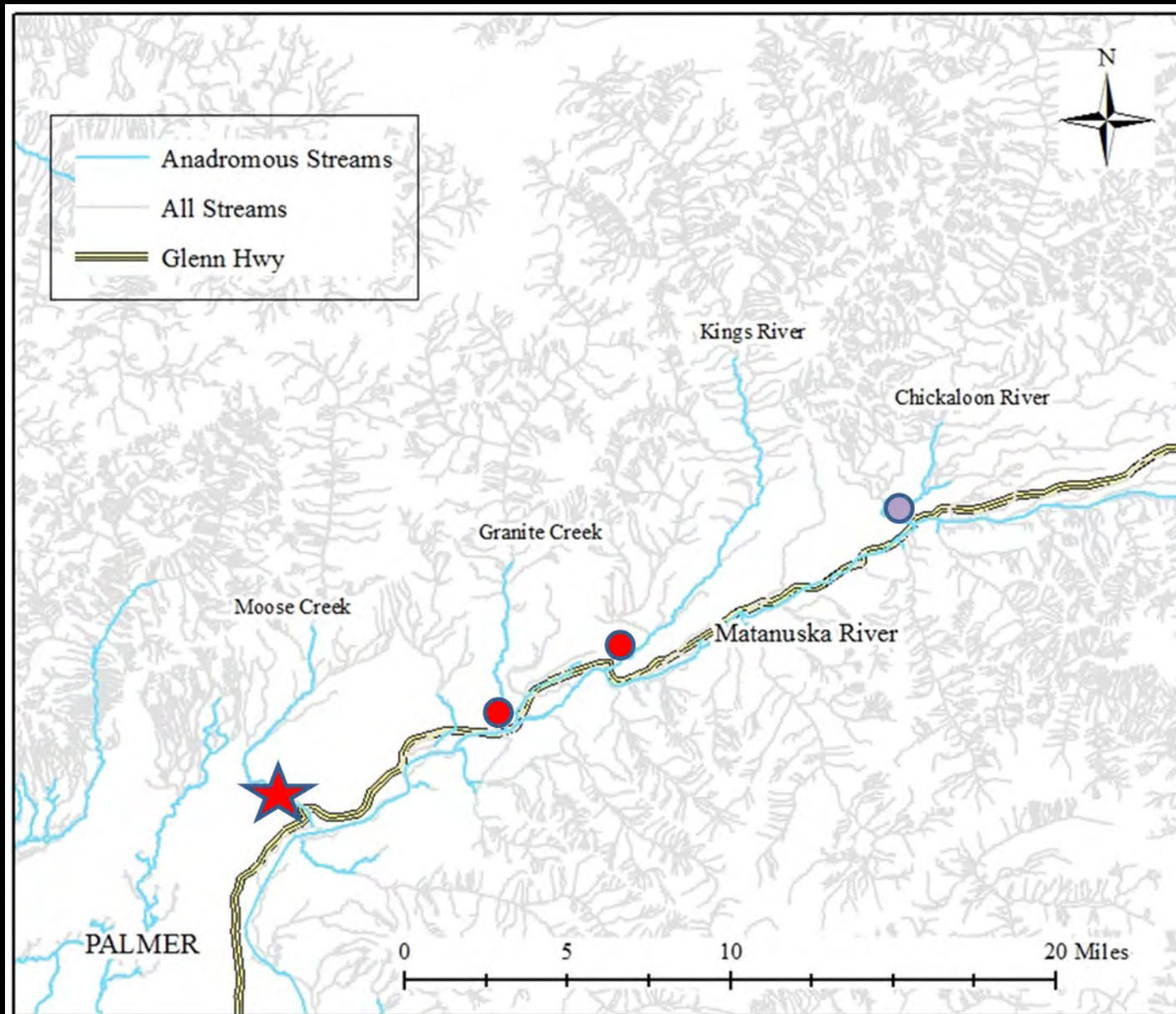
Current Projects: Petersville Road Streamgauge Network



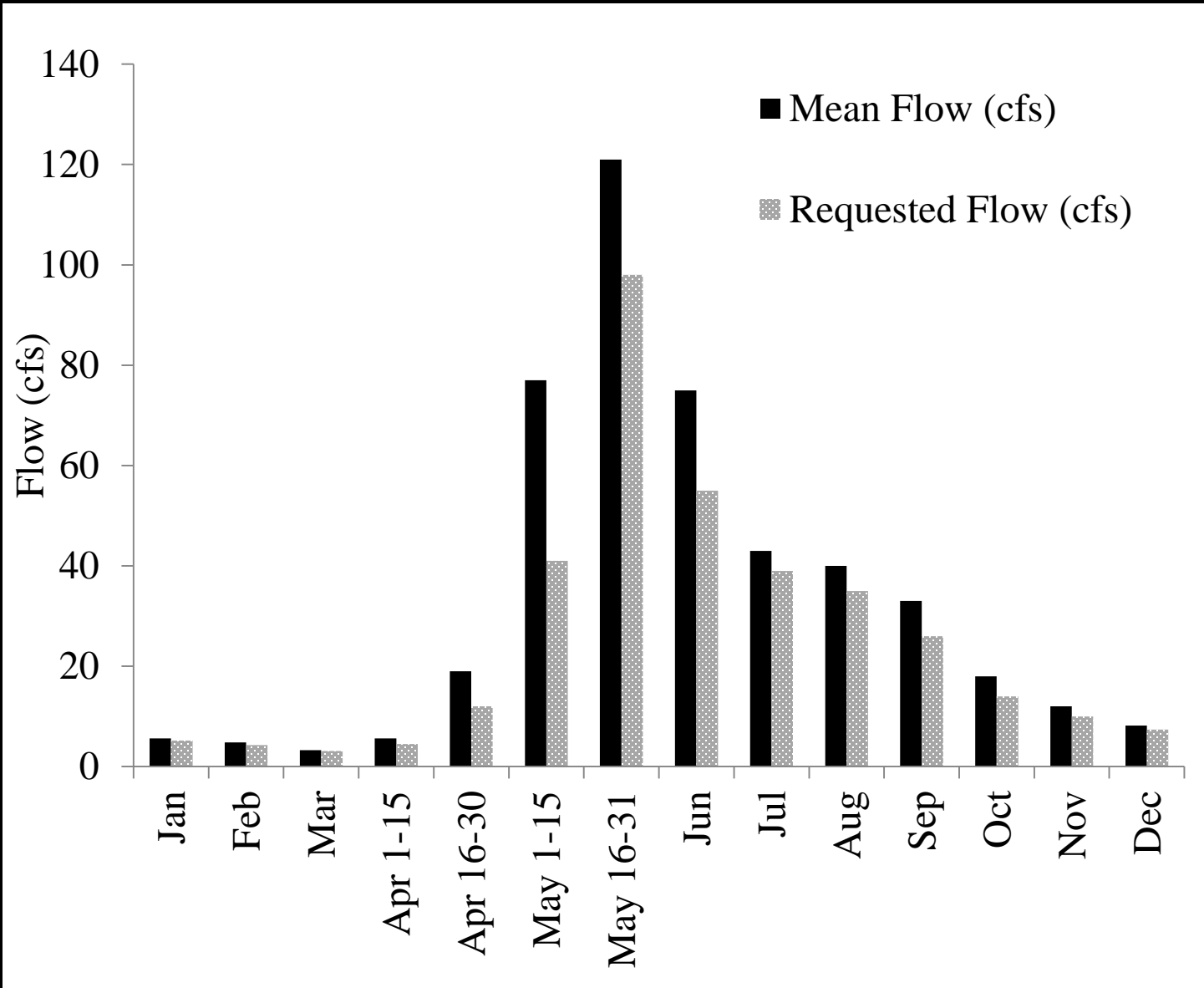
Current Projects: Petersville Road Streamgauge Network



Recently Completed Projects: Glenn Highway



Recently Completed Projects: Water Reservation Applications



Susitna River watershed (data from Susitna-Watana Hydropower studies):

Whiskers Creek

Gold Creek

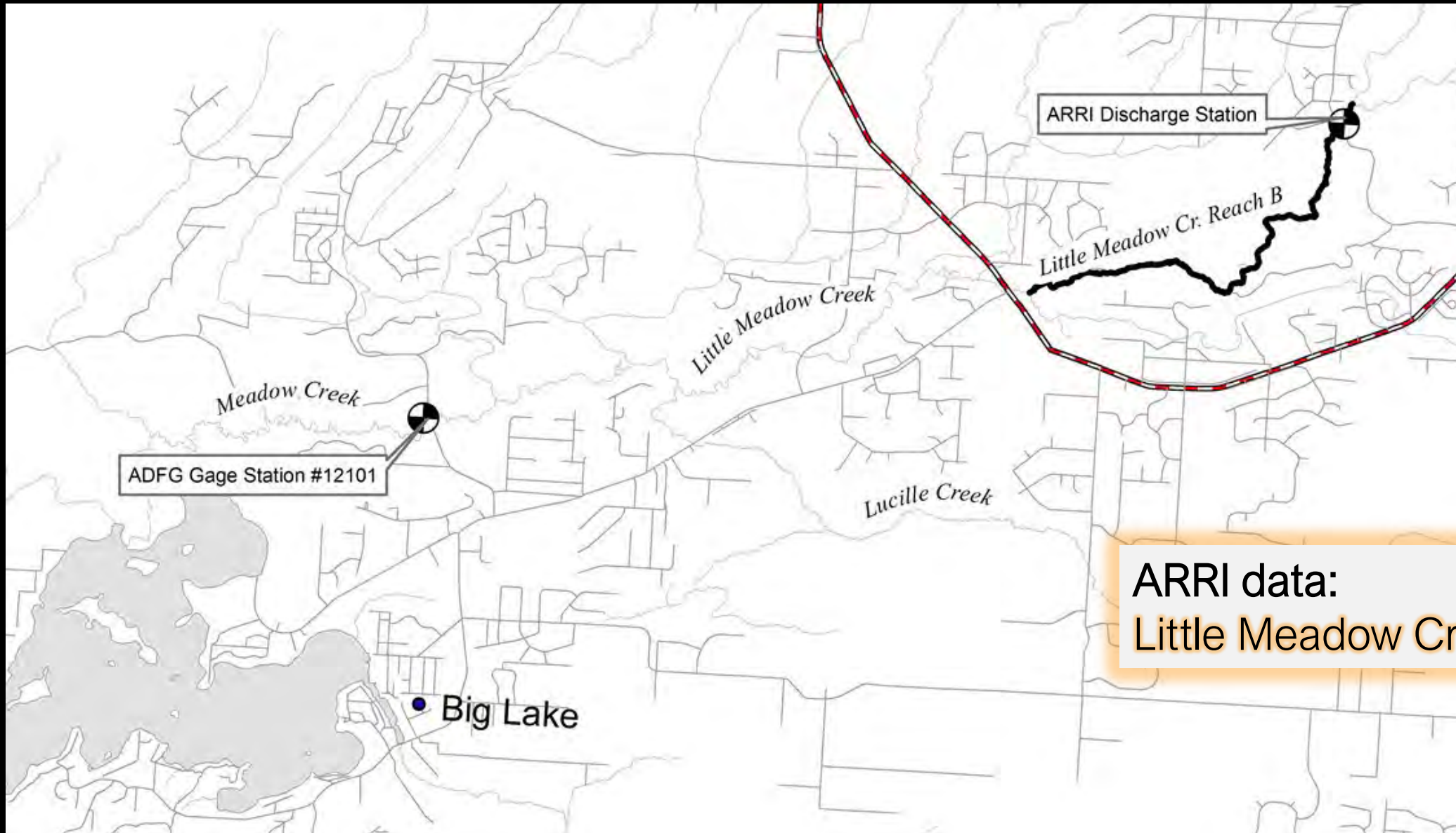
Indian River

Portage Creek

Birch Creek

Trapper Creek

Recently Completed Projects: Water Reservation Applications



ARRI data:
Little Meadow Creek tributary

Goals and Implications

A) How does your work fit within the framework and identified goals of the Mat-Su Salmon Fish Habitat Partnership's Strategic Action Plan?

Objective 9.1: Instream Flow on Anadromous Waters

B) What are the management implications of the activity you are describing in your presentation?

Tool for long-term water withdrawal planning

Questions?

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