

Germination Suppression Experiment

PRRIP Technical Advisory Committee Meeting

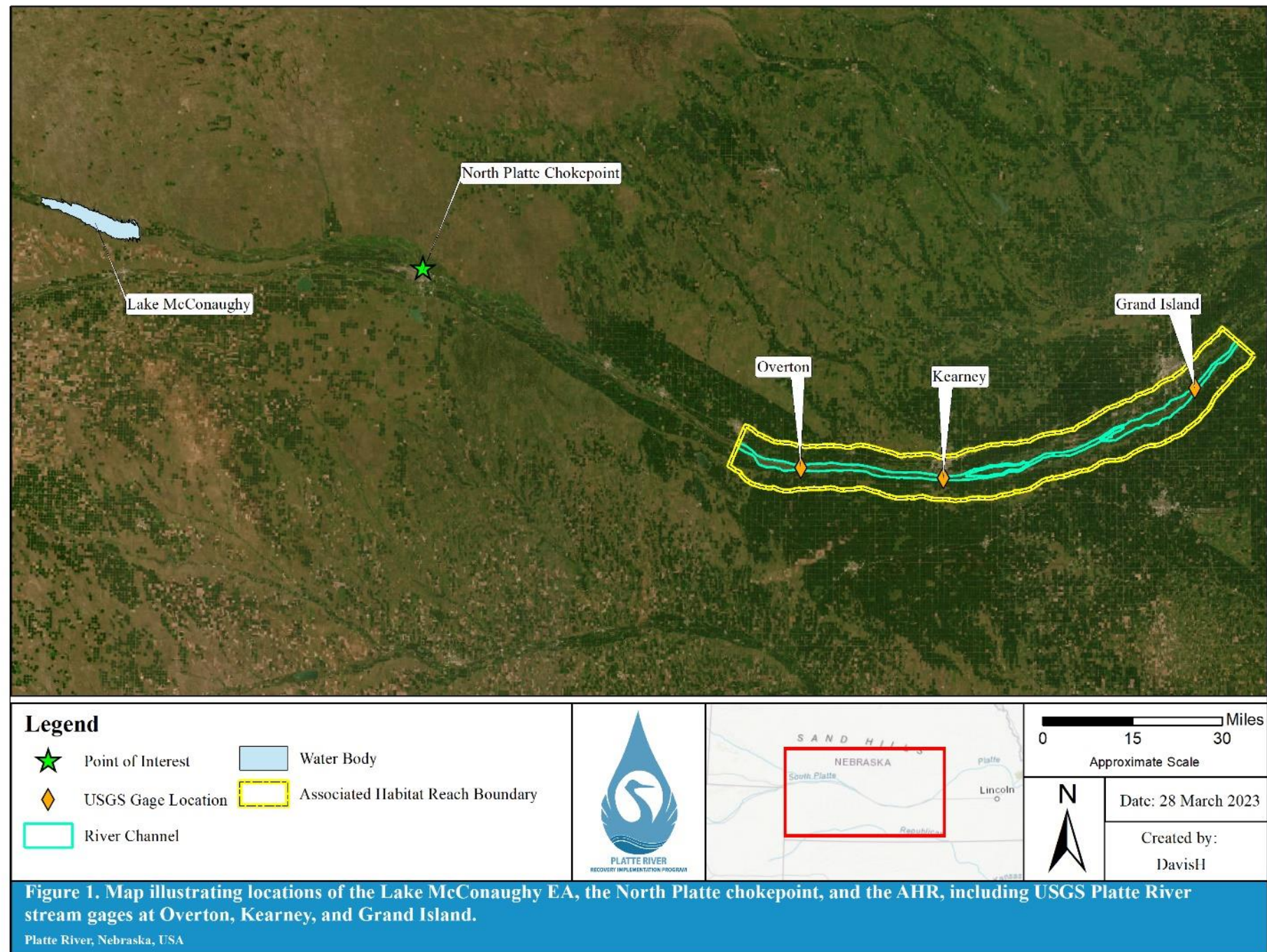
April 12, 2023

Purpose

- Test the effectiveness of using Program water to maintain suitable whooping crane habitat (EBQ #1 and #2)
 - Suppress germination of cottonwoods, willows, etc.
 - Slow the expansion of phragmites
- Management hypothesis
 - 30-day minimum flow
 - 1,500 cfs at Grand Island
 - Between June 1 and July 15
 - In combination with continued herbicide spraying for phragmites

Area of Interest

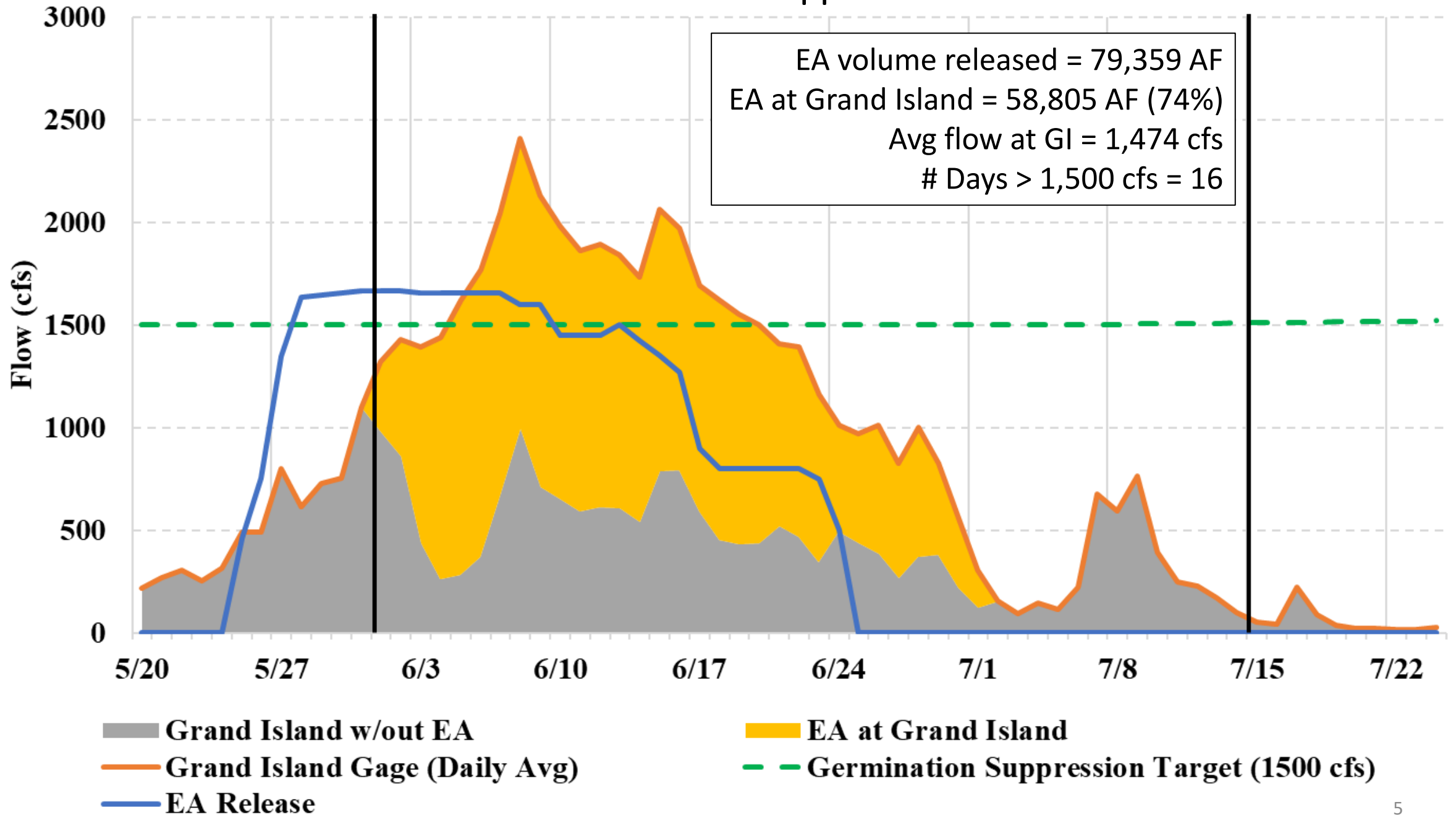
- ~200 mile reach, Lake McConaughy EA to Grand Island
- EA water routing (tracked in PWAP)
 - NPPD system
 - North Platte River (chokepoint)
 - CNPPID system
 - Platte River
- Assessment
 - Flow at GI
 - Veg across AHR



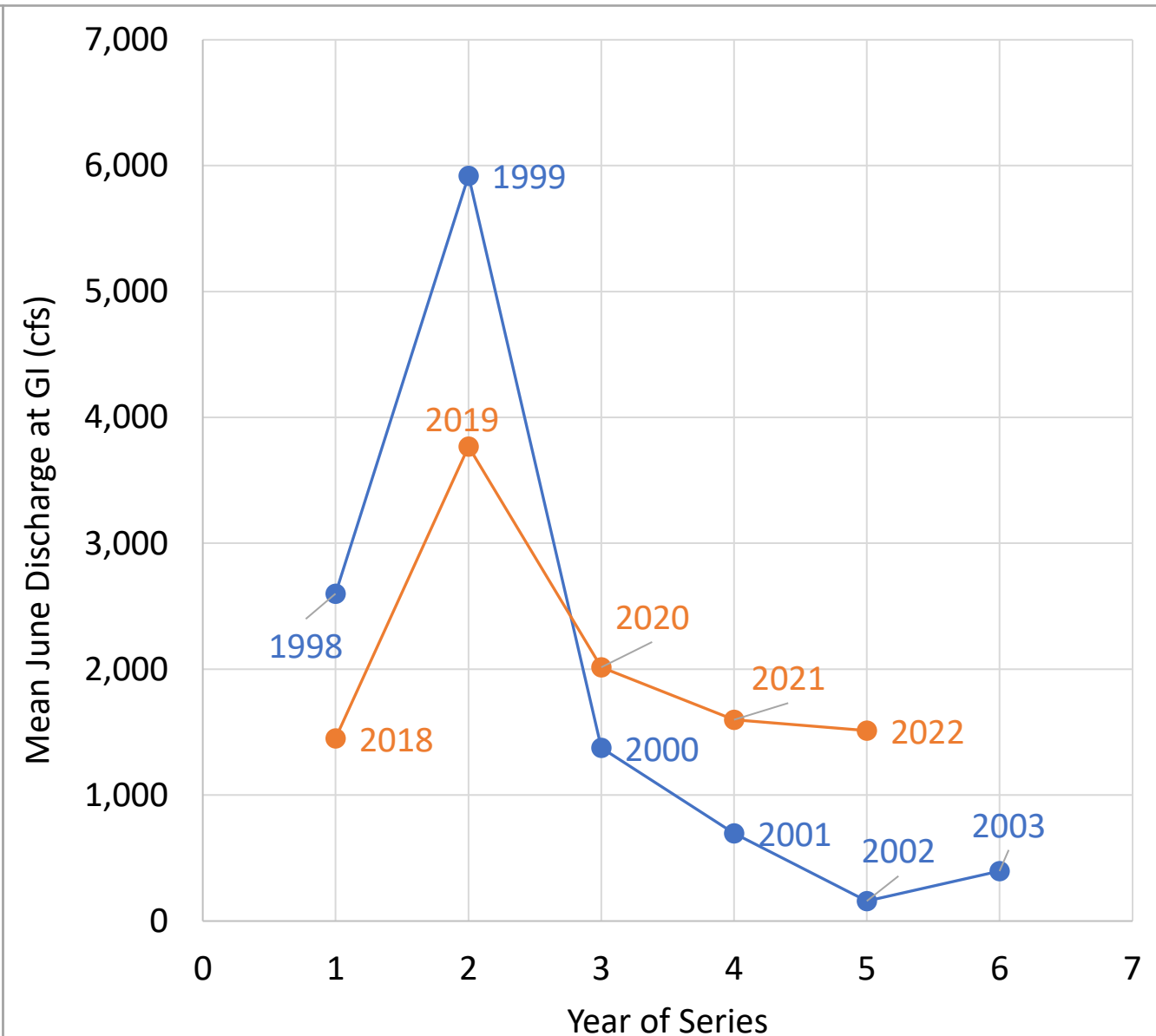
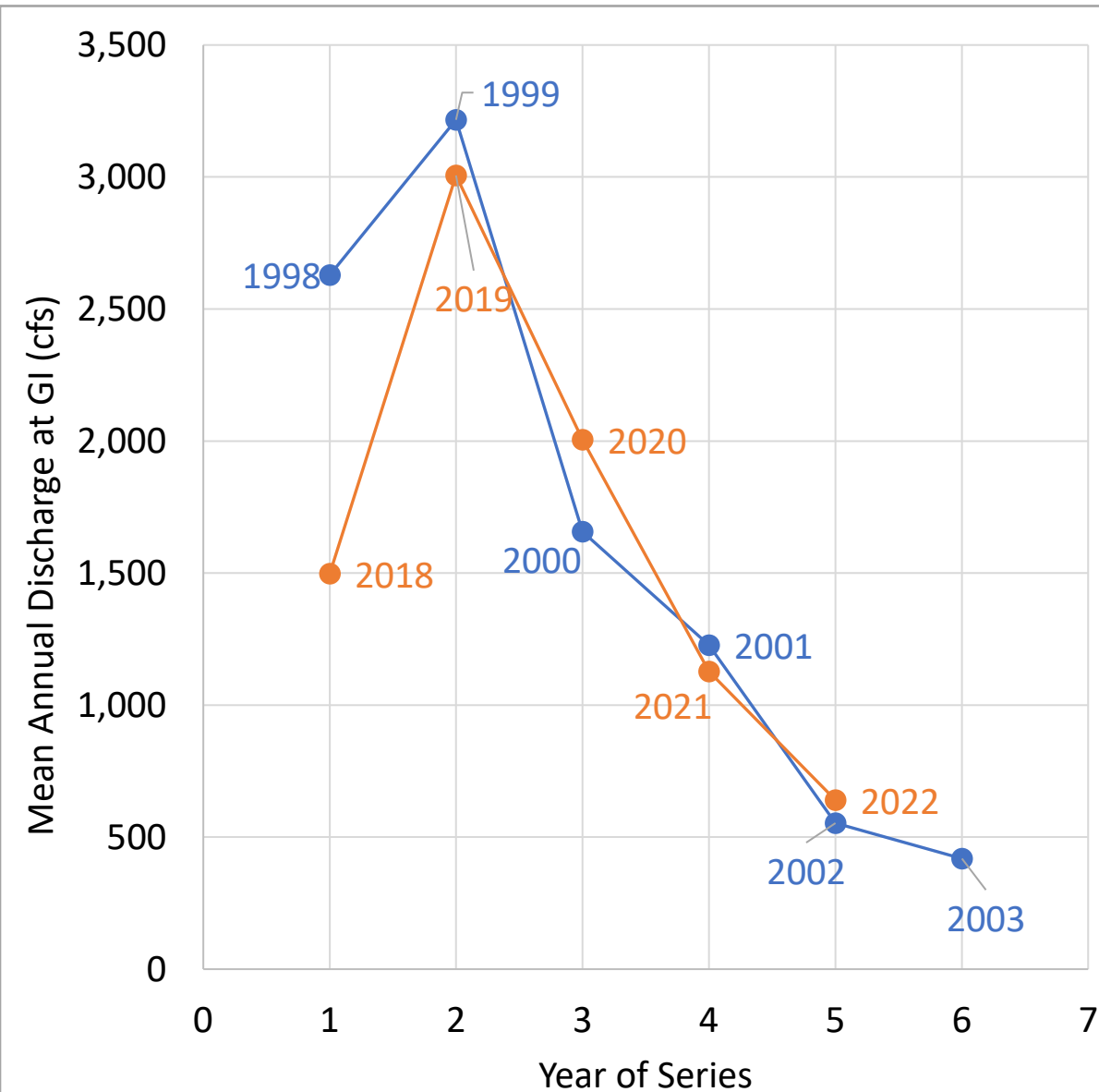
Project Planning and Execution

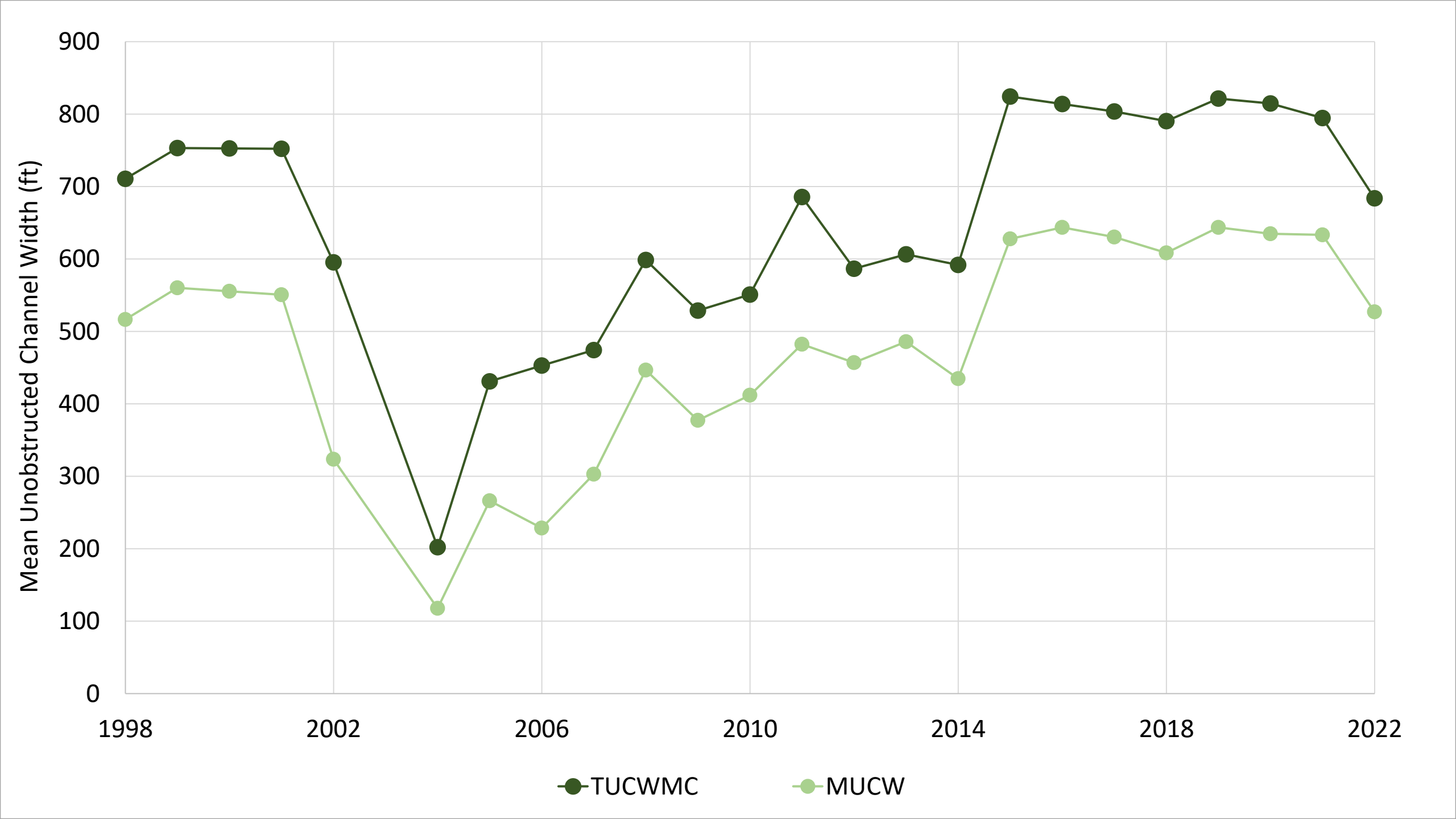
- Decision-making based on real-time conditions
- Variables considered
 - Flow at Grand Island, deficit relative to 1,500 cfs
 - Transit losses
 - Available capacity and ramp rates in canal systems
 - Available capacity at North Platte chokepoint (below flood stage)
 - Irrigation demands (timing and magnitude)
 - Weather, particularly thunderstorm activity
 - Travel time (8 days)
- Coordination: USFWS, CNPPID, NPPD, EDO
 - EA Manager authorizes releases
 - Twice-weekly coordination calls during release period

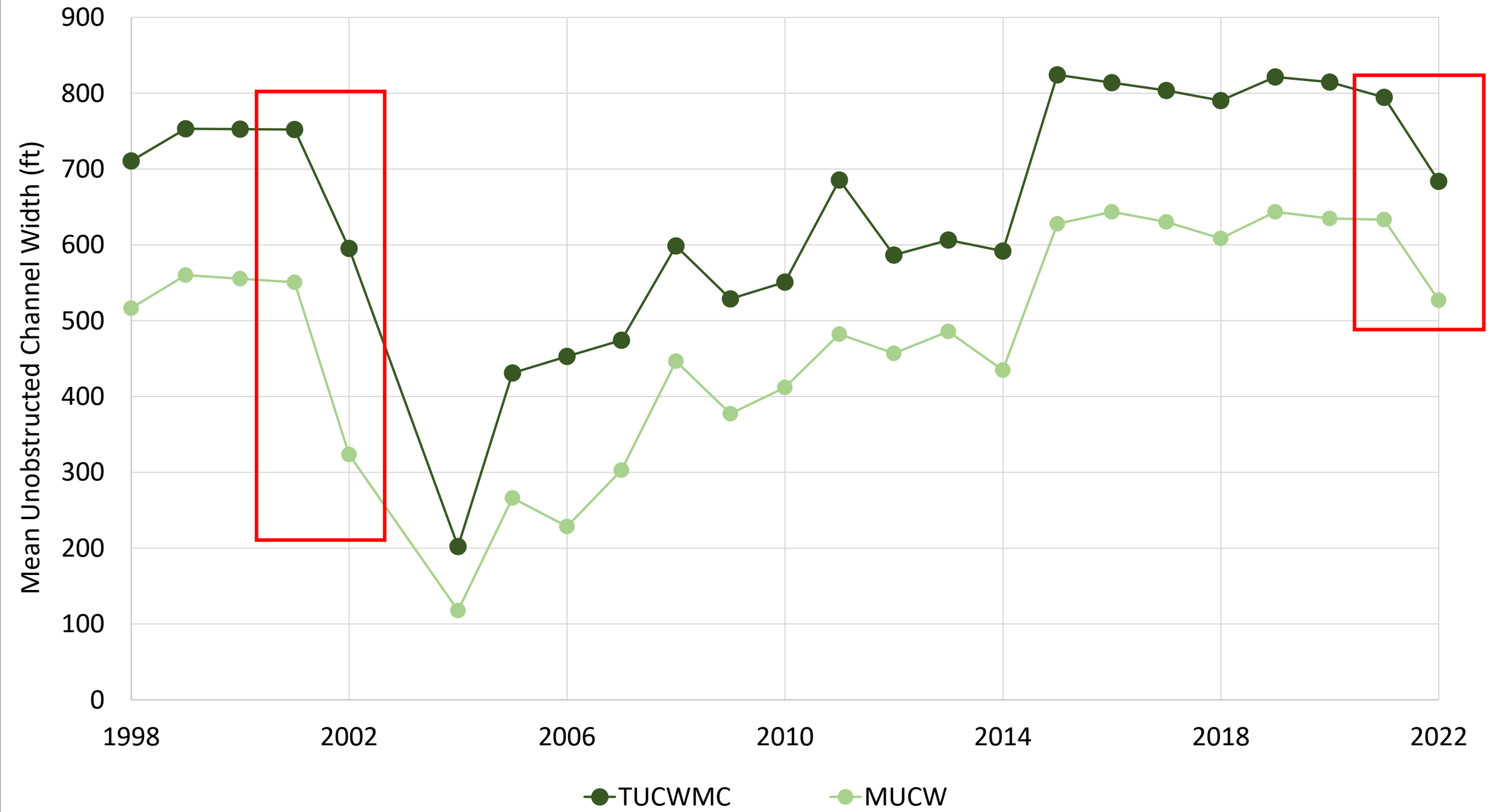
2022 Germination Suppression Release

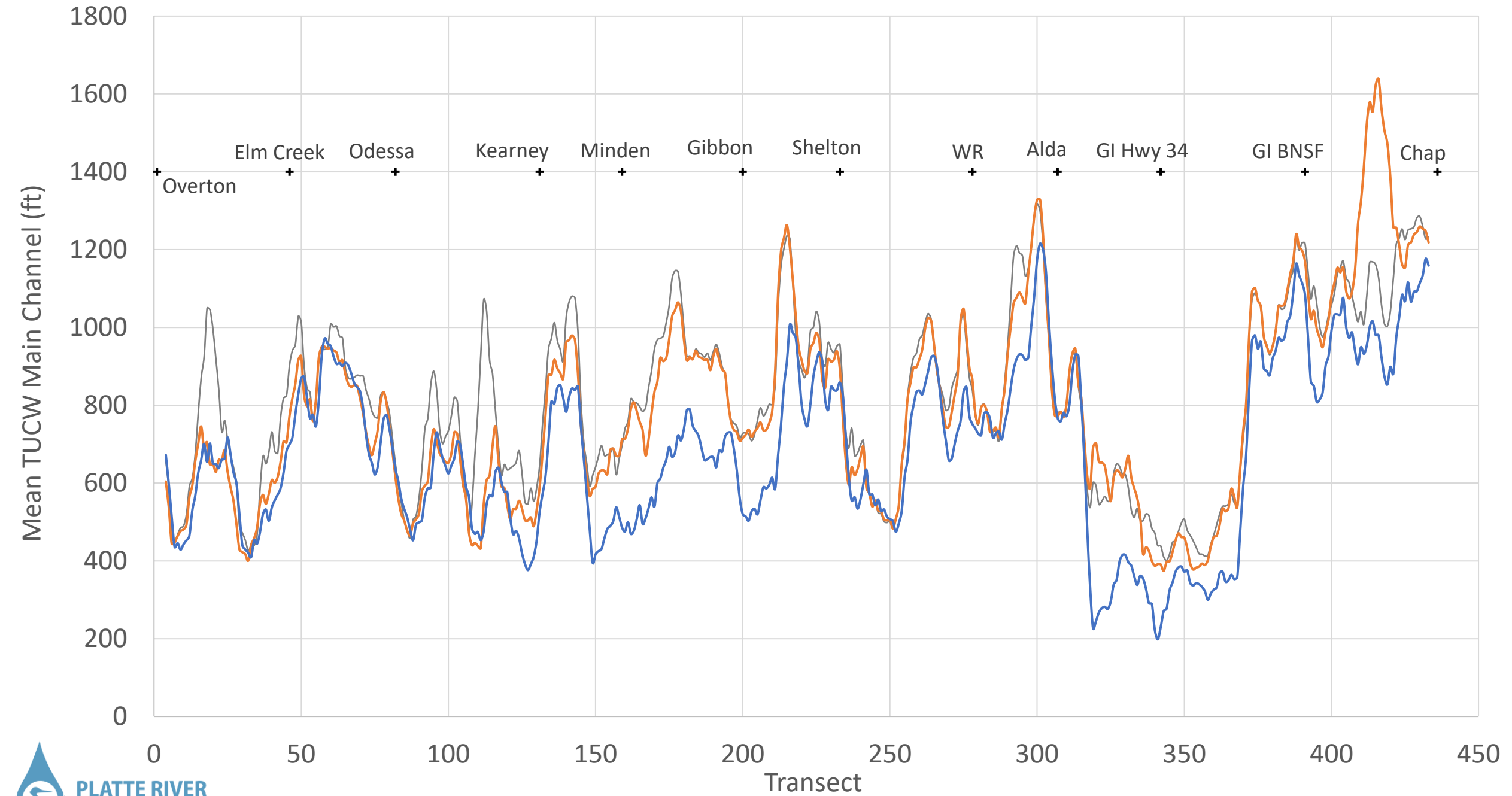


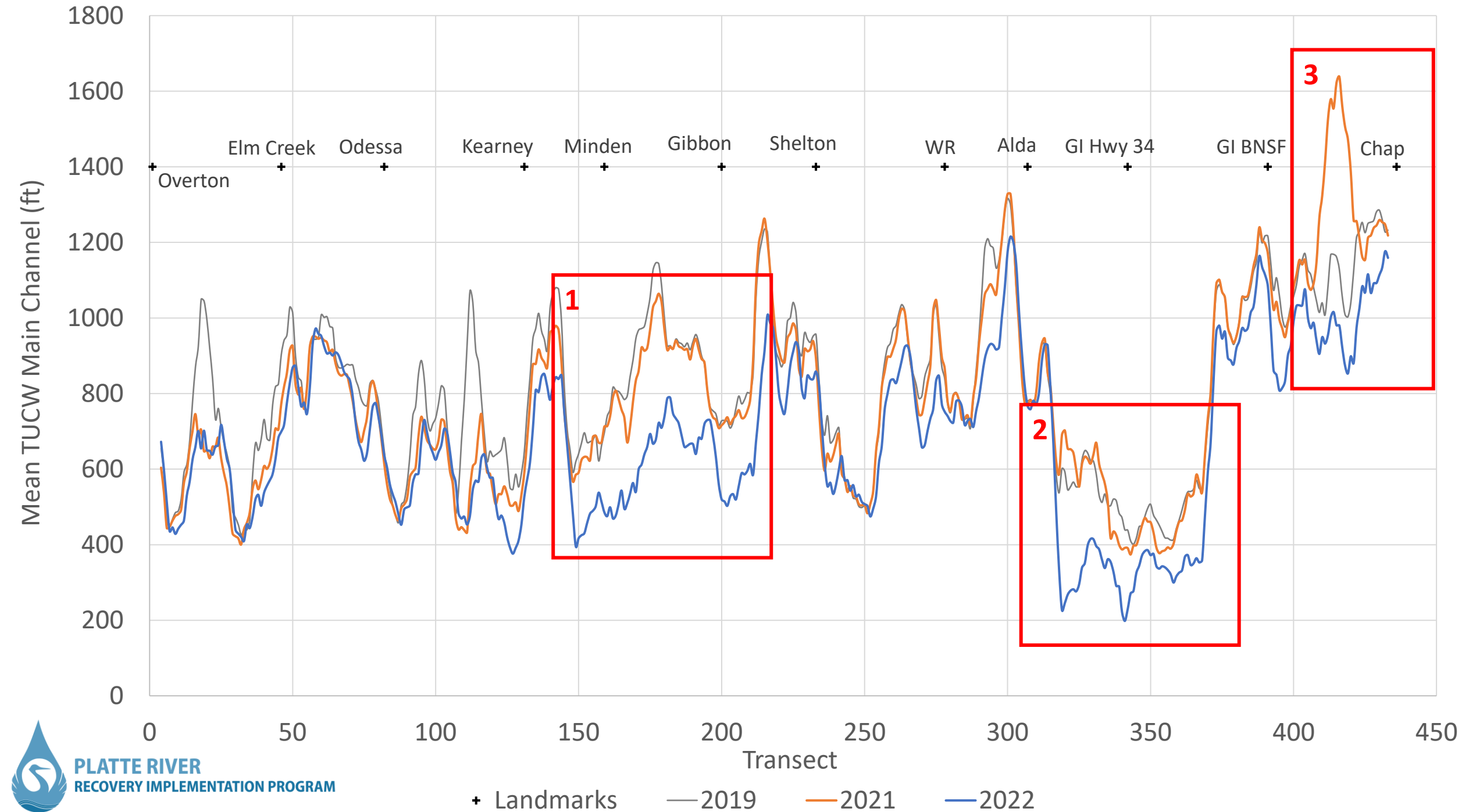
Effectiveness – Initial Thoughts







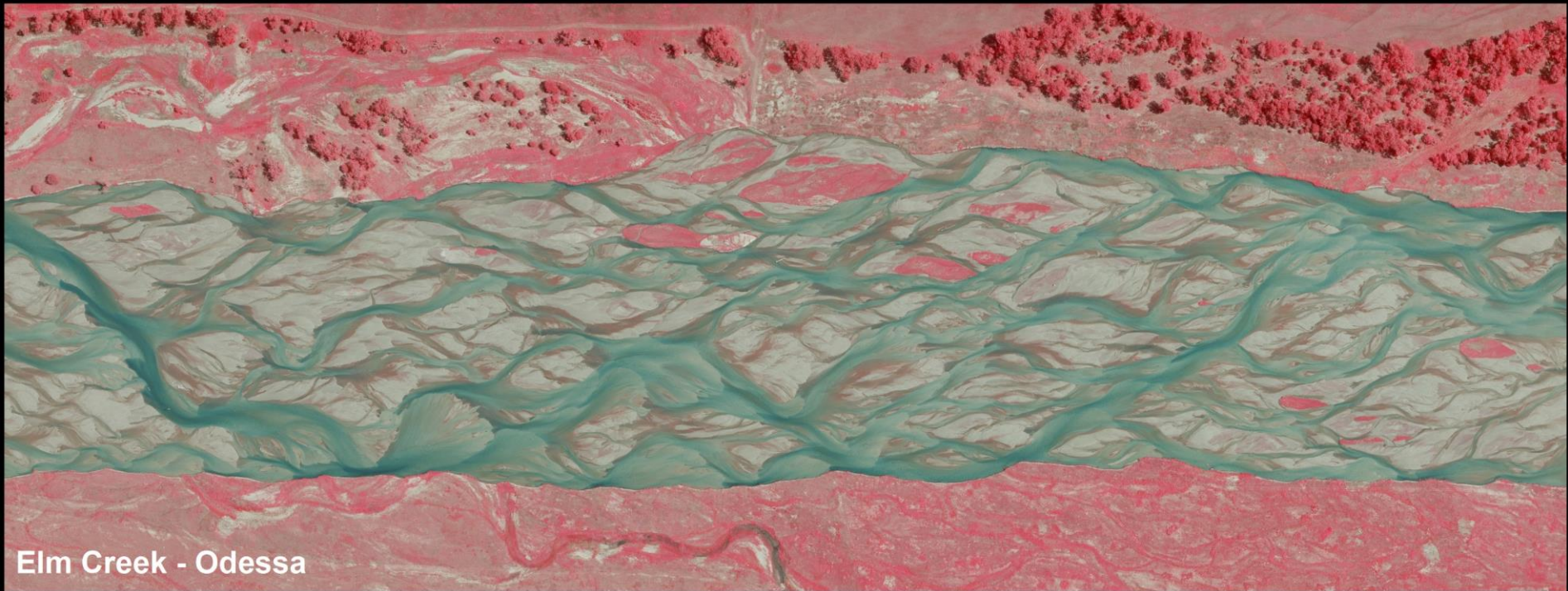




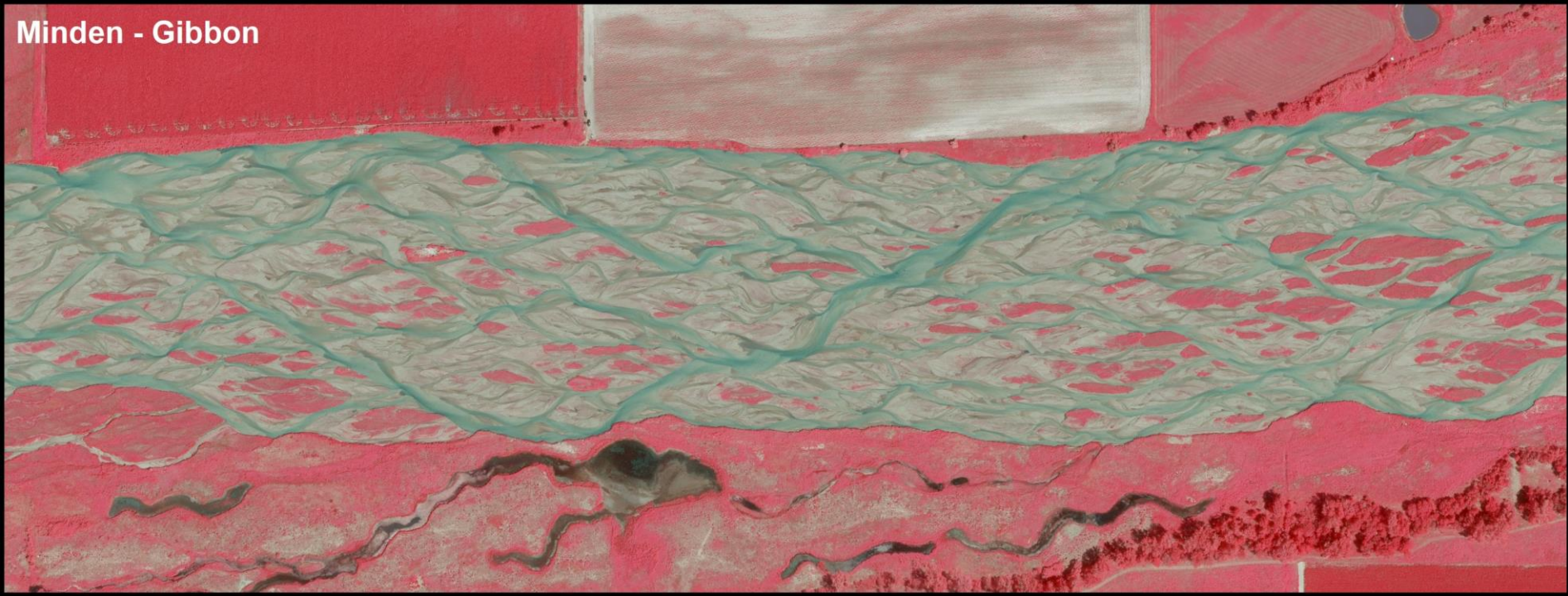




2022 Summer Imagery

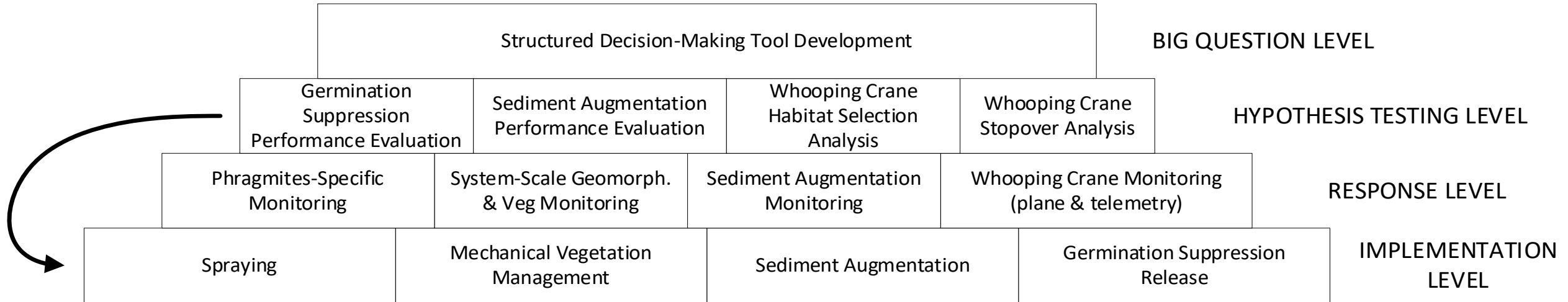


Elm Creek - Odessa



Minden - Gibbon

Monitoring and Assessment



Management Response Modeling

Tools

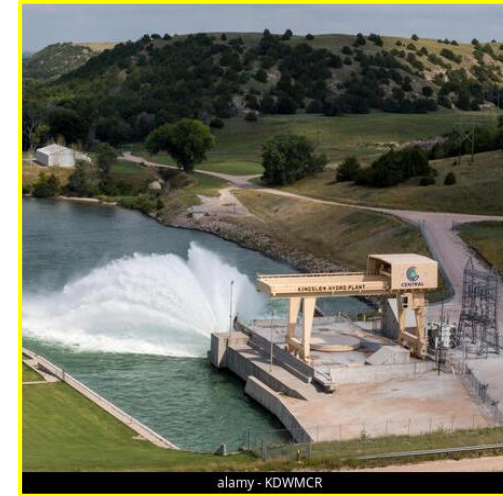
Disking



Herbicide



Flow Release



Base Flows

Wet Period



Dry/Normal Period



