

# How do Hydrologic and Water Quality Models Respond to Growing vs. Non-growing Season Landcover Inputs?

DATA

National Park Service water quality data

Landcover dataset options:

- A) Dynamic World growing season
- B) Dyn. World non-growing season
- C) National Landcover Database

Measured streamflow observations

MODELS

**Case #1:**

Predictive water quality regression models

**Case #2:** Calibrated watershed nutrient yield SWAT models

**Case #3:** Calibrated and evaluated hydrologic SWAT models

OUTCOMES

Regression coefficients

Recommendations for benefits and overcoming pitfalls of modeling with high frequency landcover data

Optimized parameters

*Simpler models*

*Complex models*

