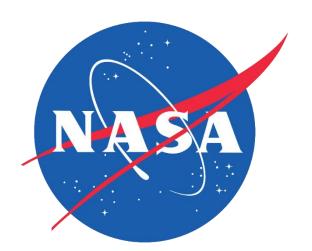


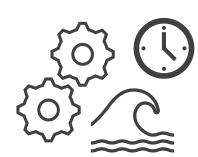
### Assessing Sediment Inputs into the Shoshone River in Wyoming to Determine Areas for Protection and Restoration Practices



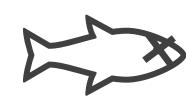
## **Community Problem**



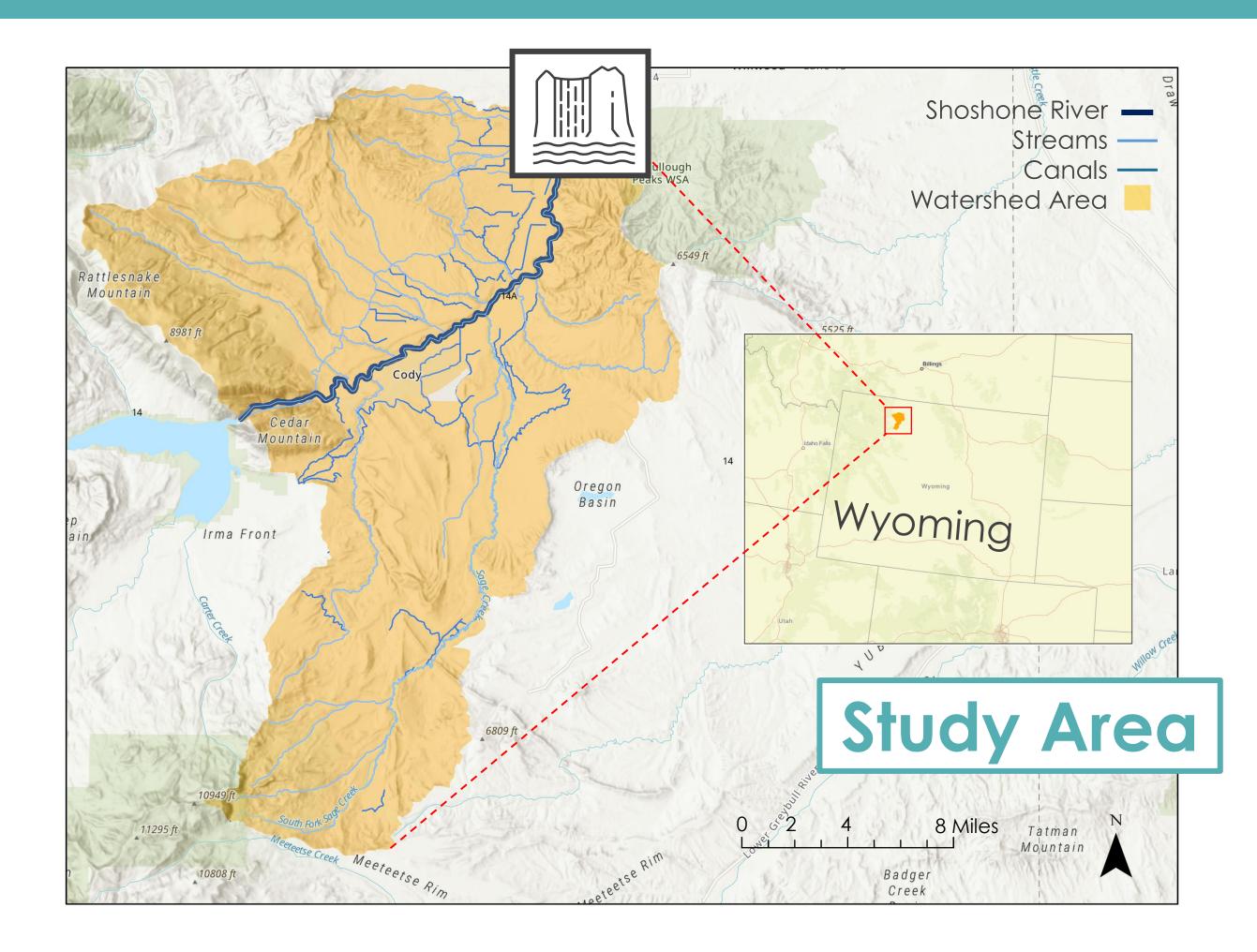
Willwood Dam captures large amounts of sediment.



To continue operating, the sediment must be released periodically.



Excess sediment can create hypoxic conditions that kill fish and damage riparian habitat.





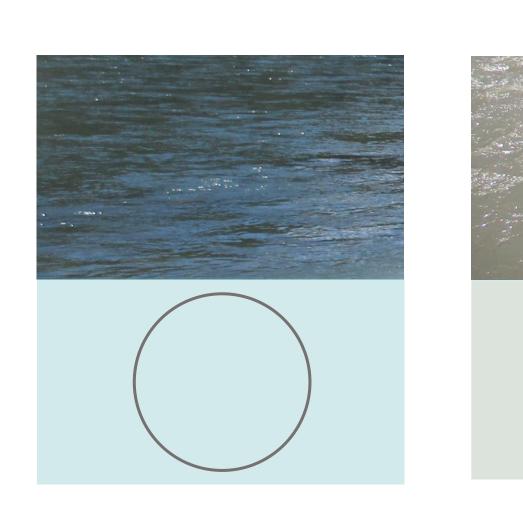
Therefore, how can we identify where excess sediment enters the river?

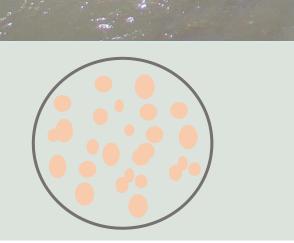
### Measuring Turbidity

Using high-resolution PlanetScope data, we can identify which tributaries are contributing excess sediment.



Suspended sediment increases reflectance which can be measured by satellites.







## Key Takeaways

- Remote sensing allows watershed managers to investigate sources of turbidity spatially.
- Small rivers require high spatial resolution imagery.
- A second term of this project will expand on this work by looking at snowmelt runoff.

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### Fall 2022 | Pop-Up Project



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