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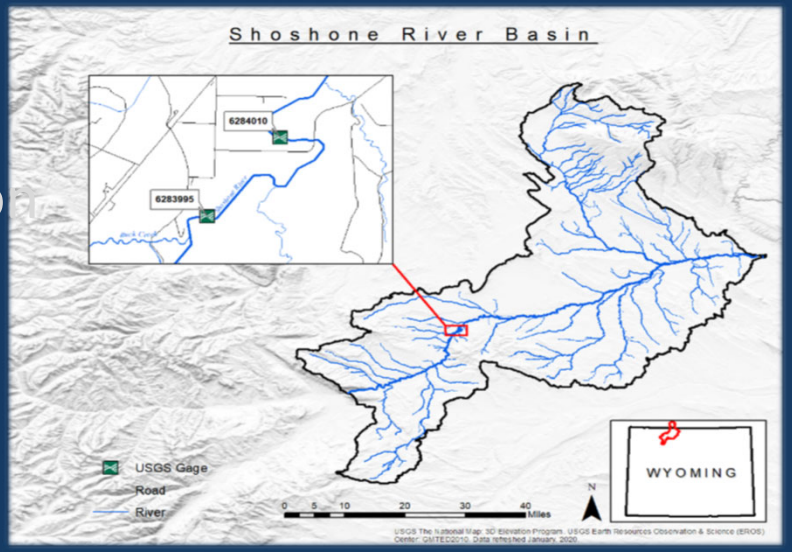
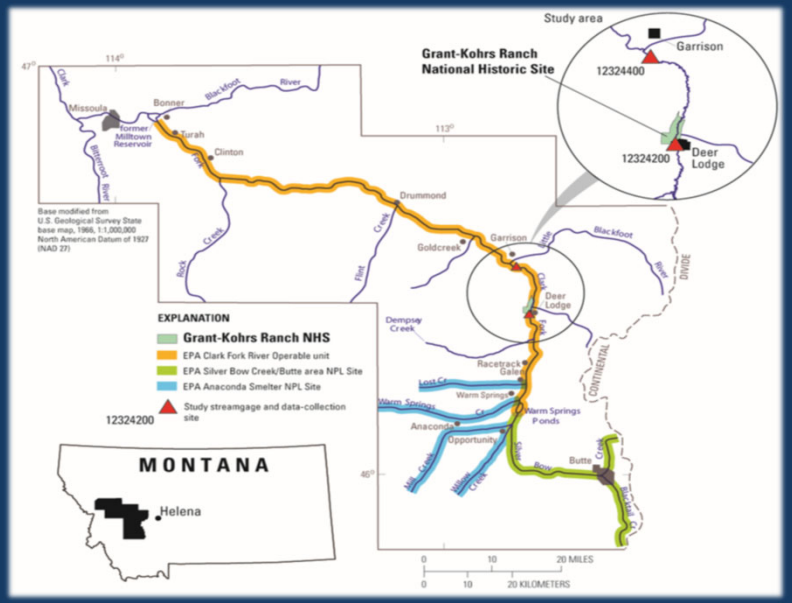
Application of AOBS Method to Provide Continuous Real-Time Information on Suspended-Sediment and Metallic Contaminants in the Shoshone and Clark Fork Rivers in Wyoming and Montana

Study Sites: Wyoming and Montana

Shoshone River in northern Wyoming
- 2 sites above and below an Irrigatio dam
- Sediment spills in 2005, 2007, 2016
- High sediment concentrations



Clark Fork River in southwestern Montana
- Superfund long-term monitoring sites
- Metallic contaminants bind with suspended sediment



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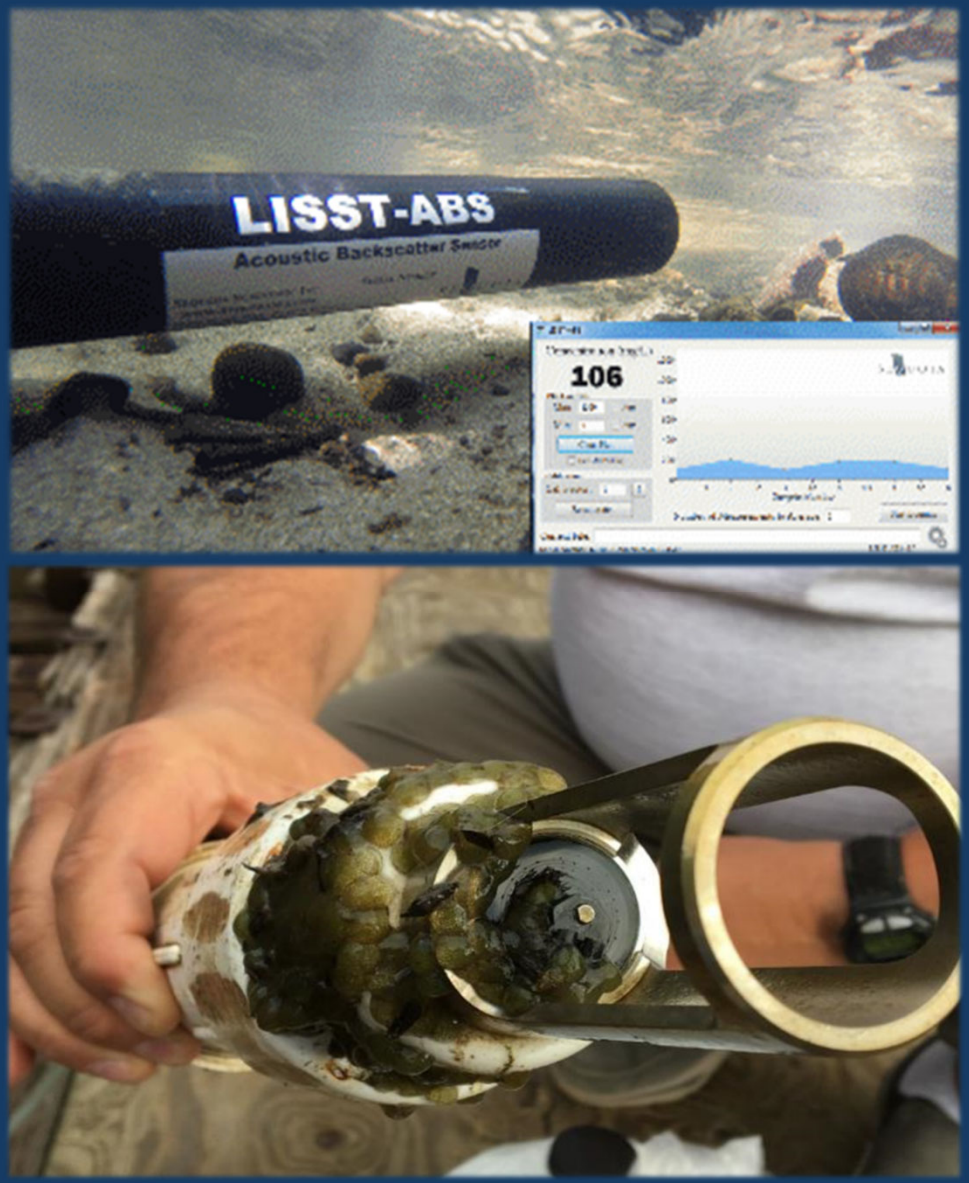
Monitoring equipment

- An acoustic (LISST-ABS) and optical turbidity sensor (NEP 5000) deployed at each location
- Interfaced with a Sutron Satlink3 datalogger
- Data recorded every 15 minutes and transmitted every hour



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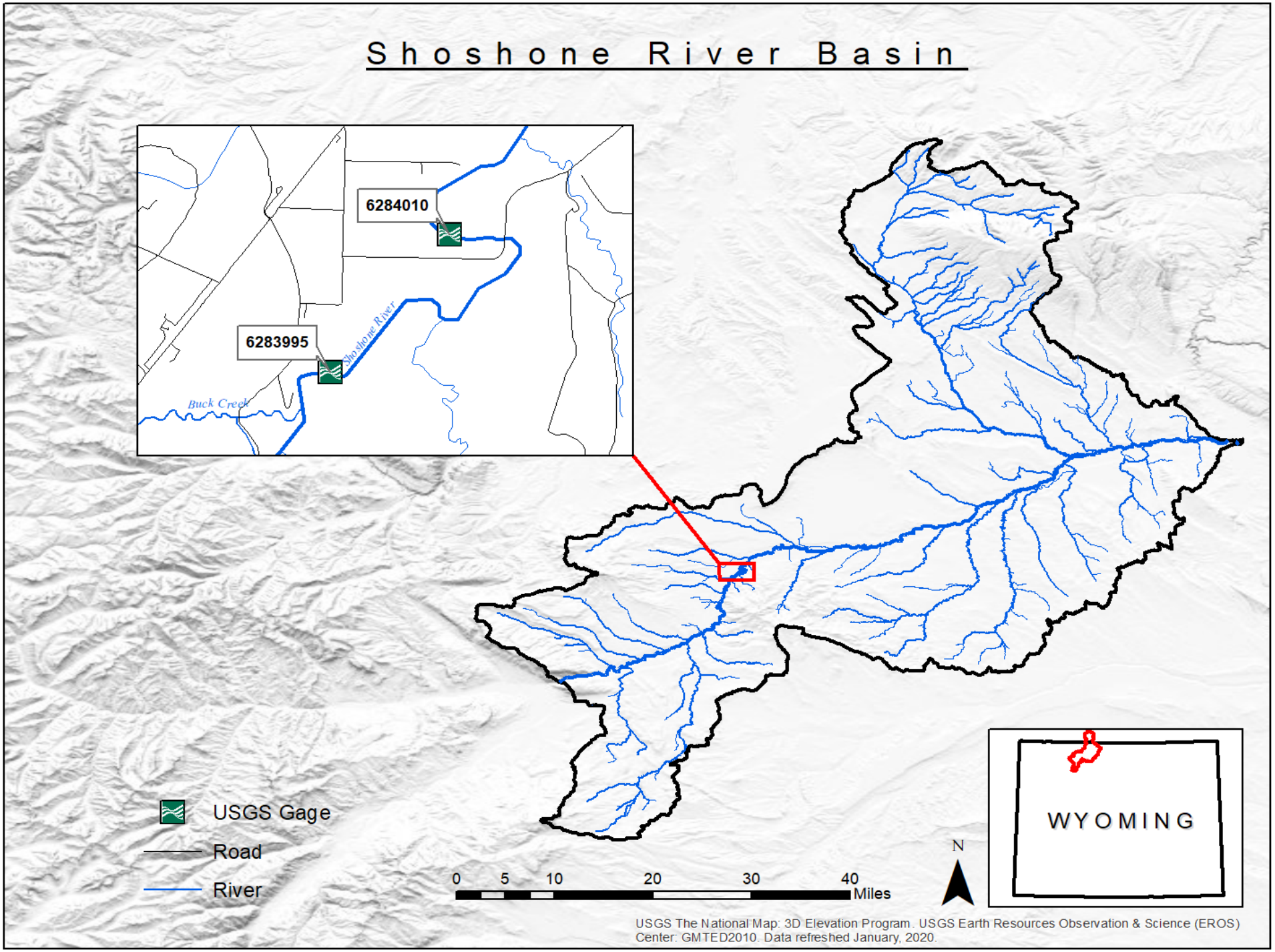
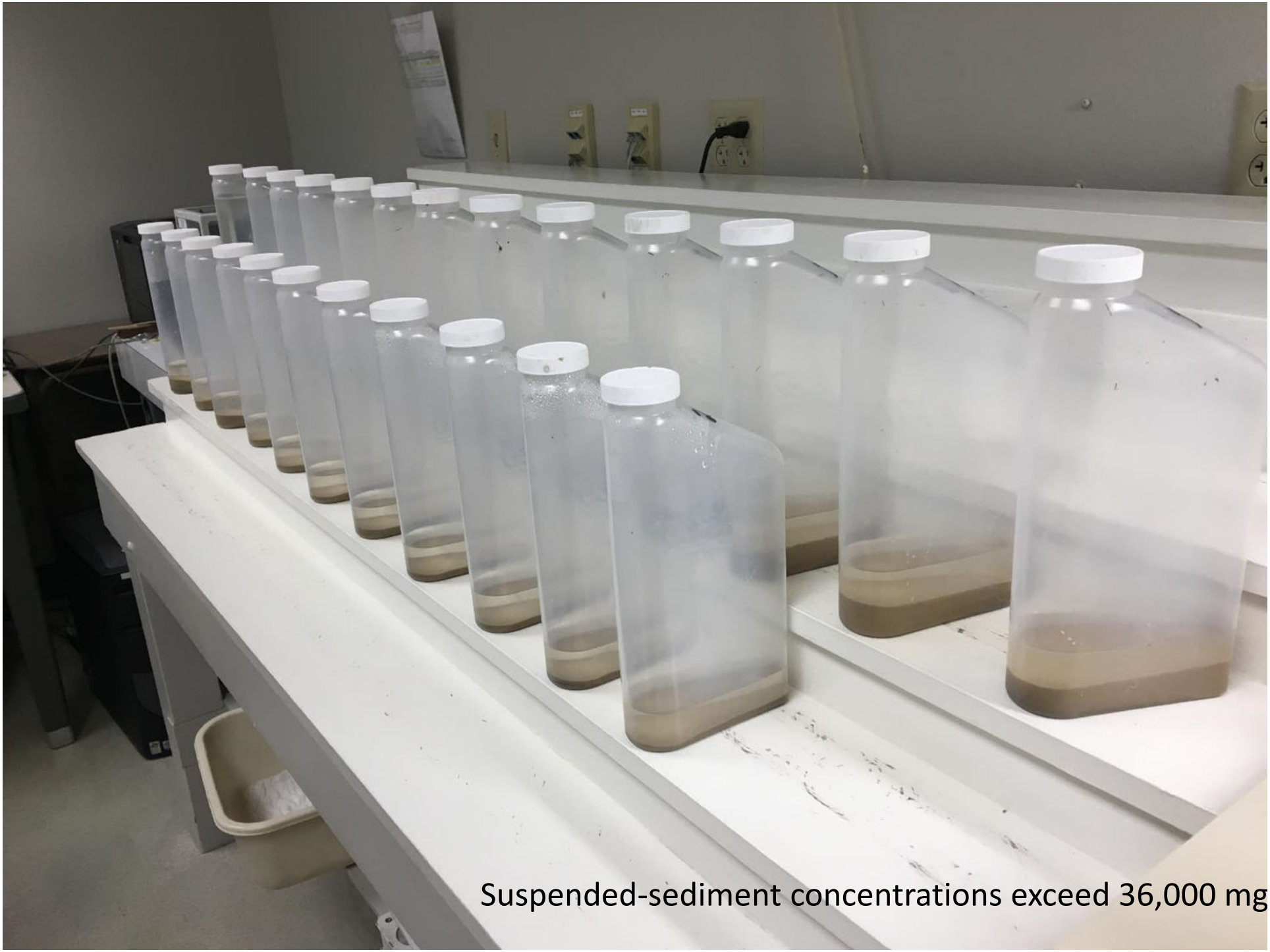
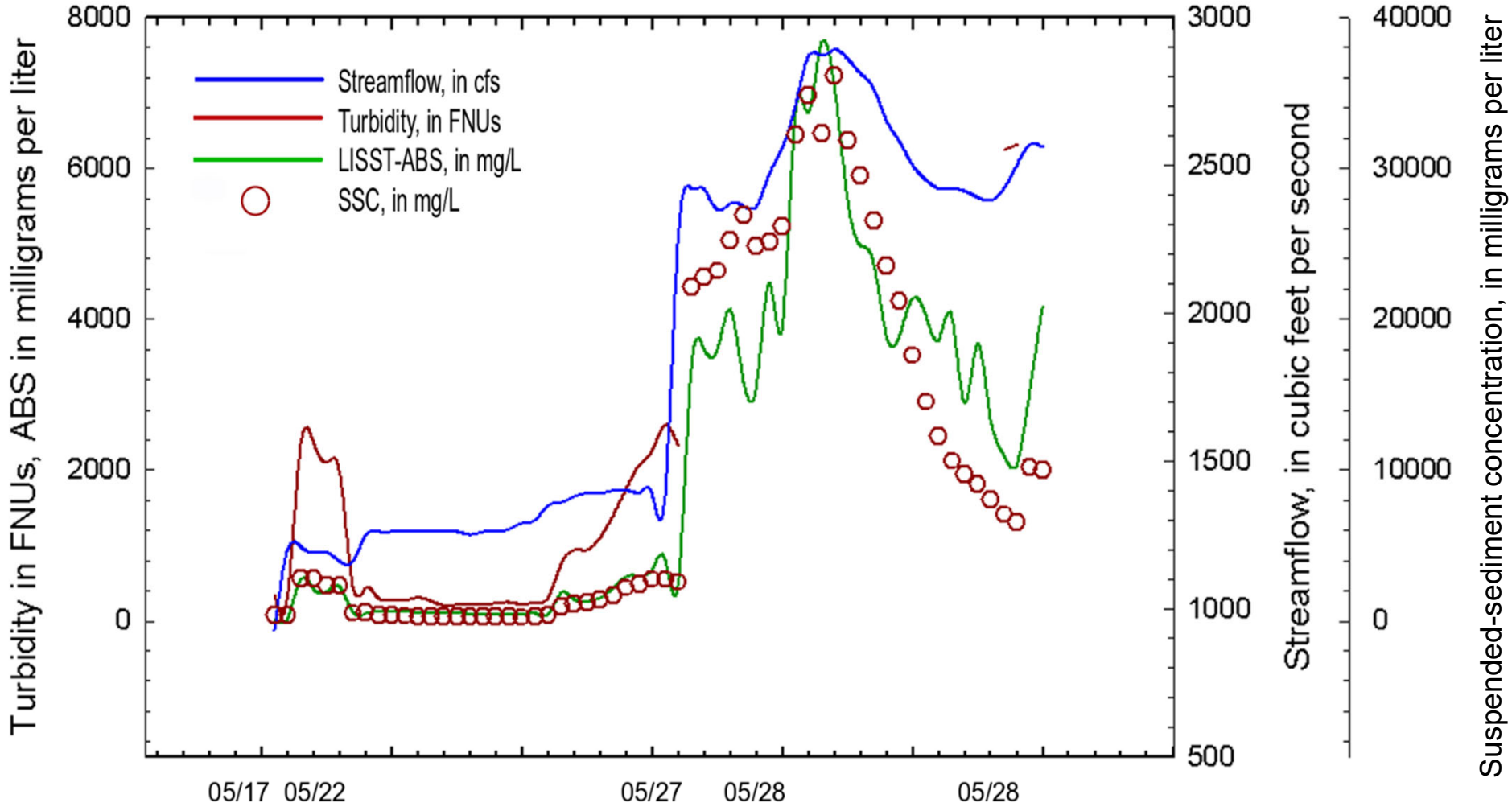

Shoshone River Basin
6284010
6283995
Shoshone River
Buck Creek
USGS Gage
Road
River
0 5 10 20 30 40
Miles
N
WYOMING
USGS The National Map: 3D Elevation Program. USGS Earth Resources Observation & Science (EROS) Center: GMTED2010. Data refreshed January, 2020.

Shoshone River in WY
above Willwood Dam 06283995


Suspended-sediment concentrations exceed 36,000 mg

Shoshone River abv Willwood Dam 06283995




Shoshone River in WY
below Willwood Dam 06284010