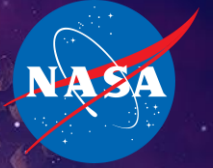


National Aeronautics and  
Space Administration



# EXPLORE SCIENCE

From Glacier to Sea: Impacts of Outwash Flooding GLOBE Investigation in Juneau, Alaska

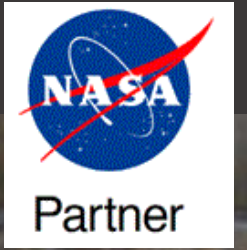
**ELENA SPARROW**

Lead, Arctic and Earth STEM Integration of GLOBE and NASA Assets (SIGNs)

October 22, 2019

# From Glacier to Sea: Impacts of Outwash Flooding

## GLOBE Investigation in Juneau, Alaska



### Arctic & Earth STEM

### Integrating GLOBE and NASA

educators Adriana Northcutt and Kristen Wells engaged 90 students in monitoring the effects of Mendenhall Glacier outwash flooding on salmon.

- Thunder Mountain High School in Juneau, Alaska. October 9, 2019
- Culturally Responsive Curriculum
- Local Tlingit Elders and Storytellers shared knowledge of salmon and glaciers
- GLOBE Protocols: Dissolved oxygen, freshwater macroinvertebrates, water transparency, nitrates, pH, salinity, water temperature.



Photo credit: Molly Tankersley, 2019  
International Arctic Research Center

