



NORTH CASCADES INSTITUTE MT. BAKER SNOW SCHOOL

2019

PROGRAM REPORT

Mt. Baker Snow School fosters connections between mountain snowpack and watershed health. The alpine heights of Mt. Baker-Snoqualmie National Forest become a living laboratory, blending community-led data collection, environmental education, and recreation. Local Middle School classes explore on snowshoes led by Western Washington University (WWU) student interns, Northwest Avalanche Center educators, and Kodner Lab snow algae researchers. Snow School students participate in two sessions:

1. **Classroom visit** focusing on weather monitoring, public lands, and healthy watersheds
2. **Field trip** to Mt. Baker Ski Area. Students conduct hands-on experiments—gathering samples, monitoring conditions, and analyzing data on snowpack, snow algae, and snow-water equivalency. This unique citizen science opportunity contributes to cutting-edge research at WWU’s Kodner Lab.

Program Outcomes

APPLIED SCIENCE LEARNING of watersheds, weather and climate



Increase ACCESS TO PUBLIC LANDS for local kids and families



Encourage HEALTHY LIFESTYLES through winter recreation



Increase OBSERVATION and INQUIRY skills



Foster a greater SENSE OF PLACE and CONNECTION to community



Expose kids to STEM EDUCATION and CAREER PATHWAYS



2019 Highlight: A Program Within A Program

Snow School trains volunteer instructors to teach about the complex interactions between climate, weather, and watersheds. In 2019, instructors came from WWU, NW Indian Collage, Washington Conservation Corps, NW Avalanche Center, Mt. Baker Ski Area, and nearby communities. Instructors taught a variety of lessons focused on how local snowpack has far reaching effects on the broader community and how the Mt. Baker ecosystem serves as a tangible example of our global climate. This translates into a multi-level learning experience as instructors use their new understanding to teach middle school students. They report that this experience expands their own connection to place and deepens their understanding of how water connects us all.

Participant Snapshot

Our priority audience is rural and underserved communities surrounding Mt. Baker-Snoqualmie National Forest. Schools pay just \$10 per student. Philanthropic support enabled the Institute to subsidize fees by \$39,000!

515 YOUTH
served from
11 schools

105 TEACHER
& PARENT
participants

26 VOLUNTEER
& INTERN
instructors

55% LOW-
INCOME
students

82% RURAL
UNDERSERVED
schools

14 distinct
SNOW ALGAE
samples collected

“ I appreciated questions students were asking at the stations. At the snow profile station, one student asked to see some other snow profiles that were more unstable and asked what level of danger each one would represent. It was great to see my students so invested in what they were learning in an outdoor context.

— Shannon Flory, Shuksan Middle School Teacher

Evaluating Outcomes: Post Snow School teacher surveys demonstrate program impacts:

86% of teachers reported that Snow School was “highly valuable” in supporting their teaching about climate science

72% reported Snow School was “highly valuable” in building classroom curriculum around a field experience

100% reported that Snow School was “highly valuable” in supporting integration of local landscapes into their curriculum

Partners & Supporters: Mt. Baker Snow School is made possible with the generous support from individuals and organizations, including:



Thank you to these funders whose grant support made Mt. Baker Snow School possible:

Office of Superintendent of Public Instruction

Lummi Nation Community

Swinomish Indian Tribal Community

And to all of the individuals and families who made generous contributions, *thank you!*

Thank you to the Bellingham MakerSpace and Community Food Co-op for donating their space.

