



NORTH CASCADES INSTITUTE MT. BAKER SNOW SCHOOL

2020

PROGRAM REPORT

Mt. Baker Snow School brings Whatcom and Skagit County middle school students to the headwaters of their home watersheds to learn how water connects us all. Our goal is to support local teachers with a relevant, place-based environmental science curriculum. Through exploring the dynamics of the winter mountain environment, students learn about impacts of climate change visible at Mt. Baker Ski Area. Students gain first-hand experiences snowshoeing, collecting snow samples, and making scientific inferences on watershed health based on their snowpack measurements and observations. Snow School's learning environment is the sub-alpine heights of Mt. Baker-Snoqualmie National Forest on the traditional homelands of the Nooksack and Lummi tribes. **In spite of snow days and school closures from coronavirus, we were able to serve 416 students from 11 different schools this year (73% of students we anticipated serving in 2020).**

Program Outcomes

APPLIED SCIENCE LEARNING of watersheds, weather and climate



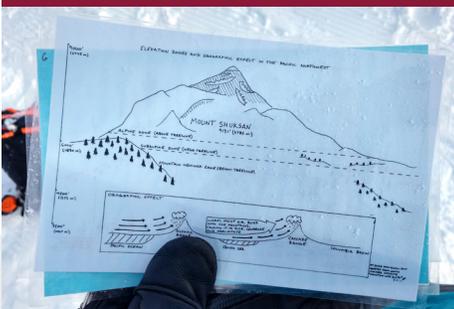
Increase ACCESS TO PUBLIC LANDS for local kids and families



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



New District Added in 2020!

This year, middle schoolers from Concrete School District attended Mt. Baker Snow School for the first time. Concrete is only 17 miles south of Mt. Baker as the crow flies but a two-hour drive to the Ski Area. One of this season's volunteer Snow School instructors, Muriel Troka, a Concrete High School alumna, said, "A lot of people in Concrete don't spend time up in the mountains even though they're so close. It's a great experience to get into a different climate and be exposed to science." 90% of Concrete students are low-income (highest percentage in the county and 41% higher than state average). Visiting the headwaters of the Baker River that flows into the Skagit River in Concrete gives students a sense of identity and perspective on where they live.



Participant Snapshot: Our priority audience is rural and underserved communities surrounding Mt. Baker-Snoqualmie National Forest. The Institute charges just \$10 per student and philanthropic support enables us to subsidize tuition by over \$70,000!

416 YOUTH
served from
11 schools

91 TEACHER
& PARENT
participants

45% LOW-
INCOME
students

25 VOLUNTEER
& INTERN
instructors

69% RURAL
UNDERSERVED
schools

8 NEW
SCHOOLS
served

“ Snow School allows me to bring my students outside to a landscape which many of them would never experience otherwise. For some students, it is their first significant ‘wild’ outdoor experience. This opportunity has potential for profoundly influencing a student’s education and life. It could be the key that opens their eyes to their connection with the natural world, even if only in a small way.

—Eric Henry, Mount Baker Junior High science teacher

In the News: “One morning in mid-February, eighth-graders from Concrete caught snowflakes on their tongues and took a few falls as they learned how to walk with snowshoes strapped to their feet. ‘I am so pumped!’ 14-year-old Phoenix Young said—not about a typical snow day, but a day spent at Snow School with 27 of his peers.” Snow School instructor Muriel Troka said showing Concrete students a new view of their backyard at Snow School could inspire some of them to also pursue careers in the environmental sciences and protect the region they call home.”

—From the **Skagit Valley Herald** article, **“Concrete students get immersed in mountain science at Snow School”**.
Read the full story at <https://bit.ly/3oZh9Kl>



Evaluating Outcomes: 2020 was the first year Mt. Baker Snow School collaborated with Dr. Alia Khan’s Environmental Science lab at Western Washington University. WWU students developed lessons on albedo and black carbon to help Snow School participants visualize how fossil fuel emissions and wildfires accelerate climate change globally.

Post-program teacher survey data showed:

Students’ participation in applied science in the field increased by **54%**

Students’ interest in science-related topics increased by **36%**

Students’ ability to describe how snowpack influenced their home watershed increased by **63%**

2020 Partners & Supporters:

Mt. Baker Snow School is made possible through partnerships and support from individuals and organizations including:



► **Thank you** to these funders whose grant support made Snow School possible:

Rice Insurance
Swantz Family Foundation
Swinomish Tribal Community
Whatcom Community Foundation

► **Thank you** to all of the individuals and families who made generous contributions.

► **Thank you** to the Bellingham Public Library and Community Food Co-op for donating their space.