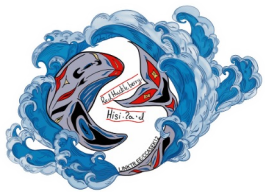




CCASE Cascadia Culture and geoScience Exchange Program



Madeleine Lucas & Julia Grossman
CRESCENT Annual Meeting, October 2025



Maddy kʷoláʔli
Híli hókʷatʼ

Quileute CASE Team Leader

ʔuǰu·ʔaʕa·ksa
ʔuquqʕas Julia

Makah CASE Team Leader



CCASE Program Mission:

To collectively increase coastal community resilience to earthquake and tsunami hazards through long-lasting & impactful educational partnerships with rural and tribal K-12 schools in Cascadia.



CASE team with Quileute Tribal School high school class and flag of the Quileute Tribe

Share traditional
knowledge,
stories, and food

Participate in
cultural activities
(music, dance, art)

Teach indigenous
languages



Cascadia Culture & geoScience Exchange

Teach Earth Science to
high schoolers

Share about our
experience as UW
students

Mentor high school
students interested in
college



Cascadia CASE Structure

Quileute Tribal School
in La Push, WA



Neah Bay High School
in Neah Bay, WA



Quileute
CASE
(4th year)

Makah
CASE
(2nd year)



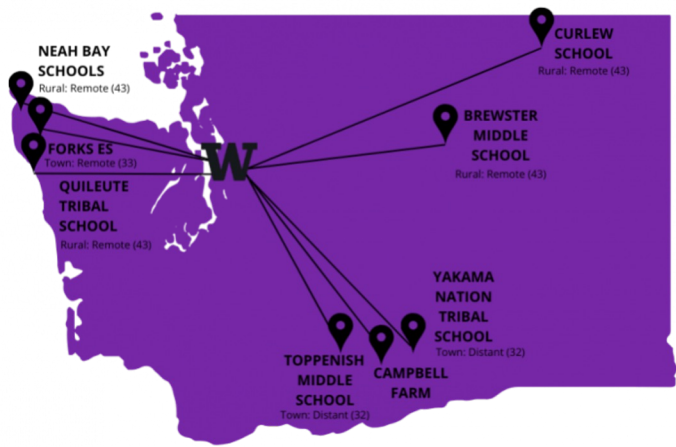
CCASE Origins and Educational Model



RIVERWAYS EDUCATION PARTNERSHIPS

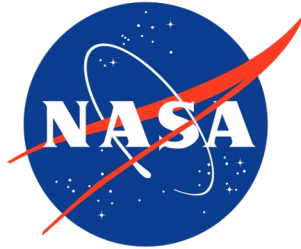
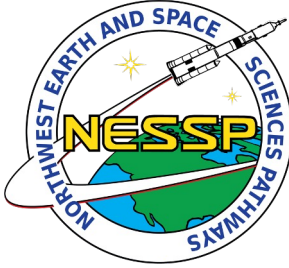
UNIVERSITY *of* WASHINGTON

Connecting with students, schools and communities towards tribal sovereignty and racial justice.



Formerly known as: **pipeline project**
university of washington

CCASE is run through a close partnership with UW Riverways Educational Partnerships



Originally supported by a Cascadia CoPes Hub Seed Grant; now supported by and in collaboration with CRESCENT



Quileute Tribal School Visits UW!





Logos created by QTS students symbolize the strong partnership developed between UW and the Quileute Tribe.

Coastal erosion fieldwork with QTS HS interns at Rialto Beach



Drumming with the Quileute drum group



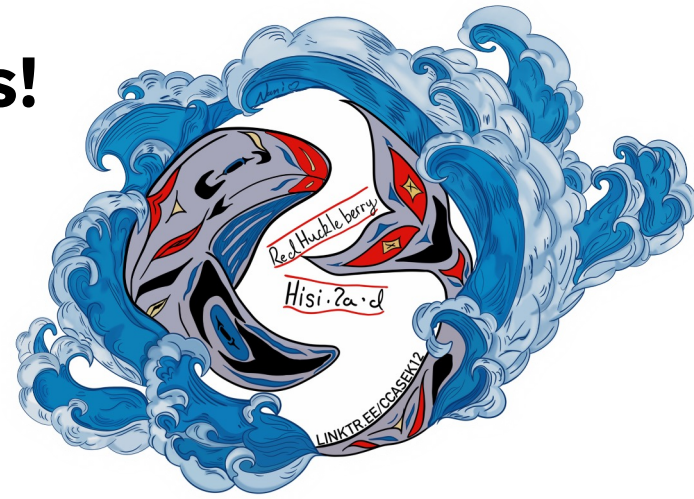
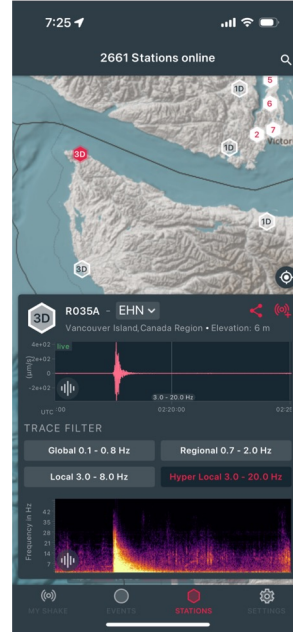
Earthquake engineering day



Students competed to build the tallest building that didn't collapse with our hands-on shake table activity!

Working with our student interns!

We met with the interns (Amnesty, Kali, Nani, and Qwaapeys) throughout the year!



Their final project was for us to install a Raspberry Shake seismometer in NBHS and to put up tsunami walk time and evacuation maps around town!

Woodshop: bentwood box making!



Traditional boxes made by Northwest Coast peoples and were used predominantly for cooking. Boxes are entirely made of wood! No glue, nails, etc. We saw other examples in the Makah museum!

Salmon release



The marine bio class runs a coho salmon fish hatchery on campus – we went with them to release their salmon into the wild!



Plans for this Year: New Partnerships & Programming

- Maintain and grow Quileute and Makah CASE programs (*GEI*)
- Building new partnerships (*P&A*)
 - Engage WA EMD in curriculum development and field trips
 - Pilot Shoalwater CASE in Spring/Summer 2026
 - Connect with community colleges (Peninsula)
- Emphasis on career pathways (STEM, emergency management, planning, policy, law, GIS, etc.)



Visions for the Future

- Hire full-time program manager to increase organizational capacity
- Sustainably expand CCASE to more coastal schools
- See CCASE 1-pager for more details!

Cascadia Culture & geoScience Exchange



Building community resilience to Cascadia geohazards through culturally-rooted K-12 education

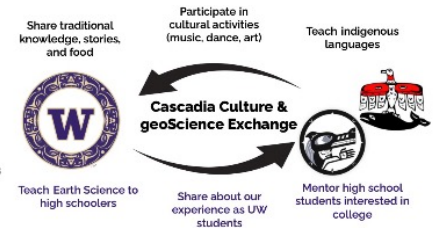


Overview

The Cascadia Culture & geoScience Exchange (CCASE) Program seeks to collectively increase coastal community resilience to geohazards through long-lasting and impactful educational partnerships with rural and tribal K-12 schools in Cascadia. By centering indigenous culture in our educational programs, we aim to empower rural and tribal students to see themselves as Earth Scientists and to pursue STEM after high school.

Programming

Based on UW's Riverways Education Partnerships program, CCASE team members develop week-long geohazards curricula that they then teach during UW's spring break. Hands-on lessons integrate geoscience and indigenous knowledge, with local field trips and guest lectures from Elders providing vital place-based learning. By centering indigenous culture, histories and lived experiences, CCASE aims to empower students to pursue STEM while simultaneously providing information on Earth Science careers and pathways.



During spring break week and on site visits throughout the school year, CCASE team members learn from students, partner teachers and community members who graciously share their cultural traditions, languages, histories and traditional knowledge. CCASE team members also mentor high school students through CCASE's year-long paid internship program, which aims to create a pathway for indigenous students into the field of Earth Science.

CCASE's Quileute (Kwó7iyot') program at Quileute Tribal School in La Push, WA is currently in its fourth year, and CCASE's Makah (Qwidičča7a-tx) program at Neah Bay High School in Neah Bay, WA is in its second year.



Program Vision & Needs

Our vision is to continue the Quileute and Makah CCASE programs while sustainably expanding our program to additional schools along the Cascadia coastline. To achieve this goal, we need to increase CCASE organizational capacity through hiring a full-time program manager. This vision necessitates an increased and longer-term funding source that enables continued student participation and program continuity.

Contact

If you would like to partner with us or help grow our program, please email cascadiacase@gmail.com.

Check out our [website](https://cascadiaquakes.org/geoscience-education-and-inclusion/ccase/) to learn more:
<https://cascadiaquakes.org/geoscience-education-and-inclusion/ccase/>



Liʔatskəl! ʔušu·yakšʔalc!

Thank you CRESCENT for supporting CCASE!

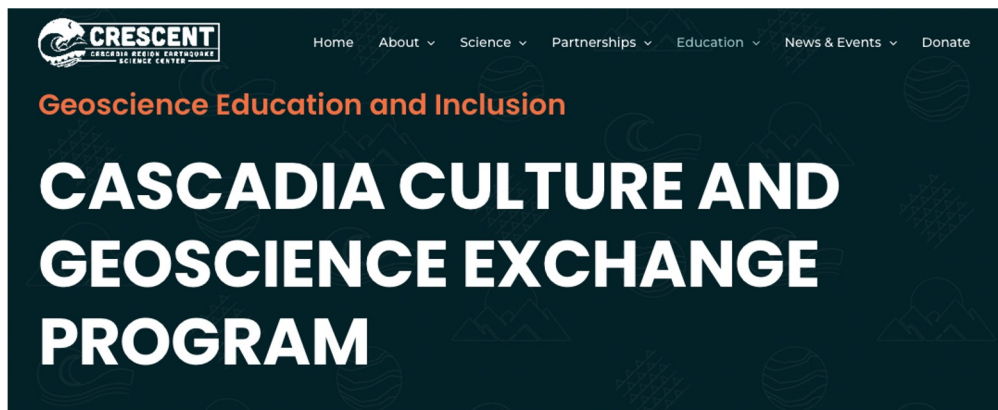


Quileute CASE

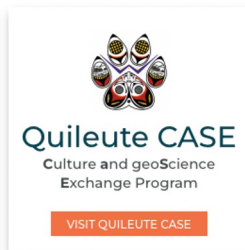


Makah CASE

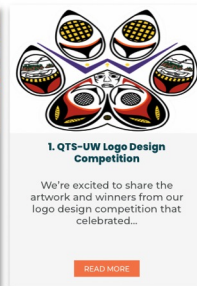
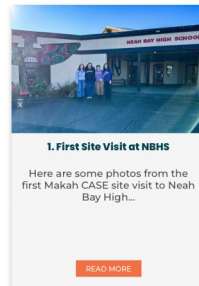
Check out our website to learn more!



CCASE Programs



Blogs



1 2 3 Next »

<https://cascadiaquakes.org/geoscience-education-and-inclusion/ccase/>

Email us to get involved! cascadiacase@gmail.com