Appendix F:

Geoscience Alliance Conference Report
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F.1 Introduction

Geoscience Alliance National Conference

GA3 2015 conference attendees

The third Geoscience Alliance national meeting, “GA3: A Changing Climate’s Effect on Rivers, Estuaries, Oceans, First Foods, and Tribal Health,” met in Portland, Oregon, March 21-23, 2015. 48 different indigenous nations were represented at the conference.

The Geoscience Alliance (GA) is a national alliance of individuals committed to broadening participation of Native Americans in the geosciences. Its members are faculty and staff from tribal colleges, universities, and research centers; native elders and community members; industry and corporate representatives; students; formal and informal educators; and others. Native Americans are underrepresented in the Geosciences, despite ongoing efforts to provide pathways into geoscience careers for Native students. With Native participation, a geoscience research agenda responsive to the unique priorities and values of indigenous communities will include indigenous needs, values, and perspectives to address the management of these widespread lands and resources, and tribes would have a higher chance of finding tribal members to contribute geoscience knowledge and perspectives to community issues. This would have widespread implications for overall management of our natural resources.

F.2. Attendees

The Geoscience Alliance conference hosted 116 attendees, including: 11 tribal college students, 21 undergraduate students pursuing Earth and environmental science degrees at 4-year universities, 27 graduate students, 10 tribal college faculty members and 12 faculty members from 4-year universities. Both the National Science Foundation and the US Department of Forestry sent representatives, as did various organizations such as Inter-tribal Youth, Wisdom of the Elders, Water Education Network and CUHASI. Twenty cultural experts, including the Tlingit dance group Náawk, shared cultural dances, stories, songs, and knowledge, as well as lent their perspective to all discussions and workshops which took place during the conference. The conference attracted a wide age-range of participants from a six-year old dancer to a 77 year old elder, with five elders and five high school students participating in the conference and adding to the diversity of perspectives.
Indigenous Communities which were represented included:

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<tr>
<th>Community</th>
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<tr>
<td>Acomo Pueblo</td>
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<td>Apache</td>
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<td>Arikara</td>
<td>Haida</td>
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<td>Ashkenasi</td>
<td>Hawai'ian</td>
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<td>Blackfeet</td>
<td>Hidatsa</td>
<td>Mayan</td>
<td>Potawatemi</td>
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<tr>
<td>Cayuse/ Walla Walla</td>
<td>Ho-Chunk Nation</td>
<td>Menominee nation</td>
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<td>Cherokee</td>
<td>Iñupiak</td>
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<td>Chicasaw</td>
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<td>Chippewa</td>
<td>Ivatum</td>
<td>Muscogee Creek</td>
<td>Tlingit</td>
</tr>
<tr>
<td>Choctow</td>
<td>Klahoose First Nations</td>
<td>Navajo</td>
<td>Tsalagi</td>
</tr>
<tr>
<td>Colville</td>
<td>Kootenai</td>
<td>Nez Perce</td>
<td>Ts'msysen (Tsimshian)</td>
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<tr>
<td>Dranjik</td>
<td>Kumeyaay</td>
<td>Oglala Lakota</td>
<td>Wasco</td>
</tr>
</tbody>
</table>

Náakw (Medicine), a Tlingit dance group that meets weekly to celebrate ancestry, community empowerment and proper protocols for song and dance presentation, were full participants in the conference. They have a strong focus on Tlingit language perpetuation through new song composition, and introductions, as well as casual and formal use of the language. The group was formed in November of 2014 in Seattle, Washington and includes members of several tribes. The group spokesperson, Nahaan, is of Lingít, Iñupiaq and Paiute ancestry. He teaches the Lingít language and is of the Dakh'l aweidi clan from the Chilkat river area of what is now called South East, Alaska. Náakw can be contacted at jilkaatkeet@gmail.com and looks forward to sharing their medicine with you at your next event.
F.3. Activities

Opening presentations were given by CMOP Director Dr. António Baptista, and Indigenous Scholar Jon Waterhouse. CMOP Director of Academic Programs Dr. Nievita Bueno Watts chaired the event, with assistance from co-chairs Dr. Diana Dalbotten of the National Center for Earth-surface Dynamics and Dr. Antony Berthelote, Director of the Hydrology Program at Salish Kootenai College and CMOP doctoral student Sheree Watson. CMOP doctoral candidate Wendy F. Smythe acted as Master of Ceremonies. Workshop presenters included CMOP postdoctoral researcher Dr. Matthew Jones, CMOP students Wendy F. Smythe and Jacob Phipps, Dr. Amy Myrbo of LacCore, Portland State University students Ciarra Green and Christina Uh, doctoral student Darryl Reano from Purdue University, Sean McAllister from the University of Delaware, Robyn Gastineau from Vernier Software and Technology, and Susan Eriksson of Eriksson Evaluation. These workshops provided participants with hands-on learning activities.

In talking-circle sessions, participants explored regional impacts of a changing climate that have been noted on indigenous lands throughout the country. Natural resource managers from tribal lands discussed some of the particular challenges being faced by indigenous nations, and participants contributed specific local knowledge relevant to their particular home places. Participants were eager to discuss the challenges faced by tribal communities in dealing with changing climates and their impact on Native foods, natural resources and health.
A poster session was held, where a variety of projects from around the country were displayed and discussed. Students of all levels participated, as did center leaders and employees of government agencies. The focus of this session was becoming acquainted with the great work others of like mind are doing throughout the land. Many connections were made and ideas shared in a friendly, non-threatening atmosphere. For some it was the first time presenting their work.

Doctoral students Angel Garcia [Taino] from Arizona State University and Darryl Reano [Acomo Pueblo] from Purdue University discuss the challenges of ethnogeology research.

Although the conference was primarily focused on climate change issues related to Native homelands, challenges faced by non-traditional students was a reoccurring theme during discussions. Both undergraduate and graduate students narrated challenges they have faced as they pursue their degrees in the geosciences and related STEM fields. These include the tension of balancing academic demands while dealing with jobs, spouses, children, aging parents, housing issues and poverty. A graduate student panel spoke to all of these issues and provided examples of the motivation needed and gained by working towards a meaningful career in the geosciences where students hope to make positive impacts in their home communities.

Alicia Highland [African Amer] and Joe Camacho [Hispanic], Master of Science Education candidates from the University of Washington Island Wood get to know Dr. Elena Bautista Sparrow, Director of Education Outreach at the International Arctic Research Center, University of Alaska Fairbanks.
In addition to the workshops, presentations, talking circles, and cultural activities, the group also took an optional field trip to the Bonneville dam and fish hatchery and Multnomah Falls. During the bus trip former CMOP intern Patrick Feller took the mike and provided an impromptu narration of the geologic history of the area. The field trip provided participants with additional time for networking and reflection before the closing ceremony the evening.

_Nieves Clausen [Hispanic], elder and Dr. Elena Sparrow at Multnomah Falls_
F.4. Evaluation

The Geoscience Alliance national meeting used the AIHEC Indigenous Evaluation Framework in evaluating the conference. This model uses a theory of appreciative inquiry and participatory evaluation to empower the community being evaluated. People expected to network and ‘make connections’ with ‘like-minded people’, those with indigenous knowledge to manage the environment, especially on indigenous lands. Students expressed the empowerment of meeting others who are experiencing issues of being native and traveling the path of education and science. Participants also appreciated the experience of hearing others’ stories and experiences through the ‘talking circles’, community meals, participation in the traditional dancing, and opportunities to talk and meet people in unscheduled time. Cultural aspects of the meeting were surprising and fulfilling to many participants, and included the format of discussions, long and good meal-time discussions, student- focused activities, and the participation of the traditional dancers in all the activities. People appreciated hearing about the culture of the dancers as well as the ability to participate in the dancing. They felt community and empowerment from the experience. The field trip was also appreciated and some participants expressed a desire for more field trips.

The next Geoscience Alliance meeting is being planned for 2017.

The conference was made possible by support from the National Science Foundations’ Office of Integrative Activities, the NSF Science and Technology Center for Coastal Margin Observation & Prediction, and the National Center for Earth-surface Dynamics.
A Changing Climate’s Effects on Rivers, Estuaries, Oceans, First Foods and Tribal Health

GA3
Third Geoscience Alliance National Conference

March 21- March 23, 2015

Oregon Health & Science University
Portland, Oregon
The Geoscience Alliance has chosen to recognize Holly Pellerin with a Lifetime Achievement Award for service and education outreach to Native American students. Holly has been actively working with young students since the 1970s. Holly is an expert at developing programs for place-based education in tribal communities. She is the program director for the gidakiimanaaniwigamig program (“Our Earth Lodge” in Ojibwe). Her most recent projects are the manoomin “Wild Rice” project and the “Walking in Two Worlds” project. Holly has shared her experience in venues as varied as the Society for the Advancement of Chicanos and Native Americans in Science and American Indian Science and Engineering Society conferences, at science conferences such as the American Geophysical Union conference and the Geological Society of America, and in Washington at the National Science Foundation and the Department of Education. Holly has influenced hundreds of young people to pursue careers in science and to achieve college educations. Many of these students are now parents who have children in gidakiimanaaniwigamig. She is “Grandma Holly” to an entire community. As Holly says: We grow our own!

At gidakiimanaaniwigamig camp, February 2015.

Holly is center front, in the red cap, surrounded by her kids.
A huge Thank You to Our Sponsors for making

GA3: Third Geoscience Alliance National Conference 2015

possible and helping to bring us all together.

This conference is supported by a grant from the National Science Foundation (NSF).

Additional support comes from the National Science and Technology Center for Coastal Margins Observation & Prediction (CMOP) and the National Center for Earth-surface Dynamics (NCED)

Workshops are supported by the Institute of Environmental Health at Oregon Health & Sciences University; the University of Minnesota’s National Lacustrine Core Facility (LacCore); Vernier Software and Technology; Purdue University Department of Earth, Atmospheric & Planetary Sciences; University of Delaware School of Marine Science and Policy; Portland State University Environmental Science & Management; US Fish & Wildlife; Wisdom of the Elders; and Eriksson Associates.

We would also like to acknowledge the contribution of the following individuals and organizations who provided additional student travel funding:

Elena Sparrow  Susan Eriksson  Brianna Menning

Team for Research in Ubiquitous Secure Technology
Saturday, March 21st, 2015 6PM -- 11 PM

Arrive in Portland, Oregon. Take MAX to Conference Hotel

4:00 – 6:00 PM Registration

6:00 PM – Welcome, Blessing, Introductions

6:30 PM -- Dinner (at conference hotel)

7:30 – 7:45 PM – A Connected World António Baptista, CMOP

7:45 – 8:30 PM – Indigenous Science + Contemporary Science = ?? Jon Waterhouse, CMOP

8:30 – 9:00 PM -- Náakw Dance Group

9:00 – 9:30 PM icebreaker, open discussions, opportunities table, workshop information and sign-ups

9:30 PM Ice Cream break

Sunday, March 22nd, 2015 8AM – 10 PM

8:00 Breakfast

9:00 – 10:15 AM Workshop session #1

10:15 – 10:30 Break

10:30- 11:45 AM Workshop session #2

12 noon Lunch

1:15 – 1:30 Break

1:30 PM – 2:30 PM Talking Circle Discussion Session #1

2:30 – 2:45 Break

2:45 PM – 3:45 PM Talking Circle Discussion Session #2

3:45 – 4:00 Break

4:00 – 5:30 Panel Discussion: My Journey This Year

5:30 – 6:30 Dinner

7:30 – 10:00 PM Poster session
Monday, March 23rd, 2015  8AM – 10 PM

8:00 AM – 9:30 Breakfast

9:00 – 9:30 AM Speaker TBD

9:30 – 9:45 AM Break

9:45 – 10:45 AM – Talking Circle Discussion Session #3

10:45 – 11:00 AM Break

11:00 – 12:00 PM – Talking Circle Discussion Session #4

12:00 – 12:30 Closing Dancers

12:30- 1:00 Break. Report to bus.

**Field Trip – Boxed lunch**

1:00 Bus leaves hotel to Bonneville Fish Hatchery, Bonneville Dam, Multnomah Falls

6:00 PM Return to Hotel

6:30-7:30 PM Dinner

7:30 PM – 10PM Research talks, pop-ups, and closing

**Tuesday, March 24th, 2015 – Travel Home**

8AM – 9AM  Breakfast available
Workshops 1

Vernier: Incorporating Technology into Water Quality Studies  [Max 18 participants]

Presenter: Robyn Gastineau, Partner and Managing Director of Chemistry, Biology, and Environmental Science, Vernier Software & Technology

This hands-on workshop will introduce participants to LabQuest 2 and its water quality sensors. This data-collection technology is used by students around the country and around the world to study their environment, both in the field and in the classroom. Temperature, dissolved oxygen concentration, pH, and total dissolved solids are just a few of the water quality parameters that can be measured using LabQuest 2. Data can be geotagged using the built-in GPS, then mapped in Google Maps or ArcGIS. These innovative products from Vernier Software & Technology, along with their Water Quality with Vernier lab manual, make it possible for students to access technology previously available only to professionals.

Writing and reading lake histories to understand climate change

Presenters: Dr. Amy Myrbo, Research Associate, LacCore, Department of Earth Sciences, University of Minnesota; Shane Loeffler, LacCore, Department of Earth Sciences, University of Minnesota

The layers of mud beneath the bottoms of lakes contain a fascinating history of the lake and landscape. Using core samples, we can learn about what the environment was like hundreds or even thousands of years ago. Was the climate dry or wet? Did wild rice grow here? Were there salmon? Was the water salty or fresh? Was a river flowing in? out? When did pollutants begin to appear? In this workshop we'll play with core samples, creating histories and then reading them back. Although this exercise doesn't use real lake mud, we will talk about how history from lake core samples is being used every day in Tribal resource management and climate change research to understand the long-term natural conditions of our lands.


Presenter: Dr. Matthew Jones, Postdoctoral Research Associate, Institute of Environmental Health, Oregon Health & Science University

Ocean circulation has profound impact on climate, fisheries, and the re-distribution of nutrients on Earth. We will take a closer look at the factors that impact ocean circulation and discuss how climate change influences circulation patterns and impacts on traditional foods.

Pacific NW: Climate Change, Restoration and Implementation of Traditional Ecological Knowledge

Presenters: Jacob Phipps, Institute of Environmental Health, Oregon Health & Science University; Ciarra Green, Wisdom of the Elders; Christina Uh, Environmental Science & Management, Portland State University & US Fish and Wildlife.

Climate change effects in the northwest have already had dramatic effects and are being addressed from all fronts. During this workshop our regions problems will be addressed and how our up and coming Native American scientists are leading the way. We will give current examples of the strides being made by our respective organizations.

Free Geologic Remote Sensing Data and Potential Applications for Tribal Communities using MultiSpec

Presenter: Darryl Reano, MS; PhD student, Department of Earth, Atmospheric, & Planetary Sciences; Purdue University

High-quality remote sensing data collected across the United States is freely available. This workshop provides information about where to access this data and also how to perform basic analyses of the data using MultiSpec. MultiSpec is a freeware package developed at Purdue University to analyze multispectral and hyperspectral image data.

I'm Applying ……..The In’s and Out’s To Writing An Effective Essay

Presenters: Sean McAllister, MS; PhD student, School of Marine Science and Policy, University of Delaware; Wendy F. Smythe, MS; PhD candidate, Institute of Environmental Health, Oregon Health & Science University

Whether you are applying for graduate school, internships, or scholarships there are always essays to write; about yourself, your goals, and/or your past experiences. This workshop will address how to write an effective essay using the appropriate writing style for each type of essay. This session will be discussion based with a Q & A session at the end.
Implementing the AIHEC Indigenous Evaluation Framework  
Presenter: Susan Eriksson

The AIHEC model focuses on 'Telling Our Story in Our Place and Time'. In this short time, we will use this model to craft a story of the GA conference and collectively design a mechanism for GA community input into the conference evaluation. We will compare this model to 'western' evaluation standards. The AIHEC document and worksheets will be provided to participants.

Applying YOUR Science Within Your Tribal Community  
Presenter: Wendy F. Smythe, MS; PhD candidate, CMOP, Institute of Environmental Health, Oregon Health & Science University

This workshop will be an interactive discussion about incorporating traditional ecological knowledge (TEK) with western science. We will discuss how your science/research can be incorporated into your community, and how it addresses issues that are important to your Tribe.

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Ocean Circulation: What Drives Global Circulation?  
Presenter: Dr. Matthew Jones, Postdoctoral Research Associate, Institute of Environmental Health, Oregon Health & Science University

Ocean circulation has profound impact on climate, fisheries, and the re-distribution of nutrients on Earth. We will take a closer look at the factors that impact ocean circulation and discuss how climate change influences circulation patterns and impacts on traditional foods. Hands on activity.
1. **Mani Boyd**  
   mboyd@menominee.edu
   The pros and cons of the use of Glyphosate in forest ecosystems and whether or not it is a safe method of controlling weeds and invasive species.

2. **Ida Clarke**  
   ida.clarke24@gmail.com
   A Tribal Story Written in Silica: Using Phytoliths to Research the Effects of Mining on Past Wild Rice (Zizania palustris) Abundance in Sandy Lake, Minnesota

3. **Dominique David-Chavez**  
   d.mari.david@gmail.com
   Current and future distributions of four tree species in the Northern Rocky Mountains (USA): Geographic shifts with respect to geology, soils, and land management status.

4. **Jenna Davis**  
   jen.davis1214@gmail.com
   Examining Suitable Soil Regimes for Reestablishment of Camassia Quamash (Blue Camas), Flathead Indian Reservation

5. **Annette Drewes**  
   annette.drewes@lltc.edu
   Pond watch: a research and educational partnership between Leech Lake Tribal College and the USDA Forest Service northern research station

6. **Jorge Estevez**  
   estevezj@si.edu
   Union Higuayagua

7. **Angel Garcia**  
   angel.a.garcia@asu.edu
   Using Traditional Ecological Knowledge to Teach Geosciences: an Ethnogeology study in the Caribbean.

8. **Adrienne George**  
   adrienneg@mail.usf.edu
   Characterizing bacteria communities of coral diseases in China and Taiwan

9. **Citralina Haruo**  
   haruoc_1118@students.menominee.edu
   Community Seed Exchange

10. **Abigail Jones**  
    makoquahjones@yahoo.com
    A Tribal Story Written In Silica: Using Phytoliths to Research the Effects of Mining on Past Wild Rice (zizania palustris) Abundance in Sandy Lake, Minnesota

11. **Sandra Londono**  
    sandra.londono@asu.edu
    Ka+ En+t e Uai: The words of the landscape. Ethnogeology in the Colombian Amazon.

12. **Sean McAllister**  
    mcallis@udel.edu
    Field Sites to Promote Native Education: Soda Bay, Alaska
Posters

13. Sadredin Moosavi smoosavi@charter.net

Opening up the research system to the majority of people who have no access to the funding system under current rules. Opening up this system to stakeholders not tenured/tenure track at large research universities would help bring Native ideas about geoscience education and research into the national conversation and competition for resources. A poster could be made from this...time permitting given family.”

14. Ricardo Munoz rmunoz7@ucsc.edu

A 400-year phytolith-based reconstruction of wild rice (Zizania palustris) abundance from Mud Lake core sediments, Fond du Lac Band of Lake Superior Chippewa Reservation, Minnesota, USA.

15. Molly Papin Longtimesleeping papin306@gmail.com

Glacier National Park; Blackfeet Nation's Natural Water Storage Tanks

16. Noelani Puniwai npuniwai@hawaii.edu

Hawai’i’s Changing Cultural Seascape

17. June Sayers junemsayers@gmail.com

Barrier island sand dune restoration efforts in Grand Isle, Louisiana

18. Elena Sparrow ebsparrow@alaska.edu

Signs of the Land: Reaching Arctic Communities Facing Climate Change

19. Jonathan Volkers vojo0503@stcloudstate.edu

Barrier island sand dune restoration efforts in Grand Isle, Louisiana

20. Patrick Wurster patrickwursterjr@student.skc.edu

Modeling Potential Blue Camas Camassia quamash Habitat on the Flathead Indian Reservation.
Náakw (Medicine) is a Tlingit dance group that meets weekly to celebrate ancestry, community empowerment and proper protocols for song and dance presentation. They have a strong focus on Tlingit language perpetuation through new song composition, introductions, as well as casual and formal use of the language. The group was formed in November of 2014 in Seattle, Wa. and includes members several tribes. The group spokesperson, Nahaan, is of Łingít, Iñupiaq and Paiute ancestry. He teaches the Łingít language and is of the Dakhl'aweedí clan from the Chilkat river area of what is now called South East, Alaska. Náakw looks forward to sharing their medicine with you at your next event. Gunałchéesh (Thank you)

Frieda Eide is Tlingit and Iñupiaq and is very proud to celebrate her Tlingit culture with the Náakw dancers. She is Dakhl'aweedí clan from Kéet Gooshi Hit of Tlákwaan Kwáan.

Jennifer Fuentes is a descendent of both Apache and Indigenous Mexican heritage and is an active member of the Tlingit dance group Náaw. She received her Masters of Arts in Counseling Psychology at the Seattle School of Theology and Psychology and currently works with pregnant and parenting women battling addiction. Jennifer is a healer and seeks to do this through her work as a therapist, traditional healing and also through her life work as an activist for environmental and human rights. She has focused much of this work toward the healing of indigenous peoples throughout the world which includes her work with Idle No More and the Buffalo Field Campaign. She also seeks to address the healing of indigenous peoples through revitalization of language and culture and spends much of her free time participating in cultural
actives. You will also find Jennifer spending her free time with friends and family, hiking, camping, reading, and gaming. You can follow Jennifer on Twitter @beansontherun

Ayanna Fuentes is a descendant of Apache, Indigenous Mexican and African American Heritage and is an active member of the Tlingit dance group Náaw. She was born and raised in the Pacific Northwest and is currently a student focusing on receiving her high school education in a holistic manner. She is educated part time through a web based public school, part time in a non-traditional educational co-op and supplements her education through life experience participating in a number of groups, organizations and cultural activities like the Tribal Canoe Journey and the Buffalo Field Campaign. You will find Ayanna spending her free time hanging out with friends and family, reading, listening to music, crafting, acting and writing.

Dayeen (Ryan Alivewithskies) is Kumeyaay, Ivatum, Tsalagi, O'odham and Tlingit.

Leila Perez was born in Seattle Washington. She is the youngest of seven children to Raymond Nix Sr. & Margaret Hayward. Raymond Nix Sr. Of Hydaburg Alaska is full blooded Haida. Margaret Hayward of Wrangell Alaska belongs to the Tlinget, Tsimshian, Wasco, & Paiute tribes. Leila's greatest interest in life is learning the history, culture, & language of her tribes. In likeness of her ancestors, she will pass on knowledge to her two children, & to her future grandchildren. Leila firmly believes that the strong have an obligation to help the weak..which why she dedicates as much time as she can doing volunteer work along with her children. She has helped The Tacoma Rescue Mission, United Way, March of Dimes, Relay for Life, Thurston County Humane Society, & Emergency Food Network. With such an array of Charities...Leila has recently decided to focus on her local Native Community.

Jasmine Perez was born fifteen years ago in Auburn Washington. She is the oldest of two children to Hombre & Leila Perez. Her mother Leila Perez of Seattle Washington, belongs to the Haida, Tlinget, Tsimshian, Umatilla, Wasco, & Paiute tribes. Her father Hombre Perez of San Francisco California, is of Mexican & Caucasian decent. Jasmine is currently attending her Sophomore year at Gov. John R Rogers High School. She plans to participate in the Running Start Program her Junior & Senior year. Her academic plans also include University of Washington with a major in Psychology. Jasmine's time away from school is spent at French Club, various Libraries, & with her extended family, her Drum/Dance group - Nàakw.

Patricia Allen was raised in Seattle. Her father is Tlingit (Luknaaxaadí) from Hoonah, AK. Her mother is from several bands of the Iroquois Confederate nations, predominantly Mohawk of the Bar Clan, Seneca, and the displaced Stockbridge people. As well as native, her mother is African American and Creole (African Slave Descendant/Irish/Arawak Tribe) from Montserrat Island in the Caribbean. She is currently graduating from the University of Washington for her undergrad degree majoring in American Indian Studies and Law Societies & Justice and minoring in Diversity and Human Rights. She is currently awaiting approval for her Master's in Social Work emphasised around Intergenerational healing from historical trauma of indigenous communities.
She was a co-founder for the civil rights organization, NDNs For Justice, a member of the international hip hop organization Universal Zulu Nation and M.E.Ch.A. She is becoming a weaver and doing research internationally on decolonial indigenous movements and discourse. She was last year's Study body Director of Diversity Efforts for UW and this year's Student Advisory Board Chair for the UW Office of Minority Affairs and Diversity.

Glenda Breiler was born and raised on the Colville Reservation of northcentral Washington State and is an enrolled member of the Confederated Tribes of the Colville Reservation-Okanogan Band. Her parents, Patricia and Ron Breiler, both Colville tribal members, reside on the reservation and are her cultural and academic role models. She received a bachelor’s degree in Human Services from Western Washington University in 2004 and in 2009, graduated from the University of Washington with a Masters in Social Work.

As a Washington State tribal member she has remained dedicated to the tribes of the Pacific Northwest throughout her career. She serves as a volunteer on the Local Indian Child Welfare Advisory Committee in Seattle and is active in local Native communities through ongoing cultural and volunteer activities. A member of the Puyallup Tribal Canoe Family, she traveled on the 2014 Tribal Canoe Journey to Bella Bella, BC. and is a member of the Tlingit medicine dance group, Naaw. Her path is committed to community resiliency through Indigenous medicinal knowledges and healing practices. At the University of Washington and Northwest Indian College, she served as a mentor and teacher with local communities to create opportunities for academic completion and success for Native students as they navigate education systems. She is currently the Director of the Math, Engineering, Science, Achievement program at Edmonds Community College; focusing on initiatives to improve diversity and retention with an emphasis on traditionally underrepresented students in Science, Technology, Engineering and Mathematics fields. She is also a faculty member at ECC where she teaches Native Studies with an emphasis on tribes of the Pacific Northwest. Her teaching focus involves community healing from historical and intergenerational trauma with an emphasis on resiliency; indigenous foods and the environment; Indian Child Welfare; and indigenous family wellness.

Ryan Qualls grew up in Port Angeles and Lower Elwha Klallam Tribe area of WA. He is Tlingit of the Kaagwaantaan and Kiks.adí At. Uwaxije Hit of Sitka. And is a direct descendent of both Chief Shotridge and Chief Katlian. He is also of Indigenous Mexican Heritage. Ryan now resides in Seattle and is a personal assistant to the CEO of Hope Clinics, working to lobby and inform the public on the health benefits of hemp. He is also working on furthering his career path of renewable energy and will soon be entering school for Urban Planning and Civil/Environmental Engineering at the University of Washington. Aside from his professional work, you will find that Ryan has a passion for community civil rights and is a dedicated and active member of the Seattle community; involved in multiple community organizations and projects. You will also find that Ryan is highly involved in the Native community and has a strong desire to help preserve the culture for future generations. He is currently studying the Tlingit language and is a member of the Tlingit medicine dance group, Náakw. When Ryan is not busy at work in his community you will find him participating in the many outdoor activities the Pacific Northwest has to offer.
Louis Fawcett III was born in Seattle WA. He is the second oldest of 5 sisters and 4 brothers. His mother is an enrolled member of the Lummi Nation. His father is an enrolled member of the Ts'msyen Nation. Louis lives in Seattle and is a member of a Tlingit dance group named Náakw. Louis is also learning Sm'algayax, the language of the Ts'msyen. He is also being adopted into Gisbutwada the Killer Whale Clan. He is getting more and more involved with his culture, so he can learn it and pass it on to future generations. He graduated from Tyee high school in 1996 and is now a forklift operator in the Port of Seattle.

Shannon Morrison was raised in Juneau, ak and moved to Seattle Washington so her mother can continue her studies at the university of Washington. She has raised three sons while continuing her education at various colleges throughout Seattle and finishing her ba at city university in database management. Her career has been at the city of Seattle assisting human resource departments for the last 15 years. Her greatest joy is learning the Tlingit culture with her grandson Shannon Ray Thomas. She has many outside activities including volunteering with canoes, city of Seattle native employees, providing native cultural awareness to city of Seattle employees.

Miriam Zmiewski Angelova is Mississippi Choctaw, Chickasaw, Eastern-Band Cherokee, Fond du Lac Ojibwe, African-American, Ashkenazi) is the President and Founder of 7th Generation Consulting, LLC®, a Native woman owned consulting company providing professional and leadership development, content design and crisis intervention skills training to help build capacity in Native American communities. Miriam specializes in culturally tailored approaches to health-promotion and harm-reduction in women and adolescents and has over 10-years of experience in community-based prevention program development, facilitation and evaluation.
**Antonio Baptista:** António M. Baptista, Ph.D., Professor and Director, Institute of Environmental Health (IEH), Director, NSF Science and Technology Center for Coastal Margin Observation & Prediction (CMOP), Oregon Health & Science University. My team’s research focuses on environmental systems, specifically coastal margins like the Columbia River. At high-level, we seek to understand how these systems function today, and how susceptible they are to regional (e.g., economic development) and global (e.g., climate change) stressors. At stake is society’s ability to sustainably manage unique and essential services (e.g., ecological, economic, and human health related) provided by coastal margins, at a time of profound change. Our approach is transdisciplinary (“from genes to climate”) and relies on modern scientific constructs (“collaboratories”) that integrate field and lab observations, computer simulations via open flows of information. I am among the pioneers of the concept of collaboratories, via a leading-edge observation and prediction system for the Columbia River estuary. My scientific expertise is rooted on mathematics and fluid dynamics, but I have peer-published in areas including computational science; physical, biogeochemical & microbial oceanography; fisheries; natural hazards; cardiac flows; and computer science.

**Scott Beauvais:** Hello, my name is Scott Beauvais. I am a junior in the Hydrology program at Salish Kootenai College in Pablo, MT. My main interest as of now, and has been for quite a while, is the movement of pollutants through the subsurface. The main pollutants I am interested in right now are pharmaceuticals and road salt.

**Dawnell Begay:** I am Dawnell (Diné) from beautiful Snowy Northern Arizona. Currently on an educational hiatus, taking the time to learn my traditional practices from my paternal grandmother. I work with the Navajo Nation Judicial Branch Peacemaking Program. I am an Earth and Environmental Studies major, I am a Sundevil, Arizona State University. When I get the time to act my age I like to pester my family, go on weekend long Netflix binges, read a good book, or enjoy some delicious food.

**Tina Benally:** Hello, my name is Tina Benally. I am 4/4 Navajo and grew up on the reservation in Shiprock, New Mexico. I currently live in Albuquerque, New Mexico continuing my education at New Mexico Institute of Mining and Technology. I have interests in environmental impacts such as climate change and I would like to make a transition in also helping native communities in the future. I am currently working towards my undergraduate’s degree as a junior, double majoring in mechanical and petroleum engineering at NMT. I have had summer internships at Haskell Indian Nations University in Lawrence, Kansas with Dr. Wildcat whom is a strong Native American who strives to make a difference amongst the youth of Native Americans and acknowledge those who need to be aware of environmental changes and concerns in Native American communities. I have learned quite a lot during my internship with Dr. Wildcat and I would like to be more involved in future conferences that involve with environmental changes especially with native communities such as conferences or internships like the geoscience alliance conference in March 2015. Thank you for allowing me to hopefully attend the event and for those attending to gain more information about this conference.
Mani Boyd: My name is Mani Boyd, I am a non-traditional student at College of Menominee Nation. I will be graduating this spring 2015 with my bachelor’s degree in Business Administration. I am a member of the student groups American Indian Business Leaders (AIBL), Strategies for Environmental Education, Development, & Sustainability (SEEDS), and American Indian Science & Engineering Society (AISES). I am currently employed at the Sustainable Development Institute and will be closely involved in the gardening this coming spring and summer. I am looking forward to this new experience in my continuing education.

Nievita Bueno Watts: Hi, my name is Nievita Bueno Watts, Ph.D., and I am a geologist, science educator, and Director of Academic Programs at the NSF Science and Technology Center for Coastal Margin Observation & Prediction (CMOP). I conduct research on broadening the participation of underrepresented minorities in the sciences and I serve on the Board of Directors of the Geoscience Alliance, a national organization dedicated to building pathways for Native American participation in the Earth Sciences.

Joe Camacho: Hey, my name is Joe Camacho and I’m from Pomona, California. I am a recent graduate from Humboldt State University with a degree in Environmental Management and Protection: Environmental Education and Interpretation and a minor in geology and currently a Master of Education: Science Education (IslandWood) candidate at the University of Washington. I have a passion for geosciences education and love to get kids pumped up about our planet. Once I finish my degree at the UW I plan on becoming a high school science teacher. I believe that every student has ‘ganas,’ the desire to succeed. Teachers do not only educate their students, they serve as mentors and role models.

LeAnn Charwood: My name is LeAnn L. Charwood and I am currently enrolled at the Leech Lake Tribal College, my major is Natural Science. One of my main passions is the study of water. It is my understanding that several tribes across Indian Country have sustained issues pertaining to Natural Resources Management practices. During the summer of 2009, I have completed the Water Resources Technician Training Program funded by the Department of the Interior’s Bureau of Indian Affairs. After completing the program, I worked as a temporary technician for the Red Lake Department of Natural Resources. That was when my interest for all began, today I have yet to gain more hands-on training etc.

Marc Chavez: A graduate of University of California, San Diego, Marc has over 25 years in the water and 15 years as founder/director of InterTribalYouth.org and Young Native Scholars. Establishing partnerships with top universities, tribal organizations and communities, Marc aims to provide world-class educational opportunities to youth and indigenize education. In 2010, Chavez’ daughter, Amaya Xochi, passed on at age 10. Born with Cerebral Palsy- Quadriplegia, Blindness, Amaya continues to guide him in life and to motivate youth and adults alike. Chavez is currently an elementary student of traditional medicine and physical therapy. Chavez enjoys nature, surfing and people who foster hope, love, purity and have a fresh outlook.
Kirena Elana Y. Clah: I remember stories from my grandmother of how the greenthread plant, boiled to make our favorite tea, would grow bountiful in the hills behind her house. Now we have to drive several miles away to harvest it. I believe in the Navajo proverb: We do not inherit the land from our ancestors; we borrow it from our children. My interests in science began with issues such as contaminated water sources and polluted land that I witnessed on the Navajo reservation. Because of the increasing devastation to our planet I want to better understand and improve the relationship between humans and the environment. My desire for knowledge and exploration has led to the pursuit of traveling and learning from other indigenous peoples. I want to focus deeply into the conservation efforts and restoration projects currently being conducted, so that I can return to the Navajo reservation where I grew up and adapt solutions to fit the needs of my community culturally, ecologically and efficiently. My ultimate goal is to create restoration projects and community workdays that will allow my community to manage and maintain the land with an emphasis on Navajo cultural significance of learning from the past to benefit the future. My passion as a developing scientist is to travel and study in search of answers that will contribute to the effort to preserve the environment for future generations and will ultimately benefit not only humans but the Earth as well.

After attending the University of Hawaii at Manoa, I have realized that there are similar themes among cultures, that there are universal ideas, practices, and wisdom shared by many indigenous peoples shaping their relationship to the environment, even those environments so different as the dry desert where I was raised and the tropical island on which I now study. Being Navajo has privileged me with a perspective that allows me to critically think about solutions that aim to satisfy the need of the environment while being sensitive and understanding of the culture. After earning my baccalaureate in marine biology, I plan to pursue a master’s degree and I am considering a doctoral degree. I hope that in future endeavors whatever obstacle comes into my path, I will be able to solve it with the best possible solution, while working with the community and culture. I hope the experiences gained in my studies and research will allow me to service my community and teach, collaborate and address the major problems the Navajo people are currently facing. When I return home to the reservation, my dream is to one day harvest and brew tea with my own grandchildren.

Ida Clarke: My name is Ida Clarke, I grew up on the Pine Ridge Indian Reservation. I currently attend college at Black Hills State University where I study Environmental Science. This is my last year in college and will be graduating May 2016.

Nieves Clausen: My name is Nieves Clausen and I am of Spanish descent from the Cuenca province, Central Plateau Region. I am a retired mother of four and grandmother of twelve. I enjoy knitting, gardening, and cats. I grew up in a village that did not believe in education for women. While my children were young I studied at an adult elementary school, then completed a high school diploma and went on to get an AA from Southwestern Community College before beginning a 30 year career as a bilingual secretary.
Corina Corbine: My name is Corina Corbine and I’m 18 years old. I am from the Bad River Band of Lake Superior Chippewa. I am currently attending the University of Minnesota, Morris and I am double majoring in Environmental Science and American Indian Studies. I am interested in language revitalization and want to teach Ojibwe after graduation.

Diana Dalbotten: Hi, my name is Diana Dalbotten. I started the Geoscience Alliance in 2007 and love how it has brought me friends from all over the country. I am the Director of Diversity and Broader Impacts for the St. Anthony Falls Laboratory, University of Minnesota, and the National Center for Earth-surface Dynamics. I am also Education Outreach Director for the Consortium for the Advancement of Hydrological Sciences, Inc. (CUAHSI). I’m a mother and grandmother of 3 beautiful grandchildren. I am interested in art, history, literature, and music.

Dominique David-Chavez: As a PhD student in Colorado State University’s Human Dimensions of Natural Resources program Dominique David-Chavez represents the first generation in her family to pursue higher education. Her research experience includes geospatial sciences, climate change, and Indigenous science knowledge related work. She also serves as a mentor for students from underrepresented backgrounds in the sciences. In her PhD program Dominique plans to continue exploring geospatial science technology as a platform for bridging diverse ways of knowing in climate research and in science education. Her long term goals include strengthening opportunities and relevance for students from Indigenous communities interested in pursuing sciences in higher education. In her work she draws from her own experiences growing up with a diverse Caribbean-American (Native Taíno, African, Spanish & East European) cultural background.

Jenna Davis: I am a fourth-year, first generation student attending the University of Florida and will be graduating June 2015 with a B.S. in Environmental Science and a B.A. in Sustainability Studies. My hobbies and interests include traveling, hiking, biking, and I immensely enjoy meeting people from various places and cultures. Within and outside of school, my passion is learning about living systems and the ways that human institutions intersect with these systems. My experience participating in the 2014 REU on Sustainable Land and Water Resources internship not only provided me with a wonderful chance to conduct hands-on research, but also an incredible opportunity to gain a small insight into the cultures of the Salish, Kootenai, and Pend Oreille tribes. I hope to devote my future to working with complex global environmental issues, incorporating cultural understanding into my personal and professional growth, and become a global environmental steward and citizen.
**Christa Drake:** My name is Christa Drake and I am a graduate student studying Environmental Education at the University of Minnesota Duluth (UMD). I currently live in Cloquet, MN, but I am originally from the northeastern exurbs of St. Paul, MN. I have a bachelor’s in Biology from Metropolitan State University and 26 credits from the Master of Arts in Teaching program at Hamline University. After graduating with my bachelors, I worked as a lab technician at the LacCore lab at the University of Minnesota Minneapolis for five years, and, through the lab, I began working as a science mentor for the Manoomin (wild rice) Project, which involved working with LacCore, the National Center for Earth-Surface Dynamics (NCED), Fond du Lac Resource Management, and camp gidakiimanaaniwigamig. I worked as a mentor for NCED’s Research Experience for Undergraduates program on Team Zaaga’igan (lake) at the Fond du Lac Reservation in Cloquet, MN and as a mentor and teacher at the camp which is a STEAM camp for American Indian students. Currently, I am working as a tutor through the Upward Bound Program at UMD and am honing in on a thesis project which may be related to traditional ecological knowledge (TEK), sustainability, permaculture, or ecojustice.

**Annette Drewes:** Annette Drewes, PhD is the director of the Gikenimindwa Mitigoog [Forest Ecology] Program at LLTC. She has been at the college since Fall of 2012 and has a background in woodland and freshwater ecology, with experience in teacher training and education from kindergarten through adult.

**Kayla Duoos:** My name is Kayla Duoos and I’m 20 years old. I am from the Leech Lake reservation and am currently attending Leech Lake Tribal College. I graduate in May with my A.A and plan to attend Bemidji State University in the fall to pursue a 4 year degree in Medical Lab Sciences.

**Rebecca Edler:** Rebecca Edler is the Sustainability Coordinator at the Sustainable Development Institute (SDI) at the College of Menominee Nation (CMN). CMN is a Tribal College located on the Menominee Indian Tribe of Wisconsin lands that serves both Native and Non-Native students. Her current work encompasses overseeing campus sustainability projects and includes leading the efforts of the Colleges ACUPCC commitment. In addition, Rebecca oversees food sovereignty projects which include campus gardens, the development of a community Farmer’s Market, and a seed exchange program. Rebecca also serves on a committee that is exploring the health needs of the Menominee People.

Prior to working at the College of Menominee Nation, Rebecca was the director of the American Indian Center of the Fox Valley, a program of Goodwill Industries of Northeast Wisconsin. In researching program needs of off-reservation American Indians, programs were developed and implemented that centered on academic education, sustainability, health and wellness, and cultural knowledge.

Rebecca holds a Master’s Degree in Counseling: Higher Education, a Bachelor’s Degree in Social Science, and an Associate Degree in Supervisory Management.
**Stanley Edwin:** My name is Stanley G. Edwin. I am Dranjik Gwich’in from a small village in Chalkyitsik Alaska. I am a late starter in College, though I have to-date two AAS degrees and a BS in Applied Physics. Currently am working on my Masters in Atmospheric Science. The first of my family to served in the Military, the first to go to college. A 3rd generation seasonal forest firefighter. I am the youngest of my family, and currently have only one sibling still living out of 7. All the rest are deceased including father, mother and all my grandparents. I was raised as a hunter gather as all my peoples of the interior Alaska are, and still live this way today.

My research involves looking at funnel clouds occurring in Alaska and if their a result of climate change. Funnel clouds are the precursor to tornadoes as we understand it.

**Susan Eriksson:** Susan Eriksson, a mineralogist and igneous petrologist, was Associate Professor in the Department of Geosciences at Virginia Tech and the first director of both the Virginia Tech Museum of Natural History and UN-AVCO’s Education and Outreach program. Her international experience includes heading E&O at the Earth Observatory of Singapore. She now consults in planning and evaluating geoscience education projects.

**Kelsey Espinosa:** Hello my name is Kelsey Espinosa; I am an enrolled member of the Rosebud Sioux tribe. And I graduated high school from St. Francis Indian School. I am a currently a freshman at Black Hills State University. I am studying to get my bachelor in environment physical science and also a minor in art. My interests are learning my culture, drawing, and going on hikes around the black hills area.

**Jorge Estevez:** *Taiguey,* My name is Jorge Baracutei Estevez, I am a Taino Indian from the Caribbean. As a member of Union Higuayagua Taino Luku Cairi Caribena, a Taino cultural group dedicated to the preservation and rescue of all Indigenous Caribbean culture and customs. I serve as one of five leaders residing in multiple countries, Cuba, Puerto Rico, Dominican Republic, Haiti and Jamaica as well as the United States.

In addition I work for the Smithsonian National Museum of the American Indian, in both NYC and Washington DC as a research assistant and public programs coordinator. Currently we are involved in the research phase of the Caribbean indigenous Legacies Project which will lead to a major exhibit on the survival and continuity of the Taino peoples of the Greater Antilles.

I look forward to this conference to meet young native people involved in geoscience, culture and customs. I am particularly interested in how the changing environment, climate change is affecting native communities across the western hemisphere.
Deb Fassnacht: Deb Fassnacht has been Watershed Education Network (WEN)’s Executive Director since 2004. Deb brings nearly 20 years of program oversight experience and provides leadership and management of WEN’s varied water education programs. Deb is one of WEN’s four founders from 1996. She received B.S. in Forestry, Resource Management and Conservation from the University of Montana (UM) as well as a secondary science teaching certification. Deb has nine years of experience as a science and elementary teacher and brings public education experience from several natural resource agencies including the Missoula Water Quality District. She recently completed UM’s Nonprofit Management coursework for nonprofit leaders. Currently, Deb is finishing her masters in Education - Curriculum and Instruction with an emphasis in science education and Native American culture. Deb leads WEN’s education program development and ensures that curricula are aligned to the Next Generation of Science Teaching Standards.

Patrick Feller: Patrick Feller is a senior at Heritage University pursuing a Bachelor of Arts in Environmental Studies specializing in Natural Resources. He is a Louis Stokes AMP Scholar, a member of SACNAS and AICES and a registered member of the KLAHOUSE FIRST NATIONS band located in Squirrel Cove, British Columbia, Canada. During his time at Heritage, Patrick has completed several research internships including two water quality studies—a review of conductivity as a proxy for nutrient concentrations in natural streams and a study on wetlands as a filter for nutrients in natural streams—and an internship at OHSU at the Institute of Environmental Health working out of the Center for Marginal Observation and Prediction (CMOP), and the Columbia River Intertribal Fish Commission (CRITFC). There, he studied lamprey habitat opportunity in the Columbia River Estuary using the SATURN Observation System. He additionally spent two weeks on board the research vessel Oceanus working with teams of students and scientists conducting water sampling in estuary turbidity maximum zones along the Columbia River Estuary. Patrick has presented his research at both SACNAS and AICES national conferences and at Heritage’s annual Gathering of Scholars. After graduating from Heritage in spring 2016, Patrick plans on pursuing graduate studies in natural resources management.

Megan Forcia: My name is Megan Forcia, and I am 19 years old. I am wrapping up my first year at the University of Minnesota, Morris. I am double majoring in Environmental Studies and American Indian Studies. I am currently working as the Sustainable Communities Intern in the Office of Sustainability here on campus. I am very interested in renewable energy projects on tribal lands, and firmly believe that sustainability and self-sufficiency are the first steps toward being able to more fully practice our sovereignty as independent nations. I was born into the American Indian Movement and enjoy working toward cooperative and supportive communities.
Angel Garcia: Taiguey, my name is Angel A. Garcia Jr. and I’m native from the Caribbean. I am a Ph.D. student in Geological Sciences at Arizona State University. As an ethnogeologist and active member in my indigenous community (member of Caribbean’s Higuayagüa Taino Luku Cairi Union), I am interested in applying indigenous Caribbean’s Traditional Ecological Knowledge (TEK) to teach regional geology. The creation of this intercultural and interdisciplinary bridge pursues to attract and retain more Puerto Rican, Dominican and Cuban students to geosciences related careers. I am always looking forward to meet more scientists and leaders that are passionate and compromised with Native and Indigenous communities in North America and around the world.

Robin Gastineau: Robyn Gastineau received her B.S. in Integrated Science Education from George Fox University in Newberg, OR, and her M.S.T. in Chemistry from Portland State University. She taught chemistry, Earth science, and biology at Fort Vancouver High School in Vancouver, Washington, for ten years, during which time she developed a program for her students to monitor the water quality of a nearby creek. For the past 16 years, she has worked at Vernier Software & Technology in Beaverton, OR, where she was the lead author of their Water Quality with Vernier and Earth Science with Vernier lab manuals. Currently, she is a Partner and the Managing Director of Chemistry, Biology, and Environmental Science.

Adrienne George: Adrienne George is a PhD candidate at the University of South Florida College of Marine Science. The main objective of her dissertation is to characterize coral diseases in Taiwan and China. While abroad, Adrienne worked with Academia Sinica in Taipei, Taiwan and Chinese Academy of Sciences in Guangzhou, China through the NSF EAPSI in 2012 and 2013. Adrienne’s additional research experiences include the Partnership Education program at Woods Hole Oceanographic Institution, Delaware National Estuarine Research Reserve, and MOTE Marine Laboratory REU program. Her sea experience includes the E/V Nautilus for 3.5 weeks sailing from Puerto Rico to Grenada serving as an ocean science/mapping intern, the E/V NOAA Okeanos Explorer for 3 weeks from Galveston, TX to Norfolk, VA as a watchstander and assisting NOAA scientists with processing multibeam data and the Multicultural Students at Sea Together (MAST) program for 4 weeks in Chesapeake Bay studying marine policy, marine science, and the history of African Americans and Native Americans on the Bay.

Adrienne George graduated from Delaware State University in 2009 with a B.S. in Natural Resources and Environmental Science. She completed her M.S. in Marine Science with a concentration in Biological Oceanography in 2011 from University of South Florida (USF).

Vanessa Green: Vanessa Green is Director of Student Development and Diversity at the Institute of Environmental Health, Oregon Health & Science University. She coordinates undergraduate internship programs and graduate admissions processes related to the Center and develops partnerships with research, education and community organizations. She earned a Master’s degree in Higher Education Administration at Syracuse University, and a Bachelors Degree from Marlboro College in Vermont.
Ciarr Greene: I am an enrolled member of the Nez Perce Tribe (NPT). In May 2012, I graduated with my BS in Chemistry from Northern Arizona University (NAU). Previously I was employed at the Arizona Science Center as a STEM instructor in Phoenix, and the NPT Water Resources Division in Lapwai, Idaho. For my tribe, I was a Wetland Program Field Assistant, and progressed into a Water Resources Specialist position, focusing on development of watershed based plans and community outreach. Currently I reside in Portland, Oregon, and work for a non-profit Native American organization, Wisdom of the Elders, Inc. developing culturally-tailored, multimedia curriculum and am the Program Coordinator for the Wisdom Workforce Development. I will begin graduate school at Portland State University in Spring 2015, pursuing an MS of Science Teaching.

Lowana Greensky: Lowana Greensky is the Director of Indian Education for St. Louis County Schools (Minnesota). She is an Ojibwe mother and grandmother who lives in Marble, Minnesota. She helps to direct the gidakiimanaaniwigamig (Our Earth Lodge) Native youths science enrichment program.

Citralina Haruo: My name is Citralina Haruo. I am currently a student at College of Menominee Nation, Green Bay campus in Wisconsin. I also intern at the Sustainable Development Institute at College of Menominee Nation, Keshena campus. I intend to double major in both the Nursing and Sustainable Development programs. I am very interested in learning about different ways that I can play an active role in preserving the waters and land. I believe that it is necessary for our future.

Alicia Highland: Hello, my name is Alicia Marie Highland. I am a mid-westerner, born and raised, but am excited to start my Pacific Northwest adventure. I graduated from Kent State University in Ohio with a Bachelor of Science in Conservation Biology in 2013, and I am currently Master of Education: Science Education (IslandWood) candidate at the University of Washington. My love of conservation, research, and experiential education has afforded me various opportunities including: a National Science Foundation Research Experience for Undergraduates Fellowship with the Scripps Institution of Oceanography, a Pelagic Ecosystem Apprenticeship with the University of Washington, and hitches with the Student Conservation Association in Georgia, Colorado, New Hampshire, and Vermont. I am looking forward to starting the graduate program at IslandWood and sharing my love of the outdoors with others.

Pat Hurley: Pat Hurley has taught in Salish Kootenai College’s Natural Resources program since 1980. She has contributed to the college’s development, learned as much as she taught, and has developed a deep appreciation for the cultural and natural gifts of the Flathead Indian Reservation. Pat was born in southern New Mexico, raised in El Paso, and completed her BA and MS degrees in Biology at University of Texas El Paso. She also completed an online, 12-credit graduate certificate program in Restoration Ecology from University of Idaho. Pat has a daughter and a granddaughter, both of whom put the light in her life.
Emi Ito: Emi Ito was born in Japan but spent some of her formative years in US (2 years between age 11 and 13) and moved here permanently during her last year of high school. She holds a BS in Mathematics from University of Chicago, and a MA in Geological Sciences from Princeton. She took a 2-year leave from academic pursuit after her MA and taught mathematics and earth sciences to middle and high school students at an open school in New York City. She returned to Chicago for her PhD in geochemistry (Dept. Geophysical Science) and came to Minnesota following a 2-year post-doc at the Carnegie Institution of Washington. She shifted her research focus from ‘hard-rock’ geochemistry to ‘soft-rock’ and water geochemistry about 20 years ago and currently direct the Limnological Research Center. She also holds faculty appointments to Quaternary Paleocology Free-standing Minor and to Water Resource Science. Ito’s research interests are to reconstruct past moisture balance or aridity of a region using lake sediments and also to reconstruct recent (last 1000 years or shorter) landscape changes. She likes to work collaboratively with other researchers who bring different expertise so that as a group, they have access to multiple lines of evidence that are examined from broader points of view. Since 2008, Ito has been working with Diana Dalbotten, Fond du Lac elders and Resource Management Division personnel, and local teachers to host weekend informal science camps primarily for middle and high school students. She is also the lucky advisor of Chris Mahr, a MS student (attending this GA meeting) who has been analyzing Hg levels in MN wild rice (collaboration with Ed Nater in Soils Dept.) and now embarking on a genomics study of sulfate reducing microbes that can also methylate Hg (collaboration with Dan Jones in BioTechnology Institute).

Ma’Ko’Quah Jones: Ma’Ko’Quah Abigail Jones, a citizen of the Prairie Band Potawatomi Nation, is currently a Masters of Environmental Law and Policy (MELP) candidate at Vermont Law School. She received a B.A. in Government and Native American Studies from Dartmouth College in 2014 and an A.A. from Haskell Indian Nations University in 2011. Her research focuses on the intersection of climate change impacts on Indigenous communities and federal Indian law and policy, with emphasis on climate-induced displacement and relocation. While at Dartmouth, Jones was a 2014 and 2011 Significant Opportunities in Atmospheric Research and Science (SOARS) Protégé with the University Corporation for Atmospheric Research (UCAR). Throughout her years at Dartmouth, Jones served as a Climate Environmental Leadership Training (CELT) student leader with The Climate Institute. She also served as the student coordinator for the fall 2013 Indigenous Peoples Climate Change Working Group (IPCCWG). While at Haskell Indian Nations University, Jones worked as a 2011 legislative intern for the Kansas House of Representative and was selected as a 2011 Morris K. Udall scholar. She participated in the 2011 Research Experience for Undergraduates with NASA Tribal Colleges and Universities Project (TCUP), in partnership with Kiksapa Consulting, and the 2010 and 2009 Haskell Environmental Research Studies (HERS) Center summer internship with Kansas NSF-EPSCoR. In recognition for her participation as the tribal college listening session coordinator for President Obama’s Great Outdoors Initiative, Jones was among a small group of young environmental leaders honored by the White House Council on Environmental Quality. She hopes to earn a Ph.D. in Environmental Governance and a J.D. in Administrative Law in order to pursue a career in climate policy development and advocacy for underrepresented Peoples.
Matthew Jones: Growing up by the sea influenced me in my eventual choice of degree. Originally deciding after college that university was not right for me, it took my now wife quite a few years to persuaded me that I should try it. When accepted as a mature student, I choose a degree course influenced by my childhood, a course in oceanography at the University of Liverpool in the United Kingdom. Enjoying the course and questions it provided led me to the opportunity to study for a PhD in oceanographic and environmental chemistry at the University of East Anglia, UK. Finally, my first postdoctoral position brought me to Oregon and OHSU, where I study some of the most chemically reactive species in the marine system and assess their significance in our global system.

Jerilyn Jourdain: Jerilyn Jourdain is Red Lake Ojibwe from the Red Lake Nation in northern Minnesota. Jerilyn has a B.A in Environmental Science and is currently a graduate student pursuing a M.S in Environmental Science. She works as an Environmental Specialist at the Red Lake Dept. of Natural Resources, focusing on non-point source water pollution and climate change adaptation. Jerilyn has been a member of the Geoscience Alliance since 2007, and is passionate about increasing Native participation in the sciences. Jerilyn plans on earning her PhD and returning to teaching math and science at the tribal college on her reservation.

Courtney Kowalczyk: Courtney Kowalczyk has over twenty years of experience in water resource research and educational outreach. Currently Courtney is Fond du Lac Tribal & Community College’s Environmental Institute Director where she oversees coordination of research and extension projects between Fond du Lac Tribal & Community College and other partners. These projects include the NASA Gidakiimanaaniwigamig (Our Earth Lodge) STEM Camp: Investigating climate change and its effect on Ojibwe lifeways, EPA Tribal EcoAmbassador Dragonfly Research project, Minnesota SeaGrant research on Community Resilience in the Face of Severe Climatic Events, and USDA NIFA funded projects such as the St. Louis River - River Watch, Bimaaji’idiwin Ojibwe Garden, Building Capacity in STEM, and Thirteen Moons.

Jessica Lackey: Siyo. My name is Jessica Lackey and I am Cherokee. I received my BA in American Indian Studies at Haskell Indian Nations University in 2012 and am currently pursuing a PhD in Natural Resources Science and Management at the University of Minnesota- Twin Cities. My interests include natural resources management, traditional ecological knowledge, food systems, subsistence practices, ethnobotany, environmental and food policy, climate change, Tribal Federal government relations, and Indigenous and American Indian Studies.
Janene Lichtenberg: Janene began work with SKC in 2013. Prior to this position she worked for almost 12 years as a Wildlife Biologist for the Confederated Salish and Kootenai Tribes. She completed her B. S. at Utah State University in 1995, with a major in Fisheries and Wildlife (Wildlife Management emphasis) and a minor in Biology. She completed her M. S. in Biology (Ecology emphasis) at University of Arkansas in 1999 where she studied the ecology of insectivorous birds. She has also worked as an Ecologist for the USGS National Wetlands Research Center; a Biological Technician for several agencies on a variety of projects including big game range trend studies, mountain goat habitat assessments, rare plant monitoring, and bird research and inventories; and as a Wilderness Ranger with the U. S. Forest Service. Her areas of interest include rare and sensitive species conservation and wildlife habitat management. While working for CSKT she was involved in numerous wildlife management and conservation activities including northern leopard frog and trumpeter swan reintroduction projects; field inventories of birds, small mammals (including bats), reptiles and amphibians; and habitat restoration and management. She is a Certified Wildlife Biologist with The Wildlife Society.

Layla Locklear: My name is Layla Locklear. I live in Pembroke, NC and I’m Lumbee and Oglala Lakota. I’m a recent graduate of the University of North Carolina at Pembroke where I received my undergraduate degree in Environmental Science. I’ve been very involved in my Native community and with tribal activities (conferences, career-related meetings, events, etc.) for many years. I’m very passionate about Native people and the environment, and the justice for the environmental rights of Indigenous people. I’ve applied to graduate school at the University of Idaho in hopes to pursue my Master’s Degree in Tribal Water Resource Management. My career interest lies in working with Native peoples and their water resources (particularly Native people who rely on rivers, streams, and oceans as a way of living, in many traditional aspects). Combining tradition with my education, my desire is to promote Traditional Ecological Knowledge through work, encouraging people to become more aware of the validity and importance of Native science, as well as it’s huge influence on the world of science as a whole.

Shane Loeffler: I am a senior undergraduate studying geology and astronomy at the University of Minnesota Duluth. My undergraduate research has focused on the geology of the Moon, Mars, as well as the recent climate of the Earth. Through work at my university’s planetarium, I’ve found that one of my greatest joys and strengths is in public outreach and education. This year, a team of great people and I were able to secure NSF funding to begin development of a mobile geoscience app called Flyover Country. This app will allow the public to understand and appreciate the geological knowledge of the landscape out of their window during their flight or on a road trip. In the future, I plan to attend graduate school and continue doing geologic research and education.
Carolina Londono: Sandra-Carolina Londono is a Geologist from Colombia. She came to USA in 2009 to do her Ph.D at Arizona State University. Her research at ASU is both cross-cultural and multi-disciplinary. Her project is in Ethnogeology, or the native geological knowledge. Colombia has around 87 cultures, each with their own understanding about Earth, her research seeks to learn from them and establish a dialogue and knowledge exchange between cultures. In the Amazon she collaborates with the Uitoto people in a project about water in their traditional land. Together they study water from the western and native sciences. Besides ethnogeology, she is interested in the links between geology and health, in particular medicinal applications of geologic materials. She currently investigates antibacterial clays that could be an alternative to antibiotics.

Chris Mahr: My name is Chris Mahr and I am a graduate student at the University of Minnesota. I am in the Master’s Program and I am majoring in Earth Science. I did my undergraduate studies at the University of Minnesota Morris, where I majored in Geology. I am interesting in glacial geology and paleoclimate, and these interests led me to the U of M for my graduate studies. I am currently doing research on the methylmercury content in wild rice from rice lakes in northern Minnesota.

Sean McAllister: Sean McAllister is a graduate student at the University of Delaware, studying geomicrobiology with Dr. Clara Chan. He is also an avid supporter of native education, writing curriculum, running science fairs, and supporting native involvement in research endeavors. Born and raised in Alaska, Sean began his journey in native education with Dr. Craig Moyer at Western Washington University, where he earned his Master’s degree. Sean is adopted Haida by Mary Swanson of Haida Gwaii. His Haida name is E’th lun laas.

Marcy Mead: My name is Marcy Mead. I am a sophomore at Salish Kootenai College, graduating this spring with my associates in Environmental Science, Terrestrial Resources. My passion for harmony with the environment is my motivation for a career in wildlife and fisheries management. I am continuing on with my bachelor’s degree at SKC in Wildlife and Fisheries. My career goal involves working in wildlife management.

Brianna Menning: Brianna Menning currently serves as the Associate Director of the Sustainable Cities Initiative at the Humphrey School of Public Affairs at the University of Minnesota. In this role, she works with faculty and students on two interdisciplinary National Science Foundation grants on sustainable cities and infrastructure, which includes work across the country, as well as in India and China. She holds a Masters of Public Administration from Cornell University.
Sadredin Moosavi: Dean Moosavi grew up in a multi-ethnic family in the inner city of Rochester, NY learning to love nature and the environment under the tutelage of his grandparents who were naturalists and Renaissance scholars. These experiences combined with witnessing the devastating effects of acid rain on forests while living as an exchange student in Bavaria in Cold War divided Europe lead to college studies directed toward the environmental protection combined with creating a just and equitable world at peace. Dean began his college career at Community College of the Finger Lakes in Canandaigua, NY, the Chosen Place of the Seneca and developed his identity as a scholar focused on the use of place in exploring and protecting the environment place by place. Dean’s early research experiences with his fellow students on the Finger Lakes and Lake Ontario continue to shape his approach to involving all students regardless of their academic status and personal background in research. Completion of a BS in Environmental Chemistry from SUNY Environmental Science & Forestry in Syracuse led to graduate work studying controls on boreal and arctic methane emissions in Alaska and Canada under at the University of New Hampshire. While conducting research with the NASA BOREAS project in northern Manitoba Dean had the privilege of working alongside members of the local first nation and witnessed how NASA’s research efforts were carefully coordinated with the needs of the local Cree communities to improve their infrastructure for the long term. Dean also served as a trip leader and advisor to the New Hampshire Outing Club, the university’s largest student organization and used his influence to support efforts to increase the diversity and inclusivity of the university community. Upon graduation Dean spent a couple years teaching high school science before moving to Minnesota State University Mankato to help prepare future teachers to be literate in the geosciences. The special place project mechanism for preparing general education geoscience students was developed at that time and has evolved over the past 15 years working at institutions as diverse as Tulane and Rochester Community Technical College were Dean currently teaches. Dean’s research interests in climate change, place based geoscience education and efforts at increasing the diversity and inclusivity of the geosciences have expanded to include coastal systems including studies of erosion of barrier island beaches due to hurricanes and the BP oil spill on Grand Isle Louisiana.

Ricardo Munoz: My name is Ricardo Munoz, a twenty year old Hispanic male who has resided in Anaheim, California for the majority of my life. I am currently in the middle of my third year at the University of California, Santa Cruz. Upon completing my first year at UCSC, I have decided to major in both History and Earth Science. These majors were shaped by the family vacations I experienced as a child. Fond memories of touring Dinosaur, Native American, and United States History museums established the foundation for my passion in History. Likewise, long camping trips and visiting iconic geographical locations such as Yellowstone National Park and Carlsbad Cavern instilled a deep desire for understanding the Earth’s processes. Ultimately, I plan to use both these majors to enroll into a law school in order to join a law firm that deals with the protection and restoration of geologic settings.
Amy Myrbo: I mainly study the mud at the bottoms of lakes, and how people affect lakes (and vice versa). I’m a researcher and also Director of Outreach, Diversity, and Education at LacCore and the Continental Scientific Drilling Coordination Office, Department of Earth Sciences, University of Minnesota. I grew up in an urban-industrial area and didn’t realize I wanted to be a geoscientist until I accidentally took a class in college to fulfill a science requirement (I was an English major at the time, and graduated with an English BA and Geology minor, and went straight into a Geology Ph.D. program). I am very lucky to work with a lot of undergraduate researchers as well as with scientists worldwide in the field and in the lab. I’m usually stressed and crabby but don’t let my resting face keep you from saying hi.

Sheila M. Northbird: Boozhoo, Anishinaabeg I am an Ojibwe relation from the Red Lake and Leech Lake nations. I grew up in both territories and was taught the old traditions through oral legends from my family. My future goals are to become very active in forest management of the Chippewa National Forest in Minnesota or any other place where my indigenous relatives reside. I hope to help maintain, sustain and possibly restore forests to a sustainable yield for future generations; while still working towards a PhD in Forestry and Soils. I firmly believe ancient traditional knowledge imbedded within our oral legends will help aid in the stabilization of Climate, production of freshwater and a multitude of other renewable resources that are needed for life to be sustained on Mother Earth. I am looking forward to working on projects and establishing good connections with my indigenous relatives; working towards continued revitalization of our strengths as trusted caretakers of the natural world through our ancient knowledge.

Molly Papin Longtimesleeping: I am a Senior at Blackfeet Community College where I am studying General Studies Math & Science with an emphasis in Biology. I am considering going to a four year school to major in Environmental Science and minor in Business. I enjoy conducting field research such as Water Hydrocarbon Testing Research and Serviceberry plant DNA Research projects and the NASA 2014 Summer REU. I am also interested in the Salish Kootenai and Blackfeet cultures and the challenges that the reservations face on climate change.

Lina Patino: Lina C. Patino, originally from Colombia, received her B.S. (1990), M.S. (1993) and Ph.D. (1997) in Geological Sciences from Rutgers University. She joined the National Science Foundation in 2005 and is currently Program Director in the Division of Earth Sciences (EAR). In addition, Lina has served Acting Section Head for the Surface Processes Section in two occasions. As program director, Lina manages the EAR Education and Human Resources Program; focusing on fostering workforce development for Earth Sciences through Research Experience for Undergraduates and Postdoctoral Fellowship programs. In addition, Lina participates in cross Foundation activities like Graduate Research Fellowship Program and Career Life Balance Working Groups. She is also Adjunct Associate Professor in the Department of Geological Sciences at Michigan State University, where she conducts investigations on the origin and composition of volcanic rocks.
Dan Patrick: Originally from Pasco, Washington, I am currently a Mathematics Instructor at Salish Kootenai College (SKC) in Pablo, Montana. My educational background includes a BS in Mathematics from Montana State University (Bozeman) and an MAT in Mathematics from the University of Idaho (Moscow). I have been teaching mathematics since 1990, mostly in Montpelier, Idaho, with one year in Sweet Home, Oregon, two years in Naches, Washington, and the last five years at my current position at SKC. This conference was recommended to me because the SKC Hydrology Department Head thought that I would benefit. I am interested in how this conference can help me help our Forestry, Natural Resources, and Hydrology students succeed in pursuing their interests.

Jacob Phipps: Jacob Phipps, Muscogee (Creek), is a first year masters student at Oregon Health and Science University. He obtained his undergraduate degree in chemistry at South Dakota School of Mines and Technology. While at Mines he started an outreach program on local reservations that strives to help increase the number of Native Americans in STEM fields. Jacob also was presented first place prize of the 2013 AISES undergraduate poster presentation as well as received the annual AISES leadership award.

Noelani Puniwai: Born and raised in rural Puna on Hawai‘i Island, Noelani is passionate about protecting our people, islands, and specifically the ocean or seascape. Her work focuses on understanding the subjective meanings of the seascape and using this knowledge to inform management. Noelani is a mother of 3 making her dedication to conservation and education of our youth a force in her life. Working at the University of Hawaii at Hilo, she connects students to careers and research in Hawaii and empowers them to take control of our collective future. Noelani is academically trained in marine (BA UH Hilo) and environmental science (MSc. WSU) and is working on her PhD in the Natural Resources and Environmental Management program at UH Manoa.

Darryl Reano: Darryl Reano is a Ph.D. student at Purdue University. He grew up on the Acoma Pueblo Reservation and is currently researching how Native undergraduate students create links between Western science and their respective Traditional cultures.

Dean Reano: Dean Reano, Jr. grew up on the Acoma Pueblo Reservation in New Mexico. He is most interested in how traditional farming and agriculture have been affected by climate change.
Jayne Sandoval: Yáʼáʼtʼeэh shí éí Jayne Sandoval yinishé. (Hello, my name is Jayne Sandoval). I am a freshman at Northern Arizona University majoring in Environmental Engineering. I am a Navajo woman who comes from small community on the Navajo reservation called Pinon in the northern region of Arizona. Growing up on the reservation where quality education was not available was a struggle. Since elementary school, I was sent hours away from home to gain a quality education. Each weekend I returned home I saw the poverty that impacted my reservation. Observing the struggle of my people inspired me to find an efficient way to bring them a better living. Becoming an environmental engineer will bring my people the stability they need such as, clean water systems and alternative energy resources.

June Sayers: I’m a hydrology student at St. Cloud State University, St. Cloud, MN. I will be graduating in August 2015. I’m half Ho-Chunk Nation and Red Lake Band of Ojibwe (enrolled). My future career goals include working with Native communities on protecting natural resources and treaties.


Lauren Smythe: Lauren Smythe (Lulu) is a junior at Hillsboro High School and is a Kaigani Haida and Hawaiian. She is interested in geoscience and graphic design. She has done field work in Yellowstone National Park and in Alaska, and has presented her research at AISES Nation Conference and at the Geoscience Alliance Conference at SKC.

Wendy Smythe: Wendy F. Smythe (K’ah Skaahlwaa) is a Ph.D. candidate at OHSU’s Institute of Environmental Health at the Center for Coastal Margin Observation & Prediction. She is Kaigani Haida from Hydaburg, Alaska. Her research focuses on cycling of carbon and metals from extreme environments and geomicrobiology of microbial fossilization processes. She directs a Geoscience education program within her tribal community coupling western science the tradition ecological knowledge and served as vice chair on the Hillboro Title VII Indian Education parent committee.

Elena Sparrow: Elena Bautista Sparrow, Ph.D., is currently a Research Professor of Soil Microbiology and Environmental Sciences in the School of Natural Resources and Extension, and Director of Education Outreach at the International Arctic Research Center at the University of Alaska Fairbanks (UAF), Fairbanks, Alaska. She directs other education outreach programs such as the Bonanza Creek Long Term Ecological Program, and the Alaska EPSCoR (Experimental Program to Stimulate Competitive Research), engaging K-14 teachers and their students in earth/environmental science research. Elena is also a co-lead in a Polar Learning and Responding Climate Change Education Partnership with Columbia University and other institutions that have been developing innovative ways to increase understanding of climate change, its implications and adaptations. Adults, including those in Alaska Native communities being impacted by climate change, are the target audience.
Jesse Stine: Dr. Stine has been a professor of chemistry at Salish Kootenai College since 2011 and is in charge of the Organic and Environmental Analysis Lab. He graduated with a BS in Chemistry from Eastern Illinois University and a PhD in Chemistry from the University of Montana. After graduate school he worked as a post doc working with fisheries byproducts for the USDA in Alaska. Jesse is chair elect of the Montana section of the American Chemical Society. His research interests are in the detection and quantification of environmental contaminants.

Jessica Stine: Jessica is a Ph.D. student in the Department of Chemistry and Biochemistry at the University of Montana. She graduated with a BS in Chemistry from the University of Denver. Her research interests are in the areas of structural biology and biophysics, using NMR spectroscopy to study protein structure, function and dynamics.

Jonathan Volkers: I’m an Earth Science major, with minors in Hydrology and Geology at St. Cloud State University, in St. Cloud, Minnesota. I’m planning on graduating this spring. I’m a first generation college student, coming from generations of farmers. I have been fortunate to participate in the past Geoscience Alliance conferences, which have been valuable experiences. In my spare time I enjoy gardening, working on cars, cycling and running.

Sam Wall: My name is Sam Wall and I am from the Flathead Indian Reservation in western Montana. I graduated in the spring of 2014 with a B.S. in hydrology from Salish Kootenai College. I am currently attending the School of Earth Ocean Science and Technology at the University of Hawaii Manoa. I am pursuing my MS degree under Dr. Henrieta Dulaiova in the Geology and Geophysics program. My research interests focus on degradation of freshwater resources in the Hawaiian Islands to further understand hydrologic issues and implement improved land use management to increase water quality in vulnerable coastal aquifers.
**John Waterhouse:** By introducing contemporary scientists to Indigenous knowledge, Jon Waterhouse believes a clearer, richer and more vibrant understanding of our planet is emerging. Having spent the last decade working on water quality and monitoring techniques with Indigenous, place-based people who have lived on the frontlines of climate change since time immemorial, Waterhouse has witnessed the value of mixing the traditional with the modern in science. As he works to help small populations in remote regions around the world measure, document, preserve and fully understand their water and environments, he is also connecting these cultures with the modern world and with one another, to share their historic knowledge, and to respond together to the environmental challenges they face. John is an OHSU Indigenous Peoples Scholar, a National Geographic Education Fellow and Explorer, an Eco-trust Indigenous Leadership Awardee, Co-Founder of the Network of Indigenous Knowledge, and Presidential Appointee to the Joint Public Advisory Committee of the Council for Environmental Cooperation.

**Neil Watts:** Neil Watts is Apache and Black, originally from Tucson, AZ. He is a Veteran who served in the Army, and has lived many places both in the United States and abroad. He is a father and grandfather to four grandchildren, and a huge Raiders fan.

**Matthew Weingart:** I currently attend the Salish Kootenai College as a fourth year student of the Forestry and Hydrology programs in Pablo, MT. My current project is focused on reconstructing the fire and vegetation history of Swan Lake in Yellowstone National park through the Holocene to the present using lake sediment cores. I aspire to become a research professor someday to help give back to Native communities and future students.

**Patrick Wurster:** I was born and raised in Polson, MT. I am 33 years old. I have been married to my wife Kristen for 11 years, and we have two daughters. I am a Hydrology major at Salish Kootenai College (SKC) in my Junior Year. I hope to graduate from SKC and seek a Master’s degree at the University of Montana. I would then like to gain employment with an agency or organization which works to sustain and improve Montana’s water resource. I enjoy hunting, fishing, hiking, and basically any other outdoor activity. Other hobbies include reloading ammunition, beer/wine making, and woodworking.
**Nicole Yamase:** Kaselehlie! My name is Nicole Yamase and I am from the island of Pohnpei in the Federated States of Micronesia. I graduated this past May from Chaminade University of Honolulu with a B.S. in Environmental Studies and a B.A. in Biology. I am currently pursuing my PhD in Marine Biology at the University of Hawaii at Manoa under Dr. Celia Smith. My research focus is on how elevated CO2 and elevated temperature affect the growth and photosynthetic rates of native Hawaiian macroalgae.

**Ray Yazzie:** My name is Ray Yazzie and I am a Navajo. I recently graduated from Mesa Community College and earned my Associate of Arts degree in Educational Studies. I will be starting school at Arizona State University in the summer and my major will be Educational Studies with a minor in American Indian Studies. One of my many interests is learning about my own culture. There is always something new to learn and it's interesting to see how that connects with real-world problems.

**Imran Yousef:** I am an IT Consultant and have recently completed a Master’s of Science in Management Information System from a California University. I am originally from London, England where I have worked on various IT projects in different industry sectors.

**Antony Berthelote:** Dr. Berthelote is a descendent of the Pend D’Oreille, Salish, Kootenai, Lakota, and Chippewa Cree peoples. He holds a Bachelor’s in Geology, a Master’s in Geophysics, and a PhD in Geosciences. Dr. Berthelote is currently the Head of the Hydrology Department he helped create at Salish Kootenai College, the only geosciences degree program at a Tribal College or University. He has been directly involved with the Geoscience Alliance since 2009, SKC AISES Chapter Advisor, and AIHEC Science Bowl coach. He has completed research on the Cochiti Pueblo lands in New Mexico, Kanaka Maoli lands in Hawaii, and the Salish, Kootenai, and Pend D’Oreille aboriginal watersheds in Montana. His research projects have primarily focused on surface water-groundwater characterizations using hydro-geophysical methods. Dr. Berthelote has a passion for protecting native lands, increasing STEM capacity in Indian country, and educating the next generation of Native leaders to be environmentally responsible.
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