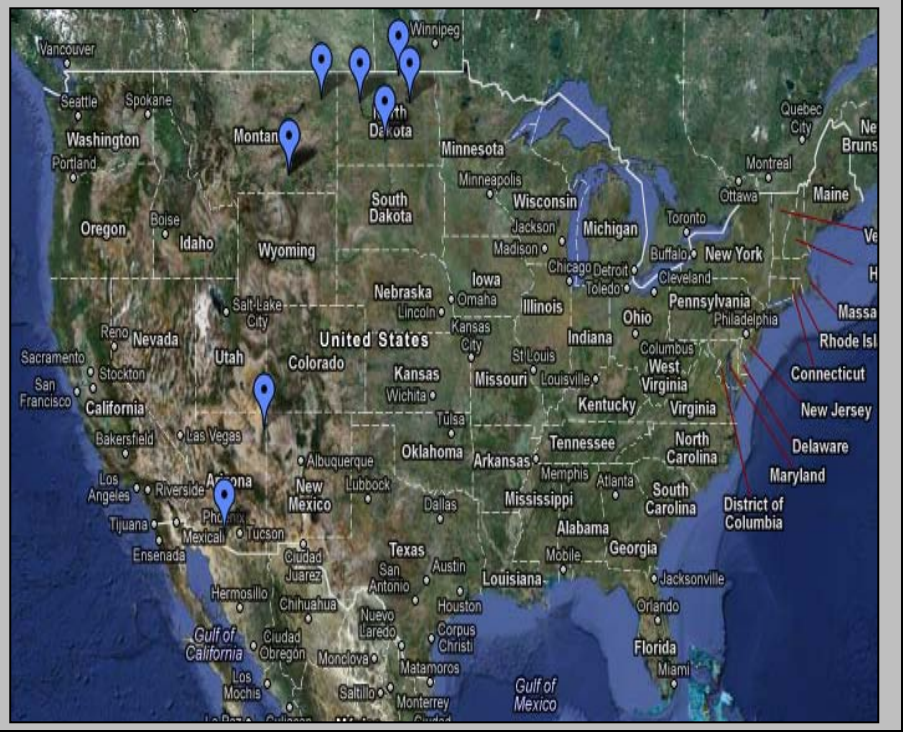
2011-2012 EPA Tribal EcoAmbassador Program

In its pilot year, EPA's Tribal ecoAmbassador Program consists of 8 Ambassadors and 63 students from 8 different Tribal Colleges and Universities. The projects chosen represent a wide variety of environmental issues important to their students and larger tribal community. Throughout their tenure, Ambassadors are working directly with EPA regional scientists.

Ambassador	TCU	Project Topic
Dr. Kerry Hartman	Fort Berthold Community College, New Town, ND	Monitoring for contaminants in wells on Fort Berthold Reservation
Dr. Deborah Hunter	Turtle Mountain Community College, Turtle Mountain, ND	Testing Private Well Drinking Water Quality on the Reservation of TMBCI
Rachel Brazil	Cankdeska Cikana Community College, Fort Totten, ND	Community Recycling through Campus Sustainability
Dr. David Stone	Tohono O'odham Community College, Sells, AZ	Carbon-Negative Building Products from Local Recycled Materials
Renee Dufault	Fort Peck Community College, Fort Peck, ND	Toxics Exposure and Disease
Sarah Plaggemeyer	Little Big Horn College, Crow Agency, MT	Assessing non-point sources on Little Big Horn River
Dr. Jen Hartman	United Tribes Technical College, Bismarck, ND	Sustainability modeling
Dr. Mark Bauer	Dinè College, Tsaile, AZ	Participatory Air Quality Monitoring

Map of Current Tribal ecoAmbassador Projects



Tribal ecoAmbassadors at a Glance

- This year's program directly employs **63** tribal students.
- At least **3** accredited new courses will be developed as a result of this year's program.
- Contacts from **3** Federal Agencies (DOI, NASA, and CDC) have requested to work with EPA on this program next year.
- Professors from **2** Universities, Johns Hopkins and University of Arizona, have provided in-kind equipment or analysis.
- Over **20** EPA scientists are working closely with the Ambassadors to help publish and interpret collected data.
- **$30,000** in scholarships for leadership training has been offered to this program's students.

Bricks made from adobe and glass

At **Tohono O'odham Community College** in Arizona professors and students are using waste glass bottles in combination with adobe as a building material to create carbon-negative buildings on campus. The goal is to use this building material for future reservation construction, which would eliminate the need for a proposed new cement plant. This approach helps to solve several problems:

- Reduces cost to transport waste
- Creates jobs and much needed housing
- Provides a sustainable and community-oriented business model
- Traps CO2 through the bonding of aggregate materials

"Sitting on CO2", a carbon-negative bench on Tohono O'odham campus

At **Diné College** near Shiprock New Mexico, a professor designed a program where students have been wearing personal air monitors over the course of several weeks to record levels of air pollutants in their immediate environment. The data is then uploaded to the research database and the students will present the findings to their communities to strengthen awareness of indoor and outdoor air pollution due to coal-burning stoves.

Intern wearing the portable MPOD air monitoring, a versatile monitor worn during other activities.