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Nevada v. Hicks: A New Challenge to Tribal Sovereignty

Since at least 1984, it has been the formal policy of the U.S. Environmental Protection Agency (EPA) that Tribal Governments are “the appropriate non-federal parties for making decisions and carrying out program responsibilities affecting Indian reservations, their environments, and the health and welfare of the reservation population.” Many of the federal environmental laws now also contain provisions that appear to delegate significant authority to tribes to establish federally enforceable environmental programs for their reservations.

In June 2001, the United States Supreme Court decided a case called Nevada v. Hicks that may affect the ability of tribes to develop and enforce environmental regulatory programs on their reservations.

In 1991, state game wardens in Nevada received information that led them to believe that Mr. Hicks, a member of the Fallon Paiute-Shoshone Tribes of western Nevada, had killed a state-protected species of bighorn sheep off the reservation. State game wardens obtained a search warrant from a Nevada state court to search the reservation home of Mr. Hicks for evidence. They found no evidence that Mr. Hicks had killed any protected sheep.

Mr. Hicks claimed that the wardens had damaged his personal property during the search and that the search exceeded the limits of the search warrant. He brought a damage suit against the wardens in tribal court. The court concluded that it had jurisdiction to decide the case. The wardens unsuccessfully appealed that decision to tribal appellate courts and later to federal courts. By 1999, the case had reached the U.S. Supreme Court.

The U.S. Supreme Court disagreed with the other courts and decided that a tribal court does not have jurisdiction to decide the claims Mr. Hicks tried to bring against the state officials, “who entered tribal land to execute a search warrant against a tribal member suspected of having violated state law outside the reservation.”

To understand how this case might impact tribal environmental enforcement authority requires a careful reading of the Supreme Court’s decision.

Although all nine justices agreed that the tribal court was incorrect when it decided it had jurisdiction in the case, several of the justices disagreed with each other as to why the tribal court’s decision was incorrect. In fact, the Supreme Court’s decision includes separate decisions written by five of the nine justices. Three of those opinions are important for our purposes here.

Cases after Montana v. United States, 450 U.S. 544 (1981), recognize that Indians have “the right . . . to make their own laws and be ruled by them,” but, according to Justice Scalia, these cases also make clear that this does not exclude all state regulatory authority on the reservation, and state sovereignty “does not end at a reservation’s border.” When state interests outside the reservation are implicated, Scalia reasoned, “States may regulate the activities even of tribal members on tribal land.”

Justice Scalia concluded that “tribal authority to regulate state officers in executing [a search warrant] related to the violation, off-reservation, of the Tribal Authority Rule is a sovereign act.”

In my view, however, the court probably made the correct decision. The important question was whether the tribal court can regulate off-reservation investigations by state officials. To my knowledge, no tribal court in the nation has attempted to exert that authority, probably because tribal courts have paid strict attention to their boundaries and sphere of influence. Nothing has changed with this verdict.

The most damning part of the decision were comments made by the various justices that seem to expand the scope of state influence on tribal sovereignty. These issues were not properly tested at this trial.

A much stronger tool for the exercise of inherent tribal authority over non-Indians on fee (or trust) land would be the Tribal Authority Rule under the Clean Air Act. The TAR’s language is simple and cuts with a thin, clean razor’s edge.

Rose Lee, Yakama Nation:

I can only speak for the Yakama Nation’s Environmental program, not

(Cont. on page 3)

Comments of tribal air professionals on the Hicks decision

Randy Ashley, Confederated Salish and Kootenai Tribes:

This trial should have started at the state level and it should not have gone to the Supreme Court. Recent Supreme Court decisions are notoriously anti-tribal. In my view, however, the court probably made the correct decision. The important question was whether the tribal court can regulate off-reservation investigations by state officials. To my knowledge, no tribal court in the nation has attempted to exert that authority, probably because tribal courts have paid strict attention to their boundaries and sphere of influence. Nothing has changed with this verdict.

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From the Director

Over the years, ITEP has been the focal point for an ever-expanding community of tribal air quality professionals—a family of sorts. Recently that family lost a cherished member. Clarence Mojado, who served as an air quality technician for the Pala Band of Mission Indians in California, had been involved in air quality work for nearly four years when he passed away on October 24th. He was a good friend and a valued colleague. We offer our deepest sympathy to his family and loved ones.

Clarence was the kind of person who made friends wherever he went, including at air quality workshops and other gatherings sponsored by ITEP. During the past four years he attended a total of ten ITEP air-management workshops at locations around the country—fully half the courses we offer. At each event, he added to his seemingly endless list of friends, a natural outgrowth of his gentle, honest nature and quiet humility.

Many among our staff grew close to Clarence over the years. Lydia Scheer fondly remembers the address book he carried with him wherever he went, adding to contacts that, he told her once, reached back fifty years. Lydia was also impressed that he remembered her name months after a brief first meeting. Christy Nations recalls her trip to the Grand Canyon with Clarence and another staffer during a Flagstaff workshop. At a gift shop there, he asked Christy’s opinion on which pair of earrings in a display she thought was most attractive. She told him, he bought them, and he presented them to her without fanfare along with a similar gift to their other companion—simple acts of friendship and yet another reflection of his generous spirit.

I remember Clarence as a gentle, humble man who never had anything critical to say about anyone. His visits to my office when he was attending ITEP workshops in Flagstaff were always a pleasure. Each time he appeared at my door, I knew that during our conversation he would say two things, and he never disappointed: “You’ve got a great staff,” he would tell me, and “Keep developing your training programs. I’m beginning to learn and apply some of these concepts, but there’s so much more I need to learn.”

As a professional, Clarence was representative of many of the people ITEP seeks to support with our training and other programs. An intelligent, capable man with a limited post-high-school and technical education, Clarence had a passion for learning the skills necessary to protect his tribe’s airshed. He was usually the first one to arrive at each class and the last to leave at day’s end. He always asked numerous questions, making sure he understood the often-complex topics that we were covering. At one point, when he felt particularly frustrated trying to apply what he’d learned to real-world air management, we arranged for him to spend a couple of weeks working with the air quality staff at the Northern Cheyenne Tribe in Montana. He came away from that experience with greater confidence in his abilities, but his resolve to further improve his knowledge and skills was undiminished.

Clarence was a “barometer” of sorts for me personally, helping me to gauge the overall effectiveness of our training programs. If I learned something at a workshop, our training was successful. If he didn’t and he let me know about his frustrations, I knew we had to work that much harder.

Clarence recognized that the work he was doing for his tribe was important work, and while he considered his lack of a technical background an obstacle, he never accepted that it might be a barrier. He simply kept showing up and kept learning. His is a small tribe with a modest air program—similar to that of many of the tribes we seek to support. In his work for the Pala Band of Mission Indians, Clarence was taking small steps, but he was making progress, and I know that he fully expected to learn and do much more. He was a good man. We will miss him.
state laws, is not essential to tribal self-government or internal
relations—to ‘the right to make laws and be ruled by them.’”
This meant that the tribal court did not have jurisdiction to
consider Mr. Hicks’ claims.
In a separate opinion written by Justice Souter, three of
those six justices indicated they would have been willing to go
even further than Justice Scalia in restricting tribal authority.
These three justices, also quoting from the Montana case,
would say simply that a tribe’s civil jurisdiction “generally
stops short of nonmember defendants . . . subject to only
two exceptions, one turning on ‘consensual relationships,’
the other on respect for ‘the political integrity, the economic
security, or the health or welfare of the tribe.’”
Stated in its starkest terms, these three justices believe
“that at least as a presumptive matter, tribal courts lack civil
jurisdiction over nonmembers.” They conclude that “it is
undeniable that a tribe’s . . . jurisdiction to adjudicate civil
claims arising out of acts committed on a reservation depends
in the first instance on the character of the individual over
whom jurisdiction is claimed, not on the title to the soil on
which he acted.” The determining principle “looks first to
human relationships, not land records, and it should make
no difference per se whether acts committed on a reservation
occurred on tribal land or on land owned by a nonmember
individual in fee. It is the membership status of the
unconsenting party, not the status of real property, that
counts as the primary jurisdictional fact.”
While Justice O’Connor and the two remaining justices
agree that the tribal court was in error, they would have sent
the case back to the lower courts so those courts could
reconsider the case in light of their interpretation of the
Montana principles.
Implications for Tribal Environmental Programs
The implications of Nevada v. Hicks for tribal
environmental programs are not clear. However,
several observations can be made:

1. Nevada v. Hicks appears to be another in
a recent line of U.S. Supreme Court cases where
the court has repeatedly narrowed the sovereign
power of tribal governments.
2. Nevada v. Hicks raises serious questions
about a tribe’s ability to use its inherent sovereign
power to enforce environmental regulations
against nonmembers, even when those nonmem-
bers are acting on tribally owned land within a
reservation.
3. To the extent tribes are developing
environmental regulatory programs where they
are expressly authorized to do so by Congress-
ional legislation, the reasoning in Hicks probably
would recognize those programs as being within
the exception recognizing tribal authority when it
is an “express congressional delegation.” Thus,
a tribe developing an air quality management
program under the Tribal Authority Rule could
point to a fairly clear congressional delegation
of authority to the tribes in the 1990 amendments to
the Clean Air Act. The uncertainty may be more
pronounced, however, under other federal
environmental statutes where the delegation of
authority to tribes is not as clear as it is in the
Clean Air Act.
4. Even with a federal statute such as the Clean
Air Act, where there is a fairly clear delegation
of authority to tribes to develop regulatory programs
that apply to nonmembers, tribal courts may not
have jurisdiction to enforce that regulatory
program against nonmembers. That does not
mean, however, that such programs would be
completely unenforceable against nonmembers,
because federal courts presumably still would
have jurisdiction over those nonmembers.

— Bill Jeffery, ITEP

K’wne’ Ch’ats’oh’nt’wesh

Earlier this year, the U.S. Supreme Court reaffirmed a 1998 Circuit Court decision returning
control of the southern third of Lake Coeur d’Alene to the Coeur d’Alene Tribe of north Idaho.
The following is a ceremonial proclamation regarding that decision, translated into the tribe’s
native tongue.

Ch’ullimit
We are happy again.
K’wne gul syats’aghwiple’ ts’aghwnts khwe nkhwelkhwnt 1
nt’ukhupntsnent khwa chat’g’le’et
The justices have affirmed that our way of life, the place where we
provided for ourselves, is our lake.
K’wne te’l aqhy’lw k’wne’ chs’ymtst k’wne’ gul syetsht’m.
From now on, we will do our best to all be caretakers.
K’wne te’l aqhy’lw lut pi k’wne’ uchshngwigwempet
From now on, we won’t ever back up.
K’wne’ lutch’sh’edmet. K’wne’ qhest pents’ shq’tntmet, k’wne’
tch’aayay’.) khwe snj’weikhwet tew chipust k’wne’
pniyiyiligwes.
We will go forward no matter what. When we become good
stewards, we and our neighbors, the whole community, will be
happy.

K’wne’ ch’ats’oh’nt’wesh
khwe te’l
hpun’s net
We will look at
each other, from
the heart.
Ch’wunsh aats’aql.
Would that it be so.

—Translated by tribal elder Felix Aripa,
with Lawrence Nicodemus, Raymond Brinkman,
and Kim Matheson
Tsunme’ na nwqwa’qwe’eln e
Snch’tsu’umsh’tsn
(Coeur d’Alene Language Center)
Although the Hicks decision is not specific to tribal jurisdiction over environmental regulation, nor does it distinguish jurisdiction on non-Indian-owned fee lands and trust lands, which based on a previous decision Montana v. United States, stated that tribes had civil authority and jurisdiction over anyone within a reservation, except non-Indians on fee lands. This has raised much consternation among tribal leaders who say that in the court’s mind, trust lands no longer exist. A second concern is how EPA will decide future “Treatment as a State” (TAS) application for primacy. Any tribe seeking delegation must describe its jurisdictional authority to EPA. My concern is that tribes may need to address the Hicks decision when seeking primacy under the CAA, CWA and Safe Drinking Water Act. It is very difficult to say whether tribes will be able to withstand legal challenges when that time comes. The most puzzling of all is the analysis used by the court to hand down this decision. Tribal legal experts all agree that the actual holding of the decision is “narrow.” The Court used a much broader analysis which some have described as, “putting tribal regulatory authority on its head.”

- Virgil Masayesva, ITEP director
EEOP Develops Air-Quality Curriculum

The Environmental Education Outreach Program (EEOP) is currently developing an air quality curriculum for Native American K-12 students nationwide.

The goal of EEOP is to make this curriculum tribally focused, culturally sensitive and teacher-friendly. The project includes evaluating the needs of tribal educators and environmental professionals on air quality issues, developing a draft document, field testing a sampling of these curriculum materials, and revising the curriculum based on comments made during the field test. The curriculum will be posted on the EEOP website (http://www.nau.edu/eeop).

The curriculum will be constructed in two sections. The first section will feature a guiding framework for teachers to use as their students investigate a local air quality issue or problem. Sample case studies will be provided to serve as examples that teachers can use to create their own local “problems” for their students to solve.

The second section of the curriculum will provide resource information, supplemental student activities, and lists of internet and tribal resources that are currently available. Teachers and students can use these resources to gain a greater understanding of the issues from both cultural and scientific perspectives.

EEOP Offers Workshops on Uranium Risks

Over the past year the Environmental Education Outreach Program (EEOP) office has been developing and implementing a series of Uranium and Radiation Education Outreach (UREO) workshops for educators on the Navajo Nation. Six teacher workshops have been conducted and four additional workshops have been scheduled.

To provide effective outreach on Navajo Nation, EEOP partnered with Diné College Shiprock Campus Uranium Education Program (UEP) office. The focus of the Diné College UEP office is working with Navajo community members, while the EEOP office focuses on Navajo schools and educators. Other UREO partners include the Navajo Nation Environmental Protection Agency Superfund Program and Radon Program, the Navajo Nation Rural Systemic Initiative (NNRSI) program, and the University of New Mexico Waste-Management Education and Research Consortium (WERC), and the American Nuclear Society.

Educator workshops were provided in two formats. The secondary-educator workshops are conducted using Problem Based Learning, a process whereby participants develop their own questions and conduct their own research. The elementary educator workshops are based on a series of hands-on learning activities. Participants in the elementary educator workshops also receive a Geiger counter from the American Nuclear Society.

The EEOP Program Coordinator, Mansel A. Nelson, has also been working with groups of students interested in uranium mining issues. During a visit to Crownpoint schools, Mansel demonstrated In-Situ Leachate mining, a process for mining uranium proposed for the Crownpoint-Navajo Nation region. Students also learned how to use a Geiger counter to identify radioactive materials.

The EEOP staff is developing a variety of resources for educators, including a website (http://www.nau.edu/eeop/ureo/) and a UREO Resource Trunk. The website provides resources for educators using the Problem Based Learning format for teaching about Uranium issues. The UREO Resource Trunk will provide educators with resources to conduct the hands-on activities.

For more information on UREO activities contact Mansel A. Nelson by phone at (928) 523-1496 or via e-mail at mansel.nelson@nau.edu, or call Fred Sherman at (928) 523-8864.

— Fred Sherman
A n innovative project using “waste” logs from forest thinning efforts will soon provide affordable, traditional housing to Navajo Nation residents and good jobs for tribal members—and may help clear the air in the process.

The Hogan Roundwood Project began as a by-product of recent efforts to address forest-fire threats along the “urban-wildland interface.” After decades of fire suppression, grazing and logging, our national forests have become choked with spindly “dog hair” thickets of Ponderosa pine, which create the potential for devastating forest fires that can threaten populated areas. As forest managers developed plans to remove many of these small-diameter trees, which traditional lumber mills cannot process due to their small size, others were generating ideas on how to avoid wasting those trees. Using the logs to build traditional homes for Navajo residents seemed an elegant solution.

Brett KenCairn, executive director of the nonprofit Indigenous Community Enterprises (I.C.E.), the lead agency in this effort, says the project will eventually employ up to 30 Navajo Nation members, and additional, spinoff jobs will likely result. The overall effort to create, market and build the $30,000–$40,000 homes is supported by a variety of entities, including the Navajo Nation, Northern Arizona University’s Center for Sustainable Environment and School of Forestry, Arizona State University, the U.S. Forest Service, the National Park Service, the Flagstaff Community Foundation, and others.

Until now, Navajo Nation residents—many living in remote areas of the sprawling reservation—have relied on HUD housing, mobile homes, and/or traditionally built, eight-sided hogans made of wood, stone and mud. The Roundwood project brings a modern version of the traditional hogan within financial reach of many tribal members. Still in the trial-and-error developmental phase, a prototype of the dome-like structure was recently constructed in Cameron, Arizona. That prototype (pictured here) offers a general model of the concept.

The main structure is built of vertically placed roundwood pine logs, secured onto a standard concrete-slab foundation, with modern windows and doors and effective insulation. Ingenious steel roof supports developed by Arizona State University engineers (who have created much of the design, with extensive feedback from Navajo Nation members and others) adjust to accept various angles of roof-log placements, allowing for flexibility in the structure’s size and shape. A modular approach now being developed will allow for expansion outward from one or more of the central structure’s octagons. Stand-alone cast-iron stoves provide gas and/or wood heating. KenCairn says the structure could easily be solar-heated with south-facing windows. An attached greenhouse could provide both heating and food production throughout the year.

Design and structural issues still have to be worked out. For example, relatively little is known about the shrinkage and warpage characteristics of roundwood when used in this manner. “We’ll actually be pioneers in a lot of this,” KenCairn says.

The project’s base will be in Cameron, a town on the reservation about 50 miles north of Flagstaff. A warehouse in Cameron will be refurbished and fitted with the half-million-dollar Pendu log system to trim and size raw roundwood supplied by Forest Service forest-clearing efforts. Project organizers envision creating a truss plant and eventually expanding the project to provide other structures.

I.C.E.’s Iris Price-Nez and Brett KenCairn

Iris Price-Nez, Director of Organizational Development for I.C.E., says that while the infrastructure is being developed, other aspects of the project are underway. Central among them is a program to get dwellers familiar with and ready to address loan-related issues. “We’re having representatives from the Navajo Partnership for Housing do orientation sessions for those interested,” she says. “Because people live on the reservation, they might not understand what goes along with buying a home, like becoming mortgage-ready, cleaning up credit, that sort of thing. The sessions help educate them to be smarter consumers.” There will be a variety of ways to finance the homes, she says. “Even with no financing, we’re estimating that for a 15-year mortgage, the cost will be maybe $300–400 per month.”

KenCairn says the project will address environmental concerns in a significant way, including air-quality issues. First of all, using roundwood will prevent it from being burned or giving off carbon as it rots on the forest floor. In the milling stage, using virtually the entire log prevents waste that would be generated from the traditional shaping process. The project will also emphasize eco-friendliness in the very design of the production facility. “We’re looking at developing a small biomass facility in association with the processing center,” he says, “so the waste we generate can be converted to electricity or heat. We’re looking at gasification technology, which basically creates very few particulates because it creates byproducts, charcoal distillates, that burn very cleanly. That would generate electricity to run our plant and to pump back into the grid. We’d like to create a state-of-the-art facility that basically assimilates all its own waste. There are unique opportunities here for the engineering community to get involved. Besides providing affordable, traditional homes for people, this project could have much broader applications.”

Above: A prototype structure in Cameron represents one basic form of home the project will create. Left: The Cameron prototype hogan’s interior.
ITEP Supports Tribal Participation in National Emissions Inventory

The National Emissions Inventory (NEI) provides U.S. EPA with a powerful tool to assess air-pollution sources and trends across the nation. This comprehensive store of emissions inventories is also an important instrument in the policy-making activities of regional and state planners. Until recently tribal lands and sources have been largely absent from the NEI database. A new project, managed by ITEP, is designed to help tribes engage themselves in this important database.

Maintained by EPA’s Office of Air Quality Planning and Standards, the NEI database contains information on emissions sources for criteria and toxic air pollutants from around the country. In the past, these data have come largely from state- and county-held emissions inventories (EIs), and air-modeling and rulemaking have been conducted with little input from the tribes. Rules and policies derived from the national database have often impacted air-management policy in and around tribal lands, while tribal influence on the process has generally been minimal. By participating in the NEI project and providing solid data to NEI-derived air planning analyses, tribes become better represented in regional planning efforts and become stronger players in virtually all air-management efforts in which they’re involved.

Tribes that submit data to the NEI will contribute to the generation of more accurate air-quality models—crucial components in air quality management policy-making. Participating tribes will be better recognized for their air-quality work and expertise, lending greater strength to their voices at various policy tables. NEI participation also allows tribes to draw on EPA quality-control and quality-assurance capacity to evaluate and possibly improve the quality and accuracy of data they submit.

ITEP has contacted more than 50 tribes currently have emission inventories; 77 tribes plan to submit. Tribes that choose to participate in the NEI database must recognize that once EI data are submitted, it becomes publicly accessible through an EPA website. Tribes concerned about data confidentiality can discuss their concerns with Sarah Kelly at ITEP (928-523-6377). Sarah may also be reached via e-mail at Sarah.Kelly@nau.edu. —Sarah Kelly, ITEP

WRAP-region Tribes will Benefit from Data-Gathering Efforts

It has long been recognized that there is a significant gap in air quality data over tribal lands in the western United States. In August 2001, ITEP and the Tribal Data Development Working Group of the Western Regional Air Partnership (WRAP) completed and distributed a report titled An Assessment of Tribal Air Quality Data and Programs in the Western United States. The report is a first step in gathering information on tribal air quality programs in the WRAP region. It also clarifies future needs for tribal air program development.

Of the 237 federally recognized tribes in the WRAP region, 156 tribes provided information. Of the 156 participating tribes:

- 38% (60 tribes) have air quality programs
- 55 tribes plan to start an air quality program in the next one or two years
- Only 22% are involved in the WRAP in some way
- 56% have identified air pollution sources affecting their tribe’s land
- 28 tribes currently have emission inventories; 77 tribes plan to complete one in the next one or two years.

Issues critical to bridging the tribal air quality data gap were identified, including:

- Environmental program resources among the WRAP tribes are seriously limited
- Tribes have a shortage of personnel to deal with air quality issues.

Information on tribal use of GIS, interest in renewable energy, and use of prescribed burning was also gathered. Copies of this report are available by contacting Fonda Swimmer at ITEP, through her e-mail at Fonda.Swimmer@nau.edu or by phone at (928) 523-8785. The entire report is posted on the ITEP website at www.nau.edu/itep/whatsnew.html and on the WRAP website www.wrapair.org at WRAP Reports. —Sarah Kelly, ITEP
Each year ITEP’s Professional Exchange Program arranges field placements for tribal air professionals seeking specialized experience in various areas of interest. The following are reports from three of last year’s 13 exchange-program participants.

John Parada, Environmental Technician, La Posta Band of Mission Indians, CA

One of three environmental staffers for this small Southern California tribe, Parada recently spent a week at the Tribal Air Monitoring Support Center in Las Vegas, NV, and with tribal air professionals with the Northern Cheyenne Tribe in Montana, evaluating PM10 monitors and learning more about their operations. “We’re getting ready to buy a HiVol monitor,” he says, “and we wanted something new—the newer ones require a lot less time and a lot less attention. We’re only working on air-quality part-time, so we wanted the most efficient monitor we could find.” Through his work at both locations, Parada was able to determine that the Partisol FRM2000 monitor would best suit the tribe’s needs. Parada also gained valuable experience in downloading monitor data, working with filters, and performing other monitor-related tasks, and he gained valuable experience with meteorological stations, which the tribe is also working to get on-line. Parada has attended at least a dozen ITEP air-quality workshops. He says the hands-on experience and personal attention were important adjuncts to his classroom work.

Peter Lockuk, Tribal Environmental Program Manager, Traditional Council of Togiak, AK

As one of two environmental staffers for his traditional village, Lockuk attends to all environmental media of concern to his 900 fellow villagers. Lately his work has been challenging—closing an old landfill and getting a new one up and running, working on water and sewer issues, and trying to get a PM10 monitoring program up and running. He says his recent placement with the Inter-Tribal Environmental Council at the Cherokee Nation of Oklahoma gave him valuable insight into his air-related tasks. “This placement was tied to my wanting to learn the ArcView GIS (Global Information Systems) system. Much of our land is not yet mapped, and we need mapping as we close dumpsites, develop a safe sewage lagoon and other things.” Lockuk is also launching a small PM10 monitoring program to measure the impacts of local dirt roads, a community power plant, fuel-storage systems in his area, and other sources. “I gained quite a bit,” he says of his placement. “I learned a lot about the cost of the monitoring instruments, which equipment is doing the monitoring and how instruments are tied together with other instruments. I also learned a lot about staffing needs.” He says his close proximity to a variety of air-quality professionals was a highlight of his experience. “You could go to people right in the building and ask any question you had, so I got a lot of information and learned a lot.”

Maureen Zeise, Oneida Nation, WI

“We were getting pretty far along on our emissions inventory,” Zeise says of her former air-quality work with the Oneida Nation, “and I needed technical advice on where to go next with it.” To get that advice, and to learn more about air-quality modeling, Zeise spent two weeks at EPA’s Office of Air and Radiation in Raleigh, NC. She brought her EI project with her and believes the time she spent on it was invaluable. “I would advise future exchange program members to take their own projects along and have the host professionals help them,” she says. “They’re better at helping you get what you want than developing projects for you. They’re really busy, and you’re working with three or four different people during the course of a week, as they have time.” She says the experience taught her much about developing “an effective survey for doing a bottom-up emissions inventory.”

The Professional Exchange Program continually seeks to place air professionals in areas of interest. For more information, contact Fonda Swimmer at Fonda.Swimmer@nau.edu, or call her at (928) 523-8785.