



FACT SHEET

THE 13th ANNUAL

NEW MEXICO MINORITY YOUTH ENVIRONMENTAL TRAINING INSTITUTE

An Environmental STEM Program

“10 Days of Learning, A Lifetime of Experience”

July 25—August 3, 2014

HELD AT THE GLORIETA CONFERENCE CENTER—GLORIETA, NM—AND AT

NATIONAL FORESTS, NATIONAL PARKS, AND OTHER SITES IN/AROUND NORTHERN NEW MEXICO

SUMMARY



Glorieta Conference Center is a serene, forested setting for the NM Institute.

The National Hispanic Environmental Council (NHEC) is accepting applications from top students aged 17—20 from across the country to attend its upcoming 13th annual, national “NM Minority Youth Environmental Training Institute”. The Institute is an intensive, residential, science-based 10-day environmental education and environmental career program for students – competitively selected – who are demonstrably interested/active in the environment. If selected, NHEC covers all costs for students to attend. **The NM Institute will be held July 25—August 3, 2014.**

The Institute uses classroom and outdoor nature sites in beautiful New Mexico; an Environmental STEM curriculum; and a focus on science to help build the environmental professionals, leaders, and especially scientists of tomorrow.

Each summer NHEC runs 3 Institutes—our 10 day national in NM, and our 8 day regionals in S. California and New York City. **We train between 75-85 top minority students every summer to be environmental leaders.**

Each Institute utilizes the same model and has the same goal – through classroom and especially nature settings; use of an intensive Environmental STEM curriculum; high-level presentations on a range of environmental issues; environmental field studies including air, water, and soil testing, biological assessments, plant/vegetation surveys, birding, and more; plus the active participation of minority science role models — **build the next generation – especially scientists – of environmental and conservation leaders and professionals.**

The NM Institute will be held at the Glorieta Conference Center, where students will be housed and fed and classroom instruction conducted. NHEC has held the Institute at Glorieta for all but two of the last 12

years. Glorieta is 18 miles from Santa Fe (the state capital) in the mountain area north of the capital. Located off Interstate 25, the **Glorieta Conference Center is a beautiful, serene, forested setting for the Institute.**

During the 10-day Institute **students visit and conduct field studies at a broad range of public and private lands** in scenic northern New Mexico. These include 3 national forests, 3 national parks, 2 wilderness areas, private ranches, dams and hydroelectric plants, fish hatcheries, waste-water treatment facilities, national laboratories, and more.

Students hike to, explore, and conduct field studies in a variety of ecosystems that showcase the wonders of nature---forests, mountains, plateaus, wetlands, red-rock canyons, caves, rivers, streams, and more. As the most diverse state in the U.S. —ethnically, culturally, and ecologically – in New Mexico students will experience some of America’s most dramatic landscapes. Through our in-depth science and environmental curriculum, combined with daily immersion in the splendors of the great outdoors, **each year the Institute gives students a truly transformative nature experience.**



NHEC President Roger Rivera speaks to students at Pecos National Historical Park.



Role Models from federal sponsors and others participate in the Institute. Here, from the U.S. Forest Service.

All three of NHEC’s Institutes inspire, engage, and educate academically high-achieving, high GPA students – especially Latino/minority -- deeply interested in and ready to or currently pursuing an environmental or conservation major. Our Institutes also give detailed information and tutorials on the many college and career opportunities in the environment/natural resources field, **and actively assist students to pursue these careers in the future, most especially with our sponsors.** The vast majority of NHEC’s students have gone on to work in the environmental field, including with our federal sponsors.

Like the last few years, **the major sponsors of the 2014 NM Institute are the U.S. Forest Service; the USDA Natural Resources Conservation**

Service; and the U.S. Environmental Protection Agency. NHEC and its sponsors work closely together on Institute planning and implementation, and sponsor staff actively participate as role models and more, as described below.

If you are selected NHEC will provide a full scholarship to the NM Institute that covers all your major costs to attend the 10-day program, including travel—typically airfare; housing; 3 meals a day; academic materials; environmental science equipment; camping gear, and more. There is no fee to apply, and only a \$35 registration fee if accepted.

APPLICATION PROCESS, SELECTION, AND THE INSTITUTE SCHOLARSHIP

The NM Institute is open to all students aged 17—20, and all are welcome to apply, although Latino youth are especially urged to do so given the severe under-representation of Latinos in environmental and natural resource fields. **Ages 17—20 is typically a senior in high school, or a freshman, sophomore, or junior in college.**

Applications will be evaluated and selections made on a rolling basis. **While there is no deadline per se – NHEC will accept applications until all slots are filled -- applying as soon as possible is strongly encouraged.** See the attached “Application Form” and “How To Apply” documents. Students can also call or email NHEC for application materials, or go to our web page at www.nheec1.org

While students can obtain application forms from our web site, you cannot apply on-line because you must include documents like your school transcripts in your application package. Applications must be mailed to NHEC at the VA address listed.

NOTE: as this is a national program, students from across the U.S. and Puerto Rico are eligible. Students will be competitively selected for the Institute scholarship based on the criteria listed below and described in the “How To Apply” document.

NOTE: as the Institute is a federally funded program, only students who are U.S. Citizens or Permanent Legal Residents are eligible to apply and be selected.

Selection criteria includes:

1. students’ maturity and seriousness of intentions; 2. an academic background containing environmental-related coursework, especially if science-related; 3. if in college the student has declared in a relevant environmental or natural resource major, or if not yet declared it is demonstrably apparent the student will do so; 4. **a minimum 3.0 GPA**; 5. proven background in some environmental experience, activity, research program, internship, or job; 6. ability to show a strong and genuine interest in an environmental or natural resources field as a future career—especially in the sciences; 7. extracurricular and/or community activities; and 8. diversity—by age, gender, race, ethnicity, geography, environmental experience/interest, and other factors.

An essay is also required (no more than 2 pages max, where applicants describe their qualifications; their interest in the environment; their future academic and career goals; and how (if applicable) as students of color they can make a difference to our environment now and in the future. **This essay will be especially important in selecting students to the Institute.**



Students conducting environmental field studies in the Pecos River.

CURRICULUM DESCRIPTION



Students use various science equipment at the Institute. Here, the electroshock fish backpack unit, to examine fish and conduct related surveys.

The Institute will begin on Friday, July 25 and end Sunday, August 3. There will be approximately 30 students in the Institute. Following breakfast the program begins at 8:30 am each morning and continues through the day, with breaks for lunch and dinner. The Institute operates like school: students must arrive on time; participate fully in the classroom and outdoor field activities; be respectful of the instructors, role models, and fellow students; and follow instructions, especially regarding safety. There is also coursework or activities in the classroom every evening after dinner until 8:30 pm.

The Institute uses a strong Environmental STEM (Science, Technology, Engineering, and Math) curriculum taught by NHEC’s skilled Instructors (all of whom are educators and working environmental professionals). It

begins by covering principles in environmental and conservation topics, progressing to more advanced policy issues and environmental science topics as each day builds on the one before. The curriculum also examines the often distinct environmental experiences and perspectives of, and impacts on, minority Americans—especially Latinos.

The Institute combines daily classroom instruction with science-based field studies such as air, water and soil testing that complements the classroom presentations. Since a major Institute goal is to immerse students in nature, students spend every day outdoors in closely supervised field studies in forests, streams, riparian areas, ravines, mountains, and more.

Students explore and conduct field studies in spectacular federal public lands including Pecos National Historical Park, Bandelier National Monument, Santa Fe National Forest, Carson National Forest, and Abiquiu Lake/Hydroelectric Dam. Students will also camp overnight for two nights at beautiful Abiquiu Lake in the famous “red-rock” country.

Through all this, students will see and absorb the amazing natural beauty of America. Indeed, the Institute seeks to underscore in students the understanding that our natural heritage belongs to all Americans, including Latinos, and therefore we all share a duty to protect our earth. **This is in fulfillment of NHEC's guiding credo: "...because it's our environment too".**

Classroom science instruction covers a range of ecological, physical, biological, and chemical principles/methodologies, while high level presentations examine a number of environmental/conservation issues. **To conduct their multiple field studies, students use a variety of professional-grade environmental science equipment** (some brought by federal sponsors) ranging from low to very high tech, so students gain real, indeed invaluable hands-on field science experience.

The last day of each Institute culminates in Final Presentations by student teams, based on data analysis. Students create detailed power points, collated/compiled from their field test data, measurements, and biological assessments. Final Presentations are made to a panel of NHEC Instructors who evaluate and give feedback and corrections to ensure students have learned/used the applicable science and environmental principles.



Students explore the many caves on the canyon floor at Bandelier National Monument.



Students hiking the canyon trail above Frijoles Canyon, at Bandelier National Monument.

The Institute also includes sessions on environmental career paths, and gives students -- through interaction with role models from sponsors and other agencies, non-profits, companies, and more – a strong sense of how these jobs are done in the real world. A mix of federal agencies, including sponsors will be on-hand to discuss specific job and internship opportunities, both in 2014 and beyond.

In addition to NHEC's Instructors, **role models also "chart their environmental journey" to and in these natural resource jobs.** **Many role models are Latino or minority.** Role models are an essential element of the Institute.

These role models are working environmental/natural resource professionals from many different fields, but especially the sciences – foresters, wildlife biologists, fish biologists, ecologists, botanists, soil scientists, hydrologists, geologists, environmental engineers, and more. There are a minimum of 4--5 role models present each day.

NHEC preaches and practices a core belief in all our national and regional Institutes over the last 12 years – that it is vital for Latino and other minority youth to have role models to whom they can relate. Through the participation of our instructors and role models, students will have their "own" to interact with, to be inspired by, to learn from, and who have a success story to tell about working in the non-traditional environmental or conservation arena. Thus the message to students is not only clear, but believable – **"I made it in this field and so can you".**

We wish to be clear with students – this is not summer camp. The Institute is an academically challenging, science-focused, Environmental STEM program for mature students with solid GPA's and a deep interest in the environment. You will definitely have fun, but you will have work to do too.

But if you have a passion for the environment, enjoy science, want to work in the environmental field in the future, AND seek to carry back what you've learned to your community or other communities of color, then we promise you will have one of the best experiences of your life. All our students from past Institutes will tell you it is truly **"10 Days of Learning, A Lifetime of Experience".**

YOU CAN GET A JOB OR INTERNSHIP WITH OUR SPONSORS

Students should note that our federal sponsors are actively looking to hire students from our NM and other Institutes. These agencies are sending staff to the Institute who are participating to evaluate your qualifications, interact with you, and explore opportunities with them.



Students conduct forest ecology studies at the Valles Caldera Preserve, an enormous, ancient sunken volcano.

Remember—these agencies have offices all over the country, so you can work near where you live, or somewhere else in the country if you desire. The NM Institute is a real opportunity for students to land a great, paid, internship or job this year or next doing substantive and needed environmental work.

GLORIETA CONFERENCE CENTER—NM INSTITUTE SITE

Glorieta is located 18 miles northeast of Santa Fe, just off Interstate 25 at Exit 299. It is 70 miles from Albuquerque, where students flying in will land. The Glorieta Conference Center has a campus-like feel, with gardens, trees, and open spaces. It is a modern facility with a rustic look.

Originally designed as a “spiritual retreat”, Glorieta is used frequently by church groups from across America for religious services and retreats, and until recently was owned/operated by the Southern Baptists. However it is used by non-religious groups as well for educational programs. NHEC conducts no religious activities during the Institute.

Glorieta is located in the foothills of the Southern Rockies at an elevation of 7,100 feet, which usually requires 1-2 days to become used to. Institute activities for the first few days provide for this, enabling students to acclimate gradually to the higher elevation.

Glorieta offers a full range of sleeping accommodations and conference services, including meeting rooms, audiovisual, and more. All sleeping rooms are modern and comfortable, and have a clean private bath. There is a phone in each room but no television, in keeping with Glorieta’s role as a retreat center.

All meals are served buffet-style in the central Dining Hall, and there is ample quantity and variety at each meal. Breakfast, lunch and dinner are served at pre-set times. NHEC will provide box lunches to students on those days when students are off-site.

Other amenities at Glorieta include a book store/gift shop; a church; a coin-operated laundromat; postal services; a coffee shop/snack bar; and an ATM machine.

Absolutely no alcohol is sold or available anywhere at Glorieta, and smoking is not permitted. Further, there are no stores within at least 6 miles of Glorieta where such purchases could be made.

Security is on-site at Glorieta, and there is a main front gate which controls entry into the center. This gate is the only road and pedestrian access into Glorieta. There is also a “quiet time” policy at Glorieta (from 11 pm to 6:30 am), which means all activities must cease and students must be in their rooms.

Regarding the Institute: all students will be housed two to a room, with male and female students separated and located at opposite ends of the floor. Instructor rooms are located in-between. Room assignments are made by NHEC staff and cannot be changed by students. Again, Institute instructors are on the same floor to provide assistance as necessary and ensure compliance with the Institute’s Code of Conduct.

For more information on Glorieta, call 505-757-6161. Or go to their website at www.glorieta.com Address is: Glorieta Camps, 11 State Road 50, Glorieta, NM 87535

SAFETY FIRST—ALWAYS

The NM Institute is designed to not only be highly educational and fun, but also safe. NHEC has a “safety first” ethic, and safety considerations are paramount for NHEC during the Institute. For example, when students are at national parks and forests we have access to the National Park Service and U.S. Forest Service medical/safety system, and rangers are available if summoned when students are doing field work.



Here, students using the professional-grade Hanna meter for water quality studies, which tests up to 13 parameters of water.

INSTITUTE CODE OF CONDUCT

All students must follow the Institute “Code of Conduct”. This code is a set of reasonable rules that govern student behavior with Instructors, role models, and fellow students. NHEC enforces appropriate behavior at all times during the Institute, especially since this is a residential program. If selected, all students and their parents must read and sign the Code prior to the Institute, and agree in writing to abide by its terms. Failure to follow the Code can result in a number of penalties, including being dismissed from the Institute and sent home. NHEC is happy to state that given the caliber of our students, this has never happened.

Students and parents should also understand that when on federal land students are governed by federal law, and can be prosecuted for any violation of civil and/or criminal laws, should that agency choose to do so.

The Code of Conduct is a vital tool for a group of teens in a residential program. NHEC uses it, you must follow it, and it is not up for discussion on-site. **If you have a problem obeying rules, then the Institute is not for you and you should not apply.**

WEATHER CONDITIONS IN NM IN JULY/CONTACT WITH BUGS, ANIMALS

Northern New Mexico has fine weather during the summer. The days are warm, typically in the high 70’s with lots of sunshine under bright blue skies. However, mornings and evenings are cool—it can reach into the mid 50’s—especially since Glorieta is at 7,100 feet elevation. Further, rain showers or thunderstorms can occur in the afternoons. NHEC will plan for these contingencies should they occur.

Because Glorieta is in a natural setting, and a goal of the Institute is to expose students to the outdoors, students will inevitably encounter a variety of creatures such as mosquitoes, bees, insects, fish, reptiles, plus the possibility of irritating plants. Students and parents should understand that these plants, insects and wildlife are inevitable in the outdoors, and while NHEC will take all reasonable measures to protect students, contact with nature in all its forms is a key element of the Institute.

WHAT TO WEAR/WHAT TO PACK

Because of the range of temperatures (warm days, cool nights) students should bring clothing that can be layered. Students should definitely bring hiking boots if you have them. NHEC will provide detailed information regarding what to pack once a student is accepted into the Institute.

OUR SPONSORS:

THE U.S. FOREST SERVICE

The U.S. Forest Service (FS) is a major, multi-billion agency in the U.S. Dept. of Agriculture with over 33,000 full, part-time, and seasonal employees. There are 155 forests in our national forest system, plus 20 national grasslands, as well as a system of FS science research centers and laboratories

The Forest Service is charged with managing natural resources in a sustainable, multiple-use manner that best serves the varying needs of a growing, diverse nation. **The FS motto is “Caring for the Land and Serving People”.**

In addition to the traditional role of providing timber/wood for a variety of uses, FS and the national forest system provide a wide range of opportunities. FS offers recreation, tourism, hiking, camping, fishing, biking, hunting, and more, as well as jobs, internships, education, business contracting, and more.

FS is also a major leader in natural resource science, technology, and policy development, and is leading research on key issues like climate change, forest management, carbon sequestration, endangered/invasive species, and fire ecology.



Here, students use the Robotic Field Total Surveying Station with CAD Software, which plots/maps a variety of topographic and ecological data.

THE USDA NATURAL RESOURCES CONSERVATION SERVICE

The USDA Natural Resources Conservation Service (NRCS) is another large agency of the U.S. Dept. of Agriculture, with over 12,000 employees.

When people are asked about federal conservation agencies, often mentioned is the National Park Service or Forest Service, and especially their national parks and forests. However—the reality is that 70% of all the land in the U.S. is privately owned, not public; everything from the huge farms and ranches out West to the small backyards of suburbia. Thus stewardship by private landowners is critical to the environmental well being of America.

NRCS is the only federal agency whose environmental mission is to work on private lands. Created in 1935 to address soil erosion, NRCS has become a conservation leader for all natural resources, ensuring that private lands are conserved, restored, and made resilient to a range of challenges. NRCS not only tackles familiar issues like clean water and healthy soil, but also air pollution and climate change. NRCS experts help landowners make the best science-based decisions for every natural resource.

NRCS's employees work at field offices in nearly every county in the nation, assisting ranchers, farmers, other agencies, tribes, non-profits, and others.

U.S. ENVIRONMENTAL PROTECTION AGENCY

The U.S. EPA, a major, multi-billion, independent agency with over 16,000 employees, is charged with the fundamental protection of Americans from significant risks to human health and the environment where they live, learn, and work.

EPA maintains and enforces national rules, regulations and standards under a variety of environmental laws, in consultation with states, tribal, and local governments. EPA works with industry and governments on



Students at White Rock Overlook above the Rio Grande River. Students learn geology, hydrology, and more here. This is a "mini-Grand Canyon" with amazing vistas.

voluntary pollution prevention programs and energy conservation efforts. EPA also grants millions to fund state regulation and environmental enforcement actions. EPA also plays a major role in environmental education, and is the lead federal agency on the issue of environmental justice.

EPA leads national efforts to reduce environmental risks based on the best available science. It ensures that federal laws protecting public health and the environment are enforced fairly and effectively, and that Americans have accurate information sufficient to participate in assessing/managing health and environmental risks.

Through its regional offices and over 25 laboratories and research centers, EPA also plays a major research role on a range of issues, including air pollution, toxic exposure, climate change, climate justice, environmental education, and more.

ABOUT THE NATIONAL HISPANIC ENVIRONMENTAL COUNCIL

The National Hispanic Environmental Council (NHEC) is a national, non-profit membership-based organization founded in 1998 and headquartered in Alexandria, VA (just outside Washington, D.C). With over 4,000 members, NHEC is the oldest and largest national Latino environmental and natural resource organization in the country, and advocates for policies and runs programs that furthers our mission.

NHEC seeks to educate and engage Latinos and people of color on environmental and natural resource issues; encourage Latinos and especially youth to actively preserve and protect our environment; provide a voice for Latinos before federal and other national environmental decision-makers; and assists our community to pursue the many career, educational, programmatic, and policy opportunities in the environmental and conservation arena. Our guiding credo is: **"....because it's our environment too"**.

FOR MORE INFORMATION ON NHEC OR OUR INSTITUTES

Call or write us at:

National Hispanic Environmental Council

P.O. Box 1003

Springfield, VA 22151

Attention: NM Institute

At NHEC:

Office--703-683-3956

Fax—703-256-8288

Or visit our website at www.nheec1.org

For questions about NHEC but especially the Institutes, please contact Juan Rodriguez, NHEC Programs Coordinator at jrodriguez@nheec1.org or at 703-861-6064