

## National Hispanic Environmental Council



### THE 10<sup>th</sup> ANNUAL NHEC MINORITY YOUTH ENVIRONMENTAL TRAINING INSTITUTE

#### AN ENVIRONMENTAL STEM PROGRAM

#### OVERVIEW:

- The NHEC Minority Youth Environmental Training Institute is an intensive, highly competitive, residential, science-based, 10 day long program that for the last 10 years has, as its core operating principle extensively used minority role models to engage and help teach the students.
- The Institute is a summer program (held each August; the 2011 Institute was held Aug. 12--21). Since its inception 10 years ago it has been held in Glorieta, New Mexico. Students are housed/fed at the Glorieta Conference Center, and then travel daily to national parks, forests, wildlife refuges, national labs, and other federal, state, and local environmental facilities in northern NM where the curriculum is taught and training occurs.
- The Institute is designed to educate, inspire, and engage top minority teens – i.e. high GPA students -- aged 16 – 19, on key environmental and natural resource issues, steer these youth to college degrees and careers in those fields, and help create the next generation of environmental leaders and professionals.
- The Institute is both an environmental education AND an environmental career awareness program. **Specifically, it is an “environmental STEM” initiative.**
- **The Institute is an award winning program.** In 2007 it was one of 8 (out of 100) programs selected by USDA in a national competition seeking innovative, successful environmental education models. The selecting panel included Richard Louv, author of the seminal book “No Child Left Inside”.
- The Institute is a national program. NHEC recruits from all 50 states and Puerto Rico. Students are competitively selected.
- NHEC also holds two regional Institutes – in New York City and in S. California – that are directly modeled on our award-winning NM Institute. These are also for top minority students already pursuing some environmental major, with the regionals also being rigorous, science-based, 5—7 days in length, and residential.

- **With funding from sponsors, NHEC covers all costs** for students to the 10 day, residential NM Institute. This includes airfare; housing; meals; chartered bus; instructional materials; science equipment; camping equipment, and more;

## **PROGRAM GOALS**

- Provide a **high level, academically challenging curriculum** on environmental, natural resource, and energy topics for students already pursuing these fields;
- Provide **environmental career information and guidance**: i.e. teaching students about the many careers in environmental and natural resource fields;
- Provide **environmental college information and guidance**: i.e. teaching students about the many natural resource and environmental majors at universities across the country;
- Explore the inter-connectedness for Minority Americans between history, culture, and the environment; and finally
- Provides that singular transformative experience which, through the rigorous curriculum and the beauty of outdoor New Mexico, changes students' lives and propels them to become the next generation of environmental leaders and professionals.

## **CURRICULUM**

- Created by NHEC to be high level, content rich, strongly science-based, and multicultural; the Institute is "environmental STEM" in action.
- Includes field testing of the air, water, and soil at various sites, using high-level, professional-grade scientific equipment, coupled with daily classroom learning on many environmental topics that reinforce the field studies.
- Students collect specimens, conduct biological assessments, and take scientific measurements. Students put in 15 hour days every day of the Institutes.
- Even includes an environmental justice "mock trial". Students serve in a variety of court room roles, such as witnesses, the jury, attorneys, and more.
- After classroom instruction, students spend each day outdoors in supervised field activities at national parks, forests, labs, dams, waste water treatment plants, hydroelectric plants, fish hatcheries, and more.

- On Day 10 the Institute culminates in final presentations by student teams using their field tests, measurements and biological assessments collected over 10 days.

### **STUDENTS/ACCEPTANCE CRITERIA**

- The Institute is for high academic achieving students. Students must have a minimum 3.0 GPA to be admitted into the program; however most accepted students have 3.3—4.2 GPA's.
- Students are aged 16—19: thus, junior and seniors in high school, and freshmen and sophomores in college.
- Regarding acceptance criteria -- students must meet two fundamental factors – 1. have taken or are taking relevant, appropriate environmental coursework in school, and 2. have a proven background in some environmental program, internship, job, or experience.
- Of the 34 students in the 2011 Institute -- 11 had GPA's of 3.0 to 3.5; 19 had GPA's of 3.5 to 4.0; and 4 had GPA's of 4.1 and higher.
- Regarding demographics of the 2011 Institute students – there were 25 females and 9 males; students came from 15 states and Puerto Rico; and there were 23 Latino, 7 Asian American and 4 African American students.
- In 2011, NHEC received 186 applications from across the country; 90% of them met the criteria for admission into the Institute, had funding permitted.
- The caliber of students applying to and accepted into the Institute has grown every year, a result of the intellectual rigor, challenging curriculum, and the growing reputation of the program among students, parents, and teachers.
- Sponsors are strongly encouraged to recruit these top students for internships or jobs; indeed, one of the benefits of Institute sponsorship is “first crack” at hiring these top minority environmental students.
- Basically, the Institute is composed of high achieving minority students deeply interested in the environment – the ones many say do not exist or can't be found.

### **ROLE MODEL PARTICIPATION**

- The Institute is unique in that it extensively uses paid minority environmental educators as instructors, coupled with dozens of volunteer role models. Fundamentally, the “role of the role models” is to visibly demonstrate to the students that “I made it in this field and so can you”.

- These role models are working minority professionals, from every environmental discipline, who share their knowledge, life experiences, and heritage. They help NHEC's paid instructors teach and inspire students by providing supplemental information and guest lectures.
- In 2011 all 5 of the paid instructors were minority; all have at least a masters degree in their field, and one has a P.h.D.
- Of the 33 volunteer role models who participated, 28 were minority. Several role models a day were present, typically for 1-3 days at a time. Some role models stayed for 3-4 days.
- Role models come from many environmental fields – park rangers, soil scientists, biologists, environmental toxicologists, environmental attorneys, environmental engineers, foresters, hydrologists, geologists, administrators, public affairs, law enforcement officers, and more.
- Through role models, students see the challenges they will face and how to follow in these footsteps. Students have their “own” to be inspired by, to emulate, and who have a story of success to tell.
- Role models, especially from sponsors, provide their contact information, and students are strongly encouraged to follow-up with them, post Institute. Many students do.