National Hispanic Environmental Council

# **19th NEW MEXICO ENVIRONMENTAL STEM INSTITUTE**

#### July 26--August 4, 2024

To be held at

## NATIONAL PARKS, NATIONAL FORESTS, AND OTHER PUBLIC/PRIVATE LANDS AND FACILITIES IN NORTHERN NEW MEXICO

#### **"10 DAYS OF LEARNING, A LIFETIME OF EXPERIENCE"**

### FACT SHEET AND PRELIMINARY QUESTIONAIRE

NHEC is accepting applications from top <u>undergraduate and recent graduate college</u> <u>STEM students</u> from across the U.S. deeply interested in science <u>and</u> the environment to attend its upcoming **19<sup>th</sup> NM Environmental STEM Institute**. The Institute will be held **July 26—August 4, 2024 in Albuquerque and Pecos, NM**.

As in the past, the NM Institute is held at a variety of beautiful public and private lands and ecosystems in northern New Mexico. NHEC Institutes are an **intensive, scienceheavy, hands-on, 10 day** <u>residential</u> environmental science field program.

With funding from our federal sponsors -- the U.S. Forest Service, USDA NRCS, and U.S. EPA -- <u>NHEC covers all major costs -- airfare, lodging, meals, science equipment, local</u> <u>transportation by chartered bus, and more -- for those selected.</u> There is no fee to apply or attend.

Students will be housed, fed, and classroom instruction held in Albuquerque for the first three days at the **Best Western Albuquerque Airport Hotel and Suites** (2400 Yale Blvd. SE, 87106. 505-242-7022). The Institute will then shift (by chartered bus) for the remainder of the program to the **Pecos Benedictine Monastery** (16 Guadalupe Lane, Pecos, NM 87552. 505-757-6415). Pecos is a small town 81 miles northeast of Albuquerque, off Interstate 25.

Regarding this facility: although the Monastery has a small group of elderly monks still in residence, for years the complex has been used by groups as a rental retreat center for meetings or small conferences. The Monastery sits on 1,200 acres along the scenic Pecos River in a mountainous and serene setting. NHEC holds no religious activities at the Monastery or Institute.

NHEC Institutes (held in CA, NY, and NM) give students a high-quality, transformative field science experience; daily mentoring/interaction with federal scientists; job and internship opportunities; and in-depth exposure to federal enviro agencies and their mission, especially of our sponsors. This allows students to experience/learn in widely varying ecosystems and landscapes. Institutes train about 80-90 top students per year.

Through this and other programs, NHEC is **helping build the next generation of people of color environmental scientists**, researchers, and professionals, an area within STEM that still remains severely underrepresented for people of color.

**Regarding Eligibility:** NHEC Institutes are for top college STEM students (undergraduates and recent graduates) aged 18-23. Students <u>must</u> be pursuing a <u>science degree</u> in an **environmental, natural resource, or agricultural major,** and want a related career in this field, ideally with federal agencies.

**Students of color and from other diversity backgrounds are especially urged to apply,** given the underrepresentation of people of color in these fields. NHEC selects 26-28 top STEM students for each Institute.

Students are competitively selected from across the U.S. and Puerto Rico based on a variety of criteria, including: a minimum 3.0 GPA; <u>science major</u> and academic coursework; demonstrable past/present interest and experience in the environment and natural resources; and diversity. NOTE: as this is a federally-funded program all applicants and selectees must be U.S. Citizens or Legal Permanent Residents.

NHEC is proud to note that for **the last 9 years approximately 65% (often higher) of the students in each Institute have been female**. This is one way NHEC is working to address the underrepresentation of women in STEM.

The program features multiple site visits to federal lands and laboratories; high-level presentations on environmental/natural resource issues, environmental science principles, and related field methodologies; and engagement with federal scientists and issue experts, especially those of color. Sessions on working for and STEM job opportunities with federal agencies are also given. **Students are taught by NHEC's cadre of skilled Instructors**, all of whom are people of color and some with Ph.D's.

<u>At the core of the Institutes are the formal Environmental Field Studies</u>. In this Institute we utilize the "4 Great Rivers of NM" approach. Student teams work

collaboratively to conduct air, water, soil testing, plant/vegetation surveys, tree mensuration, birding, GIS, and more, using a variety of professional-grade science instrumentation and equipment. Some of this equipment is owned by NHEC and some, such as eDNA and electroshock fish backpack units, brought by agency sponsors. Learning and instrumentation usage also occurs at several participating labs and research stations. At least 4 Field Studies are held in every Institute.

<u>Each Institute concludes with the student teams giving a Final Presentation</u> on each of the Field Study sites, through their collating, researching, and analyzing of all the data, field observations, samples, lab testing/results, and more collected over the 10 days.

Federal agencies and others actively participate through Site Tours and Field Studies; experimentation/learning at laboratories; and scientist engagement/mentorship.

These facilities/sites include: the USGS NM Water Science Center; the NRCS NM Plant Materials Center/Lab; the Santa Fe and Carson National Forests; Valles Caldera National Preserve; Bandelier National Monument; FS Rocky Mountain Research Station; the City of Santa Fe Main Waste Water Treatment Plant; the Randall Davey Audubon Center in Santa Fe; Abiquiu Lake/Dam and Hydroelectric Plant; and more. Overall, these sites give students an array of methodologies, on-site exposure, instrumentation, and more to see, learn, and experiment on in lab and field.

**Regarding transportation and logistics:** once selected, NHEC will quickly call to discuss all travel logistics, typically airfare, for which NHEC must give final approval. <u>NHEC</u> <u>makes all travel arrangements for students</u>. Once in NM, NHEC transports students to/from each site by chartered bus; provides breakfast, lunch, dinner, and snacks/water; provides lodging and science equipment; and coordinates all logistics/travel.

Also participating are "Role Models" from NHEC's federal sponsors and other partners. These are environmental professionals/scientists (many are people of color and many with advanced degrees) in the science/research/technical arena. They participate onsite to share information, research, and technology; demonstrate/instruct on the instruments they've brought; and engage/mentor/inspire students to continue pursuing their science majors and careers. This role model component – <u>so students see faces</u> <u>that look like them who actually **do** environmental science work</u> -- has been a longstanding, vital element of every Institute since our first one 20 years ago.

# Students should note that our agency sponsors will be on-site to actively meet/recruit students for a variety of federal opportunities, including jobs, internships, science and research fellowships, and more that are open now and into 2025.

Further, these agencies are particularly seeking students with majors in a number of high-demand "mission critical occupations" in science. These include: forestry, ecology,

biology, hydrology, soil science, civil and environmental engineering, environmental science, chemistry, <u>and more</u>. <u>Students with these majors are especially urged to apply</u>.

#### HOW TO APPLY INITIALLY

Applicants must first answer the questions in the Preliminary Questionnaire (below) and email NHEC. This response will give NHEC a solid overview of your eligibility and qualifications, and save you and us time and effort.

Please Answer the Questions in the Order they are Asked:

1.--what college or university do you currently attend and where?

**2.**--what is your current GPA? (A minimum of 3.0 is required).

**3.**--what is your current major? Please state the exact name of the program.

4.--what is your grade level—i.e.--what grade will you be <u>in September</u>—junior, senior?
5.--describe in several paragraphs past and/or present Experiences in the environment, natural resources, or agriculture, especially in the sciences or research, that qualify you for the Institute.

**6.**--in several paragraphs describe past and/or present **Academic Coursework and Labs** in the environment, natural resource, or Ag sciences that qualify you for the Institute.

**7.**--describe in several paragraphs past and/or present **Internships, Fellowships, Part or Full time jobs, or Volunteer work, etc.** in environmental, natural resource, or agricultural sciences that qualify you for the Institute.

8.--if you have attended an Institute or program before--state where, when, and which. Briefly describe why you should attend another Institute and the new learning you seek.
9.—how did you learn about the Institute? If from a professor, counselor, federal agency staffer, etc. please identify: <u>by name, title, affiliation, and email address</u>. If from a past Institute student please identify who.

10.--what is the closest airport you could leave from if selected? Next closest airport?

**11.**--you understand that the age range for this program is 18–23?

12.--how old are you? And what is your date of birth?

**13.**--list your race, ethnicity, and/or other demographic factor you wish NHEC to know. Optional, but helpful for federal agencies collecting this data.

**14.**--are you interested in a potential job or other opportunity in <u>2024</u>, and/or beyond with the Institute's sponsors—the U.S. Forest Service, USDA NRCS, and US EPA? If interested, how interested are you? Please state if you have a preference among these agencies. If not these, indicate which others you are interested in.

**15.**--you understand that only US Citizens or Legal Permanent Residents are eligible for positions with a federal agency?

16.--are you a US Citizen or Legal Permanent Resident? You must state which one.

17.--you understand that only students who are fully Covid vaccinated can be selected?

**18.**--are you fully Covid vaccinated and can provide the CDC proof-of-vaccination card?

**19.**--provide a home/cell number, and <u>school **and** personal email</u>, for contact by NHEC.

**20.**--provide your full home <u>and</u> school address.

NHEC will contact you soon after receiving your Questionnaire to further discuss your environmental, natural resource, or agricultural science interests, qualifications, and background, and review the remaining application process, which includes a Phone Interview. The formal application materials will be sent to you soon after.

So--if you are passionate about the environment, love science, have a minimum 3.0 GPA, AND been seeking an internship or job in the environmental science arena, <u>this</u> <u>program is for you.</u>

#### TO ANSWER SOME COMMON FAQ's

**1.**-- yes, slots are available although these typically go fast.

2.--<u>there is no deadline per se</u>; NHEC reviews applications/selects students on a rolling basis until all slots are filled. <u>Thus students are strongly urged to apply asap</u>.
 2. as this is a 100% federally funded program only U.S. Citizons or Permanent Logal

**3.**--as this is a 100% federally funded program <u>only</u> U.S. Citizens or Permanent Legal Residents are eligible.

**4.**--while students from underrepresented and communities of color are especially urged to apply, this is a federally funded program. Thus students from <u>all</u> ethnic and racial backgrounds, as well as those representing other diversity backgrounds are eligible and welcome to apply.

**5.**—due to the intensive science content and activities, to be eligible you must be able to complete the entire Institute; partial attendance is not permitted.

TO APPLY: email your completed Questionnaire to Sochi Uwakweh, Institutes Logistics Coordinator, at suwakweh@nheec1.org and NHEC President Roger Rivera at rrivera@nheec1.org

For questions, email or call NHEC at 703-683-3956 or Sochi Uwakweh directly at 703-861-6064. Or see the NHEC website at www.nheec1.org

#### **ABOUT NHEC**

The National Hispanic Environmental Council (NHEC) is a national, non-profit membership organization founded in 1998 and based in Alexandria, VA (just outside Washington, D.C).

With over 3,000 members, NHEC is the oldest national Latino environmental <u>and</u> natural resource organization in the country, and we advocate for policies and run programs that further our mission.

NHEC seeks to educate and engage Latinos and people of color on environmental and natural resource issues; encourage Latinos and especially students to actively preserve and protect our environment; provide a voice for Latinos before federal and other national environmental decision-makers; and assist 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".**