

ENVIRONMENTAL SITE TOURS

Saturday, October 5, 2002

Each year at our national conference, NHEC offers our students—America's future environmental professionals and leaders—the opportunity to visit a variety of environmental sites. These tours have spanned a range of environmental and natural resource interests, including environmental engineering, water management and reclamation, environmental justice, natural resource management, pollution abatement and environmental remediation, park management, wilderness/wildlife conservation, historical and cultural preservation, and more. We now offer this same opportunity for our California environmental conference.

During the site tours, students have the opportunity to see the latest techniques and to learn from experts in the field. The tours are also an opportunity to explore and value—up close—America's scientific, natural, cultural, and historical treasures. They are designed to be substantive and educational—but also fun.

The site visits will begin around 2 pm and depart from the Holiday Inn Capitol Plaza Hotel. While the tours held during our national conference usually take all day, these tours will only take about 3 hours. Students travel by bus, and we will provide a box lunch and drinks. All students will be back at the hotel by 6 pm at the latest.

All students will be escorted to and during their site visit. All tours have been planned by professionals, with your safety in mind. **Always follow their instructions.**

Please remember—step lightly and respectfully on the earth. And most important, take only notes, pictures, and memories. Do not disturb, damage or take home with you any artifacts, rocks, plants, or anything else without the expression of your tour guide.

Regarding dress, keep several things in mind. First, all tours include time outdoors, so bring sturdy walking shoes, and be sure to watch your footing. Shorts are fine, but no tank tops or other inappropriate clothing. Dress like you're going on a hike. Regarding the weather, it will be warm in Sacramento during the day, so prepare accordingly. **Be sure to bring a hat and sunglasses. And drink plenty of water.**

Finally, remember to bring your camera and notepad. You will see some interesting places. Listen, learn, and enjoy!

FISH HATCHERY TOUR AND AMERICAN RIVER NATURE WALK

—sponsored by the California Dept. of Fish and Game

Students will travel approximately 30 minutes by bus to the Nimbus Salmon and Steelhead Hatchery, located on the American Rivera in Rancho Cordova. This facility is owned by the U.S. Bureau of Reclamation, and operated by the California State Dept. of Fish and Game (CDFG). Students will view adult Chinook salmon gathering at the base of the fish ladder, and learn more about this species and their habitat, as well as see the juvenile fish-rearing ponds on the way to the spacious Visitor Center. At the center, students will learn about salmon and steelhead biology and ecosystems through videos, posters, and inter-active displays. You will also see the huge spawning house through an observation window, where hatchery workers artificially spawn adult

salmon up to 50 pounds in size, and where they fertilize millions of salmon eggs each year. Students will next visit the American River Trout Hatchery, which is owned and operated by the CDFG, and located adjacent to the Nimbus Hatchery. There, you can view rearing ponds, and have an opportunity to feed the rainbow trout on hand, while learning more about trout management and habitat.

The second part of the tour will be a hike past the CDFG's various laboratory facilities, including the Water Pollution Control Lab, Oil Spill Prevention and Response Lab, and the Fish Health Lab. The function, goals, and equipment of each lab will be described during the tour. You will also visit the wildlife holding pens where abandoned or injured wild birds and mammals are kept temporarily for study and rehabilitation. The nature walk will continue for 1–2 miles along the American River, where guides will present the history of the river and point out the various fish, wildlife, and plant species that live there. The tour will conclude with a question and answer session about job opportunities with CDFG, and other California natural resource agencies, before taking the bus back to the Holiday Inn.

SACRAMENTO LANDFILL AND RECYCLING/ TRANSFER STATION TOUR

—sponsored by the California Integrated Waste Management Board

This tour will allow students to explore issues and technology in environmental clean-up, remediation, recycling/reuse, and sustainability. The tour will begin at the Sacramento City Landfill, at 28th and A Streets, where students will see a closed landfill that has undergone final closure as required by California's laws pertaining to certain types of landfills. This site has a "final cover system", which serve several purposes, including managing landfill gasses and preventing water from filtering into the waste disposal areas. The site has a landfill gas control system and "flare" that will demonstrate how the landfill gas is treated and thermally destructed. In addition, the landfill gas system is engineered to transfer gas to a nearby industrial plant to be used for electrical power generation.

There are other activities associated with the site that are of great technical interest to environmental students. For example, portions of the site are currently being converted to a park. Students will be able to observe how a contaminated site can be properly transformed back into safe, productive use. This site also contains the elderberry bush, a host to the rare elderberry beetle, an endangered species. The site also has historical interest, as it is one of John Sutter's (the pioneer behind California's "Gold Rush") original landings.

Following this tour, students will travel to the Sacramento Recycling and Transfer Station, on Fruitridge Road. This site is classified as a large volume transfer station with a permitted capacity of 2,000 tons per day. Waste is brought to the facility by licensed haulers (although the Station accepts drop-offs from the general public). By touring this facility, students will observe the procedures for unloading waste/garbage, and how the waste is transferred through the various sorting lines for separation. This enables the operator to capture the recoverable materials for recycling and reuse, separating them from the residual waste destined for landfill disposal. This tour will give students an in-depth look at numerous technical environmental pollution processes, and the ways in which recycling and reuse occur. Job opportunities in a variety of environmental fields, especially with the CIWMB, will also be discussed.