Host Site: Advance Disposal

Site Address: 17150 Mesa St., Hesperia, CA 92345

Website: www.advancedisposal.com

Field Trip Contact: Luisa Quintero, Recycling Analyst and Community Relations Specialist

760-244-9733 x 249

Grade Levels: 2-12 Max. # of Attendees: 35 Length of tour: 1-1.5 hours

Field Trip Description: Advance Disposal is a single waste stream refuse and recycling company which processes almost 100% of the refuse and recyclable material brought in to the facility from residents and businesses in Hesperia, Spring Valley Lake, Oak Hills and the County areas of Apple Valley. This educational tour will explain Advance's refuse and recyclables processes, how the machinery works inside the MRF including a bird's eye view from the new observation deck, an up-close look at the trucks and equipment used at the facility, a presentation that shows how trash and recycling is important to our environment and everyday life, and then an activity to explain to the students what we do and why we do it.

Special Instructions:

1. Closed toe shoes and long pants required for all participants.

Host Site: Amy's Farm

Site Address: 7698 Eucalyptus Ave., Ontario, CA 91762

Website: http://www.amysfarm.com/visit/tours

Field Trip Contact: 1-844-426-9732

Grade Levels: K-12

Max. # of Attendees: Contact site for accommodations.

Length of tour: 1-1.5 hours

Field Trip Description: Amy's Farm is a fun and unique experience for all ages. From early childhood to senior citizens, we offer age-appropriate tours for all visitors. General tours will have you participating in all sorts of hands-on activist including a garden walk, learning about the animals and enjoying the sights, sounds, smells and touches of a working farm. Grades 6-12 school programs include a guided tour and an experiential activity to engage students in learning about the importance of ecological, community-based farming. Programs are linked to the California Learning Standards and include such topics as: Sustainably agriculture, composting, irrigation, vermiculture and much more.

- 1. Activities vary by season.
- 2. Entry fee of \$8.00- \$10.00 per person depending on program. Entry fees are not covered by MEEC transportation grant.

Host Site: Big Bear Discovery Center

Site Address: 40917 North Shore Drive, Fawnskin, CA 92333

Website: http://www.mountainsfoundation.org/programs/discovery-center

Field Trip Contact: Megan Oberdoerster

moberdoerster@mountainsfoundations.org

Grade Levels: 3-12

Max. # of Attendees: 30-60, depending on program. Contact site for larger groups

Length of tour: 1-3 hours depending on program.

Field Trip Description: Opened in 1998, the Big Bear Discovery Center is the largest visitor center in the Big Bear Valley. Our goal is to ensure your visit here is enjoyable and heightens your awareness to help you become a more knowledgeable and responsible caretaker of the San Bernardino National Forest. Learning in an outdoor classroom is an adventure! The Southern California Mountains Foundation is committed to providing quality environmental education through exploration and fun activities designed to meet California state standards. Five different environmental education programs are offered which allow for the investigation of the forest ecosystem and a greater understanding of environmental stewardship.

Special Instructions:

- 1. Program fees are based on length of program. <u>Program fees are not covered by MEEC</u> transportation grant.
- 2. Field trips are offered 5 days a week. Please call at least a month in advance for reservations.
- 3. Weather appropriate clothing required.

Host Site: Big Morongo Canyon Preserve

Site Address: one-half mile southeast of the town of Morongo Valley

Website: www.bigmorongo.org/index.htm

Field Trip Contact: 760-363-7190 or bmcp@BigMorongo.org

Grade Levels: 1-12

Max. # of Attendees: 30, contact site for larger groups Length of tour: Arranged by teacher and host site

Field Trip Description: FIELD TRIPS HAVE LIMITED AVAILABILITY!!!! Open to grades 1-12 only. The desert oasis at Big Morongo Canyon is one of the 10 largest cottonwood and willow riparian (stream) habitats in California. The upstream end of the canyon lies in the Mojave Desert, while its downstream portion opens into the Colorado Desert. Elevations on the Preserve range from 600 feet on the canyon floor to over 3000 feet at the ridge tops. Several trails, including boardwalks through the marsh and stream habitats, meander through the Preserve. Program Topics Include: Adaptations of Plants and Animals to Climatic Challenges, Desert Ecology, Homes for Flora and Fauna, Land Forms, Native American Uses of Plants in the Preserve, Pond Life Producers and Consumers, The Importance of Protecting Wetlands, The Rock Cycle, The Water Cycle, Weather and Climate, Wildlife Signs, Other Topics by Request.

- 1. An approved Tour Agreement is required prior to all group visits.
- 2. Reservations are required for both docent-led tours and self-guided tours for groups of over 15 people. Reservations are required at least two weeks in advance.

Host Site: Cadiz, Organic Farm

Site Address: CADIZ, CA- contact site for specific drop- off instructions

Website: www.cadizinc.com

Field Trip Contact: Lesley Thornburg

Ithornburg@cadizinc.com

760-861-0603

Grade Levels: 4-12

Max. # of Attendees: Contact site for accommodations. **Length of tour:** Arranged by teacher and host site.

Field Trip Description: For more than 30 years, CADIZ had operated an agricultural development at the Cadiz Valley property. The underlying groundwater, fertile soil, warm desert temperatures, and low occurrence of indigenous pests provide ideal conditions for the production of a wide variety of fruits and vegetables, including citrus, grapes, melons, peppers, and squash. Students will tour the farming operations with stops in both the vineyard and orchard where students can walk along the trees and vines and learn about organic and sustainable farming practices as well as gain a better understanding of groundwater and water conservation. They may even be treated to a taste of some of our crops (if in season).

Special Instructions:

1. Please wear weather appropriate clothing and closed toe shoes.

Hats and sunscreen are encouraged.

Host Site: California Science Center

Site Address: 700 Exposition Park Dr, Los Angeles, CA 90037

Website: www.californiasciencecenter.org

Field Trip Contact: 213-744-2019

Grade Levels: K-12

Max. # of Attendees: Contact site for accommodations **Length of tour:** Arranged by teacher and host site

Field Trip Description: Through hands-on experiences in our galleries, you'll learn about human inventions and innovations, the life processes of living things and more. In our world, everything is connected. Plants, animals, people, weather, water, soil—all are part of a delicate balance. Living things can change their environments—and through a process called adaptation, environments can even change living things.

- 1. Groups of 15 people or more are required to make a reservation before visiting.
- 2. Parking is \$14 for cars and "yellow" school buses. MEEC is not responsible for parking or entrance/booking fees.

Host Site: CalPortland Company, Mojave Cement Plant **Site Address**: 9350 Oak Creek Rd., Mojave, CA 93501

Website: www.calportland.com/environment.aspx

Field Trip Contact: Brian Males, Environmental Manager

bmales@calportland.com

661-823-3731

Grade Levels: 6-12
Max. # of Attendees: 60
Length of tour: 3 hours

Field Trip Description: During your visit to CalPortland's Mojave Plant, students will learn about the limestone lifecycle and how it was deposited, blasted, crushed, burned, ground, and then shipped as the finished product-cement. Tour the eight wind turbines installed at the site which produces 50 million kWh and see why this high tech cement manufacturer has been honored with the EPA's 'Energy Star Partner of the Year' award for 13 consecutive years! Students will get to participate in a hands-on activity in which they will combine the necessary ingredients to make concrete.

Special Instructions:

1. Tours are limited to one bus.

2. Closed toe and closed heel shoes and long pants required for all attendees.

Host Site: CalPortland Company, Oro Grande Cement Plant

Site Address: 19409 National Trails Hwy, Oro Grande, CA 92368

Websitewww.calportland.com/environment.aspx

Field Trip Contact: Jessica Gammett. Environmental Manager

igammett@calportland.com

760-269-1135

Grade Levels: 4-12

Max. # of Attendees: 60 persons

Length of tour: 3 hours

Field Trip Description: Students will learn about the limestone lifecycle and how it is deposited. They will lean about the cement manufacturing process and the flow of material while observing the facility form the plant "lookout" point. A tour of the CalPortland Company - Oro Grande manufacturing facility includes a "blast" in the limestone quarry (as production/weather permits, not guaranteed), up close, and tour of the haul trucks, tour of the plant testing laboratory where students learn about the various chemical and physical tests used for quality control purposes. The students will also participate in a hands-on activity- making concrete in a cup.

- 1. Tours are limited to one bus.
- 2. Closed toe shoes and long pants required for all attendees/

Host Site: CEMEX

Site Address: 25220 Black Mountain Quarry Rd, Apple Valley CA 92307

Website: www.cemexusa.com

Field Trip Contact: Darlene Bray, Environmental Manager

Darlenemarie.bray@cemex.com

760-381-7629

Grade Levels: 4-12

Max. # of Attendees: Contact site for accommodations

Length of tour: 2 hours

Field Trip Description: Tour the country's second largest cement manufacturing facility where more than 2 million tons of cement is processed each year. Tour the Apple Valley site to see the Pyro processing system, which uses coal, old tires, pistachio shells, and wood by-products to generate temperatures in excess of 2500 degrees Fahrenheit. Prior to your field trip; a representative from CEMEX will come to your classroom and give a presentation on how cement is made... there is visual information, materials and a PowerPoint presentation to help understand the process. The day of your field trip; your bus will tour the facility, which includes the quarry and an opportunity to view a blast shot in the quarry.

Special Instructions:

1. Closed-toe shoes required.

Host Site: Desert Discovery Center

Site Address: 831 Barstow Rd., Barstow, CA 92311

Website: www.desertdiscoverycenter.com
Field Trip Contact: Jane Laraman-Brockhurst

760-252-6060 or 760-220-4351

Grade Levels: K-12

Max. # of Attendees: Contact site for accommodations. **Length of tour:** 1-3 hours depending on group size.

Field Trip Description: Students will experience native plant and animal habitat with pond and tranquility garden where a selection of interesting animals can be found including Western Pond Turtles, Mojave Tui Chub fish, Desert Tortoise and a collection of botanicals. The DDC offers environmental education programs that align with the California State Standards. Educational Programs include: Desert Tortoise, History, Earth Science, Recycling, Hazardous Waste, Ecosystems, Conservation, Desert Safety, GPS Navigation, Environmental Career Exploration and Environmental Art. Teachers are encouraged to contact the DDC prior to their visit to receive educational materials, or to arrange a pre-field trip classroom visit.

Host Site: Devils Punch Bowl Natural Area

Site Address: 28000 Devils Punchbowl Rd., Pearblossom, CA 93553

Website: parks.lacounty.gov/wps/portal/dpr/Parks/Devils_Punchbowl_Natural_Area

Field Trip Contact: 661-944-2743

Grade Levels: K-12

Max. # of Attendees: Contact site for accommodations. **Length of tour:** Arranged by teacher and host site.

Field Trip Description: The Devil's Punchbowl is a unique 1,310 acre geological wonder where visitors can walk, hike or take a horseback ride on a 7.5 mile round-trip trail through a deep canyon formed by the runoff of large quantities of water from the higher San Gabriel Mountains. See spectacular up tilted rock formations created by layers of sedimentary rocks, or visit the Nature Center to learn about the native wildlife and park history. You can also explore the landscape of Joshua trees, California Junipers, Pinyon Pine Woodland and Desert Chaparral shrubs while observing the variety of wildlife.

Special Instructions:

1. Please wear weather appropriate clothing and closed toe shoes.

2. Hats and sunscreen are encouraged.

Host Site: Edwards Air Force Base

Site Address: Rosamond, CA- contact site for specific drop- off instructions

Website: http://www.edwards.af.mil/

Field Trip Contact: Misty Hailston (misty.hailstone.1@us.af.mil)

Gary Hatch (gary.hatch@us.af.mil)

Grade Levels: 4-12

Max. # of Attendees: Contact site for accommodations.

Length of tour: 4-5 hours

Field Trip Description: The multi-million dollar program at Edwards AFB offers teachers and students an opportunity to see leading-edge technologies and environmental activities at the nation's premier center for flight test activities. Learn about biology, archaeology, chemistry, natural resources and wildlife, environmental engineering, computers, and see actual engineers and scientists at work on state-of-the-art programs. Special tours are also available of Piute Ponds, an enhanced natural marsh in the middle of the Mojave Desert, which is a major bird watching spot.

Special Instructions:

1. THIS HOST SITE IS LIMITED TO (3) SCHOOLS PER YEAR AND ALL TOURS ARE SCHEDULED ON FIRST COME BASIS.

Host Site: Elementis Specialties, Hector Mine

Site Address: 27575 E. Hector Rd. Newberry Springs, CA 92365

Website: http://elementis-specialties.com/

Field Trip Contact: Joyce E. Pulliam-Fitzgerald

760-257-3301 X 227

Joyce.fitzgerald@elementis-na.com

Grade Levels: 3-12 Max. # of Attendees: 100 Length of tour: 1-2 hours

Field Trip Description: Elementis Specialties is the world's largest producer of rheological additives (flow control additives) for solvent-based systems, an innovator in the development of additives for waterborne systems and a producer of high quality, nontoxic anticorrosive pigments. The Hector Mine is an open pit mine encompassing over 500 acres which has been in operation since the 1930's. Each student that takes a tour of Hector Mine will gain a general understanding of mining in relation to; 1) The importance of industrial minerals in our everyday lives 2) Basic Geology, 3) Mine Economics, 4) Production, 5) Equipment maintenance, and 5) the skill and education levels involved.

Special Instructions:

- 1. Limited to 3 schools per year, between October 1 and April 30. Available on a first-combasis.
- 2. Closed toe, flat shoes required. Long pants and light jacket recommended
- 3. Additional permission slip required.

Host Site: Forever Wild

Site Address: 8545 Buttemere Rd, Phelan, CA 92371

Website: http://www.foreverwildsanctuary.org/

Field Trip Contact: 760-868-2755 or foreverwild@verizon.net

Grade Levels: K-12

Max. # of Attendees: Contact site of accommodations. **Length of tour**: 1.5 -2 hours. Closed Monday and Thursday.

Field Trip Description: An animal sanctuary is a facility where animals are brought to live and be protected for the rest of their lives. Unlike animal shelters, sanctuaries do not seek to place animals with individuals or groups, instead maintaining each animal until his or her natural death. We do have a few reptiles and non-exotic animals that we allow the public to touch on certain tours. However we never allow the Exotic Cats to interact with the public, these animals are wild and in enclosures to protect them as well as you. The location can often be exposed and windy, and the enclosures are in the open.

- 1. Closed toes shoes required.
- 2. General Tour Cost: \$5. Guided Tour Cost: \$6. Admission fees are not covered under MEEC transportation grant.
- 3. Sanctuary is located 1.3 miles up a dirt road.

Host Site: Grassy Hollow

Site Address: CA-2, Valyermo, CA 93563 Website: http://www.grassyhollow.net/ Field Trip Contact: Linda Dailey

760-868-2859 **Appropriate for Grade Levels:** K-12

Max. # of Attendees: Contact site for accommodations.

Length of tour: Arranged by teacher and host site.

Field Trip Description: The field trip programs usually consist of: An informal talk on the local preserved animals on display in the Center, the Hug-a-Tree program by Wrightwood Search and Rescue (how not to get lost in the forest and what to do if you do get lost), a hike on the Pacific Crest Trail through the area burned by the 1997 Narrows Fire and damaged by last winter's storms. See the amazing forest recovery an, access to the Grassy Hollow Visitor Center, where we offer interactive and tactile exhibits, mounted animal specimens, as well as nature films that can be shown in our Conference Room. If a teacher has need of special emphasis based on classroom activity, we will try to accommodate that need. For younger children, we may be able to arrange a visit by Smokey Bear.

Special Instructions:

1. Please wear weather appropriate clothing and closed toe shoes.

Host Site: Hi Desert Water District

Site Address: 55439 29 Palms Highway, Yucca Valley, CA 92284

Website: https://www.hdwd.com/tours-presentations/

Field Trip Contact: Kayliegh Frater

kayleighf@hdwd.com

760-228-6285

Grade Levels: 1-6, 9-12

Max. # of Attendees: Contact sire for accommodations.

Length of tour: 3 hours

Field Trip Description: Hi-Desert Water District offers a variety of water and wastewater curriculum based on grade level. We incorporate a theme of wizardry in our curriculum to add some "magic" to our tours and presentations. For the Water Cycle Abracadabra program for grade levels 1 and 2, junior water wizards learn about the magic of the water cycle, watch a water leak demonstration, and make water cycle bracelets. For the Sorcery of Seeds program for grade levels 3 and 4, junior water sorcerers learn about water quality spells through microscopes, tour the demonstration garden with native plants, and plant drought-tolerant flower seeds in clay pots to take home. For the Stormwater Quest program for grade levels 5 and 6, junior water mages take a tour of a recharge pond and learn the spell to create a sponge city. For all three programs, students receive a certificate and a goodie bag at the end of the program. Limited registration each year. COMING SOON: Hi-Desert Water District will offer tours to high school classrooms of the Wastewater Treatment and Reclamation Facility starting in September 2019. Following a tour of the facility, high school students will participate in wastewater education activities.

- 1. Field trips are limited to schools within the Hi-Desert Water District service boundaries.
- 2. Closed toed shoes required.

Host Site: High Desert Interpretive Center and MWA Central Operations Center

Site Address:

Website: https://www.mojavewater.org/
Field Trip Contact: Nicholas Schneider

nschneider@mojavewater.org

760-946-7038

Grade Levels: 3-12 Max. # of Attendees: 36 Length of tour: 2 hours

Field Trip Description: An educational opportunity offering history of the Victor Valley with a focus on water resources is open at the High Desert Interpretive Center. Located between Deep Creek and the Mojave River in Apple Valley, the center features an instructional path with interpretive kiosks, a covered amphitheater and the Mojave Water Agency's new Central Operations Center. Adjacent to the Mojave River bed, the location offers views of the Mojave River Forks Dam and the Cedar Springs Dam. The instructional path is easy to traverse and features kiosks dedicated to the subjects of land and water, the California State Water Project, the ancient Mojave River, the Native American settlers of the Victor Valley, and the western Mojave Desert biology and geology. In addition to the path, the Mojave Water Agency's new Central Operations Center is available for tours. This 5,116 square-foot facility features the Agency's centralized Supervisory Control and Data Acquisition system (SCADA). The SCADA control room enables the operations staff to manage the water system's pumps, valves, reservoirs and wells by computers using operator-determined set points. A major portion of the Agency's groundwater recharge operations are expected to occur at this location with releases of State Water Project water from Silverwood Lake and the Morongo Basin Pipeline via the new Deep Creek outlet. Tours may be scheduled in conjunction with water releases at various times of the year.

Special Instructions:

3. Field trips are limited to schools within the Mojave Water Agency Service Boundaries which include the Victor and Morongo Valleys.

Host Site: High Desert Power Project

Site Address: 19000 Perimeter Rd., Victorville, CA 92392

Website:

Field Trip Contact: Jon Boyer

760-912-3007 or 760-953-9163

Grade Levels: 1-12

Max. # of Attendees: Contact Site for accommodations.

Length of tour: 1-2 hours

Field Trip Description: Students can expect to see a modern combined cycle power plant, with three Combustion Turbines with associated heat recovery steam generators, and an attached Steam Turbine with a cooling tower. Facility also includes and extensive water treatment system.

Special Instructions:

1. Long pants, no tank tops, and closed toe shoes required.

Host Site: Joshua Tree National Park

Site Address: Contact site for specific drop-off instructions.

Website: https://www.nps.gov/jotr/index.htm

Field Trip Contact: 760-367-3011

Grade Levels: 2-12

Max. # of Attendees: Contact site for accommodations.

Length of tour: 1-1.5 hours

Field Trip Description: Joshua Tree National Park Joshua Tree National Park is immense, nearly 800,000 acres, and infinitely variable, delicate, and extremely fragile. This is a land shaped by strong winds, sudden torrents of rain, and climatic extremes. Joshua Tree National Park invites you and your students to attend ranger-led education programs. Topics covered by Ranger Guided Programs include: desert landforms, the rock cycle, cultural history of how American Indians and early settlers survived in and adapted to the desert, geology of the Earth and how fault formed the landscape—and continues to shape it today, desert water sources, the Desert Tortoise, Desert Plants. Research and Job Shadowing opportunities available for High School Students.

Special Instructions:

1. Reservations are required.

- 2. Check with site for correct amount of chaperones needed for the program selected.
- 3. Entrance-fee waivers are available for educational visits but not for recreational visits. A statement of your educational objectives and your lesson plan with an outline of educational activities is required. Primary and Secondary Groups. To request an academic fee waiver for groups through grade twelve, return the request form (http://www.nps.gov/jotr/forteachers/upload/feewaiver.pdf)and allow a minimum of two weeks for us to process your request. Entrance fees are not coved by transportation grant.

Host Site: Liberty Utilities

Site Address: 21760 Ottawa Rd, Apple Valley, CA 92308

Website: http://www.avrwater.com/
Field Trip Contact: Tony Penna
General Manager

760-240-8327 or tony.penna@libertyutilities.com

Grade Levels: K-12
Max. # of Attendees: 20
Length of tour: Approx 2.5 hours.

Field Trip Description: Students will learn about the Liberty Utilities water system serving Apple Valley. They will be introduced to the major components of a domestic drinking water system and gain an understanding of how water is produced and delivered to the customer's house. The brief classroom portion includes a discussion on water quality and water system maintenance, as well as our regions water source; an overview of current statewide water supply conditions and water conservation tips. The students will then visit a well and reservoir to see the equipment needed to produce and deliver the water. Each attendee will receive a conservation gift bag filled with water-saving tips and tools.

Host Site: Living Desert and Botanical Gardens

Site Address: 47900 Portola Ave, Palm Desert, CA 92260

Website: http://www.livingdesert.org/
Field Trip Contact: Bobby Sizemore

School Field Trips Director 760-346-5694 ext. 2519

schoolfieldtrips@livingdesert.org

Grade Levels: K-12 Max. # of Attendees: 120

Length of tour: 1.5 hours +, contact site for accommodations.

Field Trip Description: The Living Desert provides an introduction to desert ecology to more to thousands of school children each year. Field Trips have the following exciting options that include our regularly scheduled storytelling, live animal encounters, Wildlife Wonders Show, Village WaTuTu, hands-on Discovery Center and our desert play land – Gecko Gulch. Docent-Guided tours available for grades 1-12. You may choose a tour of African or North American exhibits, or book a North American tour highlighting the ancient Cahuilla Indians. After your docent-led tour you may continue to enjoy the park at your leisure! Pre- and Post visit material packets are available for free download. Materials include: field trip information, guidelines for school groups, "What is a Desert?" activities for classroom settings, and background fact sheets.

Special Instructions:

- 1. Entrance fee of \$6.00. <u>Admission and activity fees are not covered under MEEC transportation grant.</u>
- 2. Educators may make arrangements to visit the park in advance to finalize lesson plans at no charge.

Host Site: Mitsubishi Cement Corporation

Site Address: 5808 CA-18, Lucerne Valley, CA 92356

Website: http://mitsubishicement.com/

Field Trip Contact: David Rib

Environmental Manager

760-248-5184 or drib@mistsubishicement.com

Grade Levels: 3-12

Max. # of Attendees: Contact site for accommodations.

Length of tour: 2 hours

Field Trip Description: See how cement is made from raw materials blasted from the mountain-side into an important building material. Beautiful views of the cement process overlook Lucerne Valley and beyond. See how vegetation is re-established to restore the natural habitat. See how raw materials are mixed and heated and then transformed to cement clinker. See a big pile of waste tires that are used daily as clean fuel for the process. Every student will learn the difference between cement and concrete!

Host Site: Mojave Desert Air Quality Management District **Site Address**: 14306 Park Ave, Victorville, CA 92392

Website: http://www.mdaqmd.ca.gov/

Field Trip Contact: Ryan Orr

Community Relations and Education Supervisor

760-245-1661 ext. 3001

Grade Levels: K-12

Max. # of Attendees: check with site for accommodations

Length of tour: check with site for accommodations

Field Trip Description Clean Power Education Center (CPEC) – Located in the lobby of the MDAQMD's Victorville offices, the CPEC was designed to promote renewable, clean sources of energy and educate the public about their benefits to the environment, the economy and future energy demands. The display includes a 1/48 scale working model of the District's Solar Electric System, a diagram of how a solar cell works, actual size PV solar cells, a Solar Kiosk – a touch screen, interactive display customized to the MDAQMD's specific roof-top system, and highlighting it's performance data. Since its 2004 installation, the MDAQMD's solar system has produced more than 1,000,000 KWh of electricity, which has saved the District more than \$280,000 in energy costs and prevented approximately 631,000 lbs of C0 emissions. Field trip includes a grade appropriate air quality workshop/presentation and tour of the air monitoring station and Clean Power Education Center.

Special Instructions: N/A

Host Site: Mojave National Preserve, Hole-In-The Wall and/or Kelso Depot Visitor Center

Site Address: 90942 Kelso Cima Rd, Kelso, CA 92309

Website: https://www.nps.gov/moja/index.htm

Field Trip Contact: Hole-In-The Wall: Christina Mills

760-252-6123 or 760-326-7051 Christina Burns@nps.gov

Kelso Depot: Dora McKeever

760-252-6100

dora_mckeever@nps.gov

Grade Levels: K-12

Max. # of Attendees: Contact site for accommodations Length of tour: 2-5 hours depending on location and activity

Field Trip Description: Mojave National Preserve Hole-in-the-Wall- Rangers escort students on the Rings Loop Trail, a two-hour guided walk beginning at Hole-in-the-Wall Information Center. Students will view petroglyphs and rock formations, which offer vivid examples of volcanic processes. Students will be offered supervised free time to explore the bizarre rock formation for which Hole-in-the-Wall is named. The hike culminates as students climb up Banshee Canyon on metal rings embedded in the rock. Kelso Depot Visitors Center, Mojave National Park, is located in a renovated 1920s-era train station and includes two floors of exhibits highlighting the natural and cultural history of the Mojave Desert; a National Park Store; the Beanery Lunch Counter; a theater showing introductory films; and the Desert Light Gallery.

Host Site: Mojave Solar LLC

Site Address: 42134 Harper Lake Road, Hinkley CA 92347 **Website:** <u>www.abengoa.com</u> and <u>www.atlanticayield.com</u>

Field Trip Contact: Jose Manuel Bravo

Manager, Compliance, Quality & Environmental Department

760-308-2601 ext. 418 or 303-378-7302

imanuel.bravo@abengoa.com

Grade Levels: 5-12
Max. # of Attendees: 20
Length of tour: 2 hours

Field Trip Description: Students will learn all about Solar Energy. We are a 100% solar powered facility. So they can learn the water process, about how to make steam in the Heat Exchangers, how we collect the needed heat, and how we produce the actual electricity!

Special Instructions:

1. Limited to one bus.

2. Long pants and closed toe shoes required.

Host Site: Mojave Water Agency Headquarters

Site Address: 3846 Conference Center Dr, Apple Valley, CA 92307

Website: https://www.mojavewater.org/ **Field Trip Contact**: Nicholas Schneider

nschneider@mojavewater.org or 760-946-7038

Grade Levels: 3-12 Max. # of Attendees: 36 Length of tour: 2 hours

Field Trip Description: MWA's Headquarters facility is a stand out among LEED Certified (Leadership in Energy and Environmental Design) buildings and includes an impressive 1.7 acre sized demonstration garden. The garden displays alternatives to turf as well as other high water consuming plants. Landscaping ideas, utilizing best water conservation practices as well as seeing what plants work best in the ever-changing climate of the High Desert are all parts of this gorgeous garden. The MWA Headquarters Facility is helping decrease negative air quality effects of transportation impacts by providing employees with bicycle access, storage and showering facilities within 200 yards of the main entrance. Hybrid or electric automobiles are encouraged through the provision of preferred parking for fuel efficient vehicles. A comprehensive photo-voltaic system was installed, comprised of roof, carport and ground mounted panels that produce up to 70% of the facility's power needs. With 258 kW DC panels, the project was completed using some of the most advanced solar technology available. Customized school tours for energy and water conservation and energy/garden service learning project ideas.

Special Instructions:

1. Field trips are limited to schools within the Mojave Water Agency Service Boundaries which include the Victor and Morongo Valleys.

Host Site: Oak Glen Preserve

Site Address: 39611 Oak Glen Road Oak Glen, CA 92399

Website: http://www.wildlandsconservancy.org/outdoor_inland.html

Field Trip Contact: Elba Mora

Outdoor Education Director

909-790-3698 or elba.m@twc-ca.org

Grade Levels: 3-6

Max. # of Attendees: 110 Length of tour: 5 hours

Field Trip Description: Located in Oak Glen, nestled within the San Bernardino Mountains, this free program takes place on a two-mile nature trail on the Oak Glen Preserve. This trail meanders through an evergreen forest, past ponds that host migratory ducks in winter, and under a canopy of a deciduous black oak forest that opens onto a south-facing chaparral hillside. The return trail follows a willow shaded stream onto a boardwalk that is the home to a variety of butterflies when the wetlands are in bloom. Children will experience, within a small geographic area, ecosystems that were previously unknown to them. The Outdoor Discovery Program is a five hour nature adventure field trip, at which each child will have a chance to learn, explore, and gain a new respect for nature while having fun.

Special Instructions:

1. Weather appropriate clothing and closed toe shoes required.

Host Site: Palmdale Water Reclamations Plant

Site Address: 39300 30th Street East, Palmdale, CA 93550

Website: www.lacsd.org

Field Trip Contact: Genesis Rodriguez (562) 908-4288 ext.2300 or

genesisrodriguez@lacsd.org

Grade Levels: 4-12

Max. # of Attendees: Contact site for accommodations

Length of tour: 1-2 hours

Field Trip Description: We invite you to take a tour of any of our facilities to see how your wastewater is cleaned. People from over 100 countries have toured Sanitation Districts' facilities to learn about our state-of-the-art methods for wastewater treatment and solid waste management. You can, too! The Palmdale WRP is a tertiary treatment plant with solids processing facilities. The plant provides primary, secondary, and tertiary treatment for a design capacity of 12 million gallons of wastewater per day. The plant serves a population of approximately 150,000 people. The effluent is cleaned to Title 22 (drinking water) standards and is beneficially reused for irrigation of trees and fodder crops on City of Los Angeles Department of Airports' property and also for parks in the city of Palmdale. The Palmdale WRP processes all wastewater solids generated within its service area. The wastewater solids are anaerobically digested, stored, and then dewatered using centrifuges. The dewatered cake, or biosolids, is hauled away and beneficially used for agricultural land application.

- 2. Closed toe shoes required.
- 3. Rain on the day of or before the tour may result in cancellation.

Host Site: Prime Desert Woodland Preserve

Site Address: 43201 35th Street West, Lancaster CA 93534

Website: http://www.cityoflancasterca.org/about-us/departments-services/parks-recreation-

<u>arts/parks/prime-desert-woodland-preserve</u>

Field Trip Contact: <u>pdw@cityoflancaster.org</u>

Grade Levels: K-12

Max. # of Attendees: Contact site for accommodations.

Length of tour: 2 hours

Field Trip Description: First proposed in 1985, the Prime Desert Woodland Preserve is the result of the efforts of many local residents and the Lancaster City Council. This scenic location nestled within an urban area has been established to provide visitors an opportunity to learn about the animals, plants, and the region in which we live, as well as a place to simply relax and enjoy nature. The Preserve has an area of about 100 acres with over two miles of trails.

Special Instructions:

1. Interpretive Center open Weekends and Wednesdays only.

Host Site: Palcerita Canyon Nature Center

Site Address: 19152 Placerita Canyon Rd, Newhall, CA 91321

Website: http://www.placerita.org/ **Field Trip Contact:** 661-259-7721

Grade Levels: K-12 Max. # of Attendees: 80 Length of tour: 2 hours

Field Trip Description: The program begins when the school bus pulls up with the children accompanied by teachers, aides, and parents. The children are led to the classroom where we begin an introduction to Placerita Canyon. The next part of the program is to show the animals we have at the nature center to the children. The animal presentation features native Southern California creatures such as tarantulas, snakes, lizards, birds of prey, and mammals. Students are than broken up into small groups for a nature hike where there is plenty to see including blooming plants, birds, and insects. We often stop at our Native American house to demonstrate how our early inhabitants lived. The Walker Cabin, home to a pioneer family, is always of interest. We often hike to the "Oak of the Golden Dream" which is the site of the first documented gold discovery in California in 1842.

- 1. Closed toe shoes and weather appropriate attire required
- 2. \$2.00 donation for each student. Donation not covered by MEEC transportation grant.
- 3. Open Tuesday-Sunday.

Host Site: Rio Tinto Borates: Borax Visitor Center **Site Address:** 14486 Borax Rd, Boron, CA 93516 **Website:** https://www.borax.com/visitorcenter/

Field Trip Contact: 760-762-7588

Grade Levels: 4-12

Max. # of Attendees: 50-100

Length of tour: 2 hours

Field Trip Description: Learn about the history of borax the mineral, and Borax the company, and mining today, how borates are used and how they are transported to the world. Tour 6 different exhibit areas of the facility – internal and external. Internal exhibits include displays on mining and geology, the refining process, product distribution, examples of the many products that contain borates, our safety, environmental and community programs and a bit about our heritage and our connection to Death Valley. Externally, there are two viewing areas – a primary area just east of the Visitor Center and a secondary area on top of the Visitor Center – where your students can watch the trucks and shovels working in the pit. Students may do their own "rockhounding" and collect their own borate samples. See an original 20 Mule Team wagon set, complete with fiberglass mules and a large haul truck tire which provides the background for a great photo opportunity.

Special Instructions: N/A

Host Site: Riley's Farms

Site Address: 12261 S. Oak Glen Road, Oak Glen, CA 92399 **Website:** http://rileysfarm.com/index.php/information/contact-us/

Field Trip Contact: http://rileysfarm.com/index.php/information/contact-us/

Grade Levels: K-12

Max. # of Attendees: Contact site for accommodations.

Length of tour: Contact site for accommodations.

Field Trip Description: Students will learn the extent of science, technology, engineering and math as it was in the 1700s and 1800s. Students will tour homesteads and draw comparisons of life in the colonial era to see how far we've come leading up to the industrial revolution. From antique candle dipping to some of the earliest farming techniques, Riley's Farms offers a glimpse into how far ingenuity has come in such a short period. Students can learn about the science behind early American tool and weapon making at the blacksmith and can even get a taste of colonial economics as they learn how business was conducted at the height of the gold rush. Teachers are encouraged to contact Riley's Farm prior to their visit.

Special Instructions:

1. Program Fee not covered by MEEC transportation grant.

Host Site: Vasquez Rock Interpretive Center

Site Address: 10700 West Escondido Canyon Rd, Agua Dulce, CA 91390

Website: http://parks.lacounty.gov/wps/portal/dpr/Parks/Vasquez_Rocks_Natural_Area

Field Trip Contact: 661-268-0840

Grade Levels: K-12

Max. # of Attendees: 60 for guided tour

Length of tour: 1 hour

Field Trip Description: Located in the High Desert near Agua Dulce Springs, features 932 acres of spectacular rock formations, Tataviam Indian sites, and a seasonal stream. The rocks' history began in prehistoric times when the sandstone rocks were uplifted at a picturesque angle, showing their jagged red features. The Vasquez Rocks Interpretive Center offers a tectonic plate simulator, EEI Curriculum-based activities, live animal displays, artifact exhibits, as well as cultural, historic and geological exhibits.

Special Instructions:

1. Interpretive Center open Tuesday – Sunday

Host Site: Victor Valley Museum

Site Address: 11873 Apple Valley Rd, Apple Valley, CA 92308 **Website:** http://www.sbcounty.gov/museum/branches/vvm.htm

Field Trip Contact: 760-240-2111

Grade Levels: K-12

Max. # of Attendees: Contact site for accommodations

Length of tour: Contact site for accommodations

Field Trip Description: Discover Your Own Backyard at the Victor Valley Museum. Explore the cultural and natural heritage of the High Desert. Exhibits include Native Americans, prehistory and history archaeology, rocks, minerals, mining, fossils, plants, animals, and the Mojave Desert's unique environments. Curriculum-based gallery guides for school groups available.

- 1. Admissions fees- Adults \$5.00, Children under 12 \$2.00. <u>Admission fee not covered by MEEC transportation grant.</u>
- 2. Open Wednesday thru Sunday.

Host Site: Victor Valley Transit Authority

Site Address: 17150 Smoke Tree Street, Hesperia, CA 92345

Website: https://vvta.org/

Field Trip Contact: Debi Lorrah

760-995-3588 or dlorrah@vvta.org

Grade Levels: 6-12 Max. # of Attendees: 10 Length of tour: 30-45 minutes

Field Trip Descriptions: The VVTA Hesperia facility is located on 10 acres just off Main Street on the corner of Smoke Tree Street at E Avenue. The VVTA Administration and Maintenance Buildings are Leadership in Energy and Environmental Design (LEED) Gold rated, which includes the following LEED attributes: State-of-the-art underground storm water treatment and retention system; Solar tubes to reduce the need for artificial lighting in hallways and some offices; Water recycling for the bus wash, featuring reverse osmosis deionization, which recycles 80% of water; Innovative heating and ventilation system in which clean air flows up through the floor rather than being pushed down from the ceilings; Photovoltaic power system, which will produce all of the facility's electricity requirements; Shade for buses to reduce air conditioning cooling times, saving fuel and reducing emissions.

Special Instructions:

1. Closed toed shoes required.

Host Site: Victor Valley Wastewater Reclamation Authority **Site Address:** 20111 Shay Rd, Victorville, CA 92394

Website: http://www.vvwra.com/
Field Trip Contact: David Wylie

760-246-8638 ext. 102 or dwylie@vvwra.com

Grade Levels: 4-12

Max. # of Attendees: Contact site for accommodations.

Length of tour: 2 hours

Field Trip Descriptions: Students will get an up close look at how VVWRA has gone from being just a wastewater treatment plant to a resource recovery facility. The tour will highlight all phases of the wastewater treatment process, including how millions of gallons of water are recycled every day and released into the Mojave River. Plus, students will learn how VVWRA is using waste to generate carbon neutral renewable electricity to power our plant.

- 1. Closed toed shoes, long pants and light coat required.
- 2. Additional field trip waiver required.

Host Site: Vista del-Lago-Pyramid Lake

Site Address: 38500 Vista Del Lago Rd, Gorman, CA 93243

Website: http://www.water.ca.gov/recreation/locations/pyramid/pyramidvisitors.cfm

Field Trip Contact: 661-294-0219

Grade Levels: K-12

Max. # of Attendees: Contact site for accommodations Length of tour: Contact Site for accommodations.

Field Trip Descriptions: The center now supports California's Education and Environment Initiatives (EEI) Curriculum. Topics discussed during tour include: ancient water, water supply threats an innovations and an over view of the State water Project. No explanation of California water would be complete without discussion of the SACRAMENTO-SAN JOAQUIN DELTA, the largest estuary on the West Coast. The center also features a video presentation, projected on a huge topographical map of California, that explains how the state's geography influences where rain and snow fall — and how water is transported to drier regions. At Vista del Lago, visitors can also learn about the 29 public water agencies that receive State Water Project supplies.

Special Instructions: N/A

Host Site: Whitewater Preserve

Site Address: 9160 Whitewater Canyon Rd, Whitewater, CA 92282 **Website:** http://www.wildlandsconservancy.org/preserve_whitewater.html

Field Trip Contact: Caroline Conway

Caroline.c@twc-ca.org

Grade Levels: K-12 Max. # of Attendees: 70 Length of tour: 2 hours.

Field Trip Descriptions: Whitewater Preserve is one of three nature preserves in the desert region owned and operated by The Wildlands Conservancy (TWC). All programs are themed according to NGSS, unless requested. Programs available cover- ecosystems, geology, flow of matter and energy, water sheds and aquifers. Citizen Science "Macroinvertebrate Survey" options available for middle and high school students.

Special Instructions:

- 1. Tour available on Tuesdays, Thursdays and Fridays
- 2. Closed toe shoes and weather appropriate clothing required.

Host Site: Yucaipa Regional Environmental Science Day Camp **Site Address:** 33900 Oak Glen Road, Yucaipa, CA 92399

Website: http://cms.sbcounty.gov/parks/ActiveOutdoors/EnvironmentalScienceDayCamp.aspx

Field Trip Contact: 909-387-2461

Grade Levels: 4-5

Max. # of Attendees: Contact site for accommodations. Length of tour: Contact site for accommodations.

Field Trip Descriptions: The Environmental Science Day Camp offers 4th and 5th grade students an opportunity to learn about geology, biology, botany, environmental stewardship and the Serrano Indians on a first-hand basis.

Special Instructions:

1. Parking and entrance fees not covered by MEEC transportation grant.