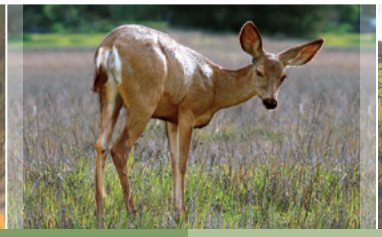
Santa Susana Newsletter

Summer 2024

This rainy season has been one of the wettest on record, raining down more than 37 inches on the site. During nondrought years, 18 inches of rain is typical.

As we do every rainy season, we managed stormwater sampling activities at the site consistent with obligations under federal and state law, including our new stormwater permit issued by the Los Angeles Regional Water Quality Control Board (Regional Board).

While we don't comment on pending litigation, last fall, Boeing filed a narrow lawsuit challenging several requirements in our new stormwater permit. We are only challenging provisions in the new permit where the Regional Board has overstepped its authority and has not followed applicable law, orders and directives by the State Water Resources Control Board.

While the lawsuit is pending, we will continue to manage stormwater according to the new permit. We remain deeply committed to protecting and improving water quality at the site and we've undertaken significant efforts to comply with applicable water quality requirements. Boeing has spent over $100 million in the past 12 years on numerous stormwater management and treatment systems, achieving over 99% compliance. The permit exceedances that have occurred are generally associated with metals and inorganics at naturally occurring levels or constituents commonly found in surface water following regional wildfires.

For more information, visit our Stormwater Technical Library on *www.boeing.com/santasusana*.

Kamara Sams
Program Director

Mike Bower
Project Manager

Community members go back to school at Groundwater U

Community members look at rock core hole

The California Department of Toxic Substances Control (DTSC), in cooperation with Boeing, NASA and the U.S. Department of Energy (DOE), held a series of educational classes called Groundwater U to help stakeholders increase their knowledge about groundwater remediation investigation activities at Santa Susana and prepare stakeholders to review upcoming groundwater decision documents.

Groundwater U included presentations on hydrogeology and geology in a fractured bedrock environment by Dr. Matt Becker, professor and Conrey endowed chair of hydrogeology, Department of Geological Sciences, California State University, Long Beach.

It also included presentations on contaminant transport and fate by Dr. Beth Parker, Santa Susana Field Laboratory (SSFL) Groundwater Advisory Panel member; professor and Natural Sciences and Engineering Research Council of Canada research chair in fractured rock contamination hydrogeology, School of Engineering, University of Guelph; and Dr. John Cherry, SSFL Groundwater Advisory Panel member; distinguished professor emeritus, University of Waterloo; and adjunct professor, University of Guelph.

Boeing, NASA and DOE also gave presentations on groundwater remediation technology pilot studies conducted at the site under the oversight of DTSC.

The wealth of groundwater data collected at and around the site provides a clear understanding of the location and extent of groundwater contamination from historic site operations. Contamination from Santa Susana is not impacting any private drinking water supply wells. In addition, the decreasing concentration of contaminants in groundwater indicates that contamination is breaking down on its own through a process called natural degradation.

Recordings of the Groundwater U presentations are available on DTSC's website: *https://dtsc.ca.gov/santa-susana-field-laboratory-meetings/*. Additional information about Boeing's groundwater investigation activities are available in our Groundwater Investigation and Treatability Studies on Boeing's website: *www.boeing.com/santasusana*.

Boeing, NASA and DOE created a Groundwater U Credly badge to certify that workshop series attendees have knowledge and understanding of geology and hydrogeology in a fractured bedrock environment. Stakeholders who verify that they attended all three virtual Groundwater U sessions and the in-person field trip or have reviewed all the Groundwater U video recordings can request a badge by emailing: *santasusanacommunitytours@boeing.com*.

In 2022, the California Environmental Protection Agency (CalEPA) announced a comprehensive framework that establishes strict cleanup protocols and timelines for Boeing. The framework involves two state agencies — the DTSC and the Los Angeles Regional Water Quality Control Board — and accelerates cleanup, reduces the potential for technical disputes and establishes a process to resolve them quickly, avoiding delays from litigation.

Former Rocketdyne/Atomics International Employee Shooting Range cleanup at Sage Ranch

The DTSC-ordered cleanup of the Sage Ranch Shooting Range will remove an additional 15,000 cubic yards of soil

In April 2023, Boeing started excavating soil contaminated by lead from shot, skeet fragments, and clay pigeon target fragments left from an old employee shooting range at the Sage Ranch property as part of a DTSC state-ordered cleanup. The former nonprofit employee gun club operated a recreational shooting range on what is now the Sage Ranch Park property from the 1970s until the early 1990s. Over time, the property has been transferred by sale to subsequent owners, and interim cleanup activities have been performed.

Excavation work includes excavators perched in rock outcrops and hand work to sweep up lead shot and will continue until approximately 15,000 cubic yards of soil is removed. The final phase of the cleanup will include restoring the area with native plants, conducting invasive species removal and, with DTSC approval, the reopening of the Loop walking trail to the public. This is a risk-based cleanup that complies with California's rigorous standards of protection, and DTSC staff are on-site regularly to oversee the work.

The comprehensive framework agreement also includes safeguards to protect important environmental and cultural resources at the site, does not impact the validity of the conservation easement recorded on Boeing's property, and includes an expedited cleanup process to streamline and accelerate cleanup of contamination at Santa Susana. The framework also included Imminent and Substantial Endangerment Consent Orders directing Boeing to remediate contamination at the Former Rocketdyne/Atomics International Employee Shooting Range cleanup at Sage Ranch and at the former Area I Burn Pit.

Overwhelming Community Support for State Agreement

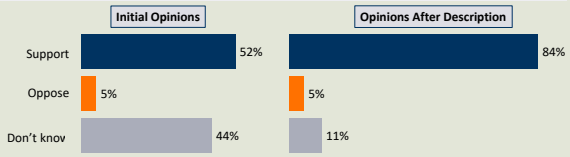
Last year, a well-known and respected polling firm in California, conducted a poll on our behalf in order to gain insight into the public's understanding of Boeing's investigation and cleanup activities at Santa Susana, including Boeing's settlement agreements with the State.

In a sample survey of more than 5,000 voters in Ventura and Los Angeles counties who live near the site, the poll found overwhelming support for the comprehensive framework, with 84% of those surveyed expressing support.

This research gives us insight into the local community's understanding of our recent settlement agreement with DTSC and will assist us in keeping the public informed of our efforts to restore and preserve the site.

Figure 2: Initial Opinions and Opinions after Description of Agreement for Boeing's Cleanup of SSFL

As you may know the Santa Susana Field Laboratory is a former industrial and government test site covering 2,850 acres in Ventura County near the LA County border in the Simi hills above Chatsworth and off of Woolsey Canyon Road. The site was used as a rocket engine test site for NASA and the US Air Force, as well as for research in the development of nuclear, solar and sodium reactor energy technology. The site was previously owned by Rocketdyne but stopped operations about 15 years ago. The current owner of most of the land, the Boeing Company, is in the process of cleaning up and restoring the site and has recorded a legal document to set its land aside to be open space with no development of any kind in the future. The company has agreed on a process with the California Environmental Protection Agency's Department of Toxic Substances Control for Boeing to clean up contaminated soils, stormwater and groundwater in its areas at the site.
One of the possibilities under this agreement, is that Boeing will be required to conduct one of the most stringent soil cleanups in the State, which would remove soil containing radiological materials down to naturally occurring levels, as if industrial operations had not occurred on-site. All other soils with contamination from past industrial activities would be cleaned to a safe standard for people to live there and eat vegetables grown on-site, while also protecting local wildlife habitat during the clean-up process.



After the description tested in the survey, support for the CalEPA cleanup agreement is prodigious for every demographic and geographic group analyzed in the survey including in LA County Supervisorial District 3 (81% support, 5% oppose) and Ventura County (86% support, 5% oppose), Ventura County Supervisorial Districts, Congressional, State Senate and Assembly Districts (see **Figure** 3 on the following page), distance from the site, political parties, racial and ethnic groups, ages, genders, parental status, and home ownership status. Additionally, 86% of the voters who have the strongest opinions on the issue and find the cleanup of SSFL to be an extremely or very serious problem support the cleanup agreement.

Area I Burn Pit cleanup

The DTSC-ordered cleanup of the Area I Burn Pit will remove an additional 10,000 cubic yards of soil

The Area I Burn Pit was used in the late 1950s throughout the late 1960s to dispose of explosive and flammable wastes. The Burn Pit consisted of multiple ponds into which solvents and fuels were burned. This method of disposal was a standard industrial practice in the '50s and '60s. It is not an approved disposal method today. Burn operations at the site were discontinued in 1971. Under regulatory oversight from the DTSC, more than 1,600 cubic yards of contaminated soil was previously removed from the Burn Pit.

This spring, Boeing started additional excavation of soil in the Burn Pit as part of a DTSC-ordered cleanup. The cleanup work involves excavation and removal of chemicals to ecological risk-based screening levels, up to 2 feet of soil in some areas. Additionally, radionuclide-containing soil will be cleaned up to background levels, and depending on confirmation sampling, excavation depths could be up to 10 feet.

An estimated 10,000 cubic yards of soil will be removed from the Burn Pit. Active excavation areas are sprayed with water and all soil stockpiles are covered. Excavated soil is characterized and stored in containers before being transported off-site. DTSC staff are on-site regularly supervising the work.

The cleanup complies with applicable health and safety laws and regulations and is being conducted in a way that protects on-site workers and the community living near the site.

Simi Hills Hike **Leader Training**

Sponsored by the California Department of Parks and Recreation and the Foundation for the Preservation of the Santa Susana Mountains (The Foundation), the Santa Susana Pass State Historic Park hosted some of this year's Simi Hills Naturalist Training sessions at the Santa Susana Field Laboratory. The classes were taught by subject matter experts on topics such as Native American history, birds, reptiles and amphibians, oak trees, wildlife, interpretation basics and archeology and geology.

The Foundation was formed to support the acquisition of land for a state park and ultimately facilitated the purchase of 670 acres for what is now the Santa Susana Pass State Historic Park. Visit *http://fpssm.org/* to learn more about the organization or take a hike with naturalists.

Community Members **Celebrate Earth Day with Nature Walk**

This spring, community members from as far south as Long Beach and as far north as Ojai attended our annual Earth Day Nature walk. During the walk, hikers learned more about site history, including Native American tribes, ranching families, movie history, rocket engine testing, and energy research as well as our current cleanup activities. Volunteer hike leaders from the Santa Susana Mountain Park Association pointed out flora and fauna along the hiking trail, and our volunteer citizen scientists from the Simi Hills Wildlife Observatory, Southwestern Herpetologists Society, Sky Valley Volunteers and Herp Connection shared details about their onsite biological studies. To sign up for our hike interest list, email: *santasusanacommunitytours@boeing.com*.