

# RAB NEWSLETTER

Your official community voice for the clean-up of the Titan 1A missile site



USACE public affairs officers Tyler Stalker and Maj. Kara Greene review site maps with a resident before the April 24 quarterly meeting at Kilaga Springs.

## County to remove gun range debris

Starting late summer or early fall, Placer County will begin removing the shell casings and other debris left behind when it used portions of the former missile site in Lincoln for a gun range and skeet shooting.

The remediation should be complete soon after that, Paul Breckenridge, of the Placer County Department of Facilities Management, told the Restoration Advisory Board (RAB) at its quarterly meeting on April 24.

His report was welcome news in the quest to see the 46 acres off Oak Tree Lane be rid of the contamination from both the county and, before that, the military.

The county purchased the former missile base property from the Air Force in 1968, three years after the base was dismantled and the Titan 1-A missiles removed. The shooting ranges are now closed, but the land is littered with expended lead bullets and shot, as well as polynuclear aromatic hydrocarbons (PAHs) from the clay pigeon targets.

While the county is responsible for cleaning up its debris, the U.S. Army Corps of Engineers (USACE) is tasked with the more daunting challenge: how to remove the trichloroethylene (TCE) that has infiltrated the groundwater in unhealthy levels from when it was  
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## Here is what you wanted to know . . .

The U.S. Army Corps of Engineers (USACE) went home from the April 24 quarterly meeting of the Restoration Advisory Board (RAB) and prepared written responses to questions asked by residents. Here are those responses, edited for length with a few additions as noted from other resources.

**Question:** Couldn't you put dye in the missile silos and watch for it in Ingram Slough to see if groundwater is making its way into the slough?

**Answer:** No. With Department of Defense operations having stopped before 1968, that means that it has taken 57 years for TCE from the property to begin appearing near the slough. The dye would likely have a similar timeline to appear at the slough and that is not feasible.

Robert Fagerness, the California Regional Water Quality Control Board (Water Board) representative on the full RAB adds this: Dyes are used in surface water to evaluate flow movement and mixing, they are not typically used in groundwater as it moves quite slowly. Any dye would be degraded and most likely be undetectable by the time it might reach the surface water (if at all).

A more conclusive way would be to establish a stadia (height measurement maker) in the surface water, and elevation measurements in a near groundwater well. This would allow the evaluation of the elevation of groundwater in the well and in the surface water. If the elevations are equal, there is a strong correlation the groundwater is feeding the slough. (Evaluations are continuing)

**Question:** What has been spent on this cleanup to date? What is the planned expenditure in the future?  
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# See you at McBean Pavilion in July

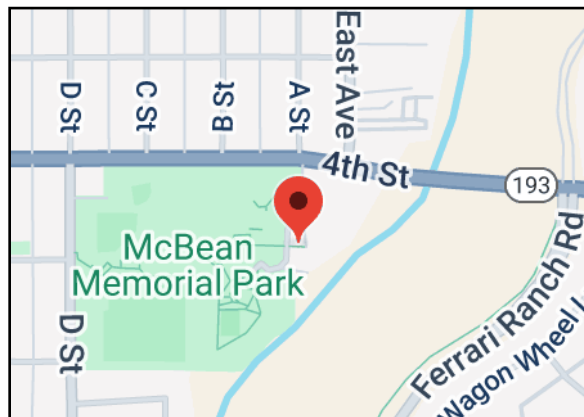
We are on the move.

After holding our first year of quarterly meetings in Lincoln Hills, the Restoration Advisory Board (RAB) is heading to McBean Park for its next quarterly meeting. That meeting, set for 6-8 p.m. July 24, is open to the public.

The idea grew out of a meeting between Community RAB members and City Councilman Richard Pearl. “We were talking about ways to involve the broader Lincoln population,” said Sandi Dolbee, co-chair of the Community RAB. “This quest to clean up the contamination at the former Titan 1-A missile site here affects all of us.”

The U.S. Army Corps of Engineers (USACE) okayed the July change, and the City of Lincoln agreed to book McBean Pavilion, the park’s community center, for the meeting. The pavilion is less than a mile and a half from both the former Titan 1-A missile site and Kilaga Springs Lodge, where the RAB has been meeting recently.

**If you have questions about the efforts to clean up the contamination left behind by the former military base or want to invite us to come speak to your group, class or business, you can email the Community RAB at [RABTitan1A@scilhca.com](mailto:RABTitan1A@scilhca.com). You also can check out the USACE website: <https://www.spk.usace.army.mil/Missions/Military-Projects/FUDS/Titan-1-A-Missile-Site/>**



## County to clean up former shooting ranges

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home to three Cold War-era missiles housed in deep underground silos in the early 1960s. TCE is a man-made chemical and was used as a popular ingredient in degreasers and other cleansing agents until it was linked to certain cancers and other health risks.

In its report at the quarterly meeting held in Presentation Hall at Kilaga Springs Lodge in Lincoln Hills, the USACE said that the study involving the extent of the contamination is done and the contractor is now testing possible cleanup remedies.

Unfortunately, the first possible remedy, which involved injecting a product to break down and neutralize the TCE, failed. The soil was too dense, preventing the injected materials from entering subsurface soil layers containing the contaminated groundwater.

Matt Marlatt, program manager for the USACE, said that while the results weren’t ideal, this phase is designed to surface exactly these kinds of challenges.

“The purpose of the Treatability Study is to understand what works and what doesn’t under site-specific conditions,” Marlatt said. “This is exactly when we want to learn those lessons — not during full-scale remediation.”

He said it’s not yet clear whether this will delay the completion of the Feasibility Study, which is expected later this year. That report will compare the pros and cons of various remedies and will help Marlatt’s team develop a proposed cleanup plan in 2026, with remediation currently anticipated to

begin in early 2027.

The Titan 1-A missile base was completed in 1962 and consisted of three, 160-foot-deep missile silos. According to records, there was an underground city there with living quarters, control centers, connecting tunnels and air intake/exhaust vents.

Above ground, the records say there was a helicopter pad, Quonset huts, hardstands for missile launches, watch towers, an oxidation pond and septic tank, and a communications system.

At the meeting, Breckenridge was asked about any future plans for that property. He said that hasn’t been decided.

*This Newsletter was compiled by members of the Community RAB and does not necessarily reflect the views of the U.S. Army Corps of Engineers.*

# More answers to your questions

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**Answer:** The latest information indicates the cost of the Titan 1-A cleanup to date is approximately \$13.7 million and the future funding is about \$15.6 million.

To track this, you can check out FUDS Sites in our Geographic Information System at: <https://www.usace.army.mil/Missions/Environmental/Formerly-Used-Defense-Sites/FUDS-GIS/>. Find the city of Lincoln on the map and click on the icon that represents Titan 1-A.

A box will pop up and if you scroll down to the Management Action Plan (MAP), you can find the costs to date and the estimated future liability as of the publication of the MAP.

Future costs are called Cost-to-Complete (CTC). If you navigate to page 12, you will see “Funding to date” as of the publication of the MAP. Please note, future funding is revised annually as we learn more about the site.

**Question:** Are you contacting other sites to gain experience from them?

**Answer:** The Sacramento USACE office has access to all documents generated as part of the cleanup of other FUDS sites across the nation, as well as a Center of Expertise whose mission is to provide a technical review for all FUDS projects so they can share information from other sites with the local team.

However, while environmental projects share similarities, each one is unique. For example, Titan 1-A may share similarities with respect to the structures installed, but the soils in which they were installed and the groundwater elevations and flow directions are different, meaning that each site must be analyzed individually.

The Community RAB



**Is this a fire hazard?** A resident took this photo of workers’ trucks in the grassy weeds to illustrate his concern. The answer: Yes, says Lincoln Fire Chief Anthony Mejia. “Some components under a vehicle can reach temperatures as high as 1,300 degrees, which can ignite vegetation,” he explained. USACE program manager Matt Marlatt notes that this was from last month and crews are no longer there. “We are working with our contractor to determine a safe approach to future field work,” he added.

adds this: It has reached out to RABs in Wyoming and elsewhere in California to learn more about how they operate, what they’ve learned and for helpful tips they can share.

**Question:** Who is the lead agency for the TCE cleanup?

**Answer:** The USACE is the lead agency for all Formerly Used Defense Sites (FUDS).

With the Titan 1-A project, the lead regulatory agency is the Water Board. In the infrequent event the USACE and the Water Board disagree, the USACE is the lead and would have final authority. However, we have been collaborating successfully to move the Titan 1-A project forward.

**Question:** Where is this project on the list of priorities within the FUDS portfolio?

**Answer:** The fact that the Titan 1-A site is currently funded by the Department of Defense indicates it has been identified as a priority. FUDS cleanup work is prioritized based on risk. The Department of Defense uses a

process called the Defense Environmental Restoration Program (DERP) Management Guidance to categorize and address sites that pose the highest and most immediate risk to human health, safety or the environment first.

Projects must compete for resources. Sites with higher risk receive funding sooner.

**Comment:** A resident claimed only three of the following four wells were installed: MW-61, MW-62, MW-63, MW-64.

**Response:** The 2024 First Semiannual Groundwater and Soil Vapor Monitoring Report, Table 1 identifies that MW-61 through 64 were installed May 2024. All four were installed. You may be thinking of MW-65 which is not in Table 1; MW-65 is the well that was not installed.

Thank you for your interest. We encourage you to read our website reports:

<https://www.spk.usace.army.mil/Missions/Military-Projects/FUDS/Titan-1-A-Missile-Site/>