

**Justin S. Greene**  
*Commissioner, District 1*

**Lisa Cacari Stone**  
*Commissioner, District 2*

**Camilla Bustamante**  
*Commissioner, District 3*



**Adam F. Johnson**  
*Commissioner, District 4*

**Hank Hughes**  
*Commissioner, District 5*

**Gregory S. Shaffer**  
*County Manager*

Mr. Stephen Hoffman  
LANL SWEIS Document Manager  
DOE/NNSA  
3747 W. Jemez Road  
Los Alamos, NM 87544

**Via email to [LANLSWEIS@nnsa.doe.gov](mailto:LANLSWEIS@nnsa.doe.gov) and certified mail**

**Subject:** Santa Fe County comment on draft Sitewide Environmental Impact Study (SWEIS)

Dear Mr. Hoffman:

The Santa Fe County Board of County Commissioners represents the residents of five districts in the County of Santa Fe. Our County is affected by the federal government's activities at Los Alamos National Laboratories (LANL). We write to submit a comment on the recently-published draft Sitewide Environmental Impact Study (SWEIS).

LANL plays a critical role in the Santa Fe economy; thousands of its employees live in Santa Fe county. However, LANL also has an outside role in Santa Feans' environment and health. The main way LANL's activities affect the County and its residents is its impact on drinking water quality; pollution from LANL activities enters the Rio Grande watershed, from which the County derives almost all of its drinking water. LANL's activities affect the environment in other ways, as well: a proposed power line across the Caja del Rio will negatively effect pristine wilderness that is critical to wildlife survival and the tourist economy. And the proposed construction of a hydroelectric power station and the other anticipated increased activity by LANL will disturb spotted owl habitat.

We do not support any expansion or surge production of plutonium pits. We do support continued clean up of the site, but no growth of the site or the mission. We see the need for modernizations and suggest that LANL modernize with regional safety, economic development and livability as their priorities.

We are writing to express these concerns and request that any final SWEIS take these concerns into account.

**I. Contaminants originating from Los Alamos and Pueblo Canyons and their tributaries and groundwater discharge to the Rio Grande upstream of the Buckman Direct Diversion intake.**

The Buckman Direct Diversion is a joint venture between Santa Fe County and the City of Santa Fe that draws and treat surface water from the Rio Grande to provide municipal water to Santa Fe

residents. Water is pumped (diverted) from the Rio Grande on the east river bank three miles below the Otowi Bridge, just East of White Rock. Sand is separated from the water and returned to the Rio Grande. Water is then pumped 11 miles and 1,100 vertical feet uphill to the Buckman Direct Diversion (BDD) Water Treatment Plant. Las Campanas receives untreated river water for irrigation. The BDD then makes bulk wholesale deliveries to the City and the County by pumping treated drinking water to their independent public water systems. In the coming years, the Pojoaque Basin Regional Water System will provide an additional source of Rio Grande water to Pueblos and other communities in Santa Fe County.

Pursuant to a Memorandum of Understanding (MOU), LANL samples stormwater discharges in the Los Alamos and Pueblo canyons. Under the MOU, LANL collects samples during stormwater events and provides this data to BDD, which BDD then compares with data at the BDD intake, as well as make informed decisions about whether to temporarily cease diversion activities during stormwater events.

Pollution from Los Alamos Canyon, Pueblo Canyon, and groundwater discharge directly affects this drinking water supply. As the SWEIS notes, Strontium-90 is present in Alluvial Well LAO-3a at concentrations above the EPA's maximum contaminant level. Strontium-90 is also found in several downgradient alluvial wells near the confluence of DP Canyon with Los Alamos Canyon.

## **II. Hexavalent chromium**

There is a hexavalent chromium plume in the regional aquifer. This is the only aquifer in the area capable of serving as a municipal water supply, and the aquifer interfaces with the Rio Grande. So accurate understanding of the plume's extent is critical to remediation. According to the draft SWEIS, two wells located along the northwestern upgradient portion of the hexavalent chromium plume, R-62 and R-43, showed a steady increase in the concentration of chromium in 2022. The draft SWEIS states that there are plans to install new monitoring wells in this area to further characterize the extent of chromium and perchlorate contamination and to evaluate whether mitigation actions are necessary.<sup>1</sup> This suggests that the full extent of the chromium plume is not yet known, and there may be areas of contamination that have not been fully characterized, potentially hindering the effectiveness of LANL's remediation strategy.

## **III. PFAS contamination**

The draft SWEIS notes that per- and polyfluoroalkyl substances (PFAS) has been detected in several alluvial and intermediate wells in Pueblo and Los Alamos Canyons in amounts exceed the New Mexico Environment Department's tap water screening levels. New Mexico law classifies these compounds as "toxic pollutants." *See* 20.6.2.7(T)(2)(s) NMAC.

Chapter 4 of the draft SWEIS states that LANL "sampled only for PFAS compounds at locations where two rounds of PFAS sampling were not completed or where a regulatory standard was exceeded." The draft SWEIS further states that "[g]iven the understanding that PFAS health effects are rapidly evolving in tandem with increasing regulatory attention to PFAS, the Laboratory will

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<sup>1</sup> Draft SWEIS, Vol. 2, at A-138.



continue to evaluate and consult with NMED on whether additional sampling for PFAS constituents is required.”

Respectfully, there is at this point little doubt that PFAS are substantial risks to human health.<sup>2</sup> LANL’s current posture towards testing, i.e., test only where PFAS has previously been discovered or where previous testing has not already taken place, creates a substantial risk that LANL will understate the prevalence of PFAS contamination in any final EIS. The County is also concerned that deferring any action on PFAS contamination pending further risk evaluation and consultation with regulators amounts to “kicking the can down the road” when the risks to both the environment and human health are clear enough today.

The County is also concerned that the Draft SWEIS fails to account for increased PFAS contamination under the Modernized Operations Alternative and the Expanded Operations Alternative. Both alternatives imply increased firefighting activities on the LANL site, whether from emergency preparedness activities or from actual fire suppression activities on an expanded site. The increased chances of increased PFAS contamination under either alternative need to be addressed with a testing regime that accounts for potential operations expansion. The EIS should also contemplate interventions to prevent distribution of PFAS through surface water runoff into the Rio Grande watershed.

#### **IV. Water rights for water used**

Under the Modernized Operations Alternative set out in the Draft SWEIS, LANL estimates that its demand for water will increase by 3.4% (in comparison to the No-Action Alternative). Under an Expanded Operations Alternative, water consumption is estimated to increase up to 70.7% annually (from 290 million gallons per year to 495 million gallons per year). Although the Draft SWEIS states that LANL’s domestic water system has “adequate capacity to meet future water demand,” it does not consider either Alternative’s effects on the rights of other water users.

The Modernized Operations Alternative and the Expanded Operations Alternative will affect other water users in two main respects. First, both alternatives will result in increased workforces on the LANL campus. These workers will need a place to live, and many LANL employees, because of a housing shortage in Los Alamos, choose to live in Española, Santa Fe, or unincorporated areas surrounding the facility. This will necessarily create new drinking water demand. Second, LANL and Los Alamos use water from the Pajarito Plateau aquifer. This aquifer interfaces with the Rio Grande and adjacent aquifers, including aquifers that Santa Fe County relies upon to meet its water needs. LANL’s final EIS needs to take adequate account of the increased water usage (both direct and indirect) under Modernized Operations and Expanded Operations Alternatives, and ensure that it has (or the utilities it purchases water from has) sufficient water rights to accommodate this increased usage.

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<sup>2</sup> See, e.g., Taibl et al., *Newborn metabolomic signatures of maternal per- and 1376 polyfluoroalkyl substance exposure and reduced length of gestation*, NAT COMMUN 14, 3120 (2023) <https://doi.org/10.1038/s41467-023-38710-3> (linking PFAS exposure to preterm birth); Blake et al., *Early life exposure to per- and polyfluoroalkyl 1043 substances (PFAS) and latent health outcomes: A review including the placenta as a target tissue and possible driver of peri- and postnatal effects*, TOXICOLOGY 443, 152565 (2021), <https://doi.org/10.1016/j.tox.2020.152565> (endocrine disruptions).



**V. The County questions the business case for the Caja del Rio power line component of the Electrical Power Capacity Upgrade Project**

The draft SWEIS describes potential environmental impacts of the planned Electrical Power Capacity Upgrade Project (EPCU) under the “no-action” alternative, and notes community opposition to the construction of a 12.5-mile-long, 115-kilovolt power line through the Caja del Rio as part of the proposed “no-action” alternative for LANL’s continued operation.

The Caja del Rio contains numerous areas of great cultural, historical, archeological, and ecological importance. It is a wonderful expression of geology from the Rio Grande Rift, stretching from the Northwestern corner of Santa Fe County to the southern and western boundaries of the La Bajada Escarpment, Santa Fe River, and Cañada Ancha. It connects surrounding mountain ranges and wildlife habitats, allowing wildlife to move throughout the Upper Rio Grande ecosystem. The County has repeatedly expressed its concerns about LANL and federal government stewardship of the Caja del Rio, and has called for a Presidential designation of the area as a national monument.<sup>3</sup>

LANL’s business case for the power line is to “provide DOE/NNSA with a reliable and redundant electrical power supply to meet existing mission requirements.”<sup>4</sup> The County understands that the EPCU is subject to a separate Environmental Assessment.<sup>5</sup> Nonetheless, the County asks LANL to consider alternative approaches to satisfying its power needs that have a lesser impact on the Caja del Rio. For example, LANL is in the process of constructing an on-site 10-megawatt ground-mounted solar photovoltaic system. The County strongly encourages LANL to consider whether this and similar power generators can be used to satisfy the lab’s needs under a “no-action” alternative, thereby obviating the need for costly and harmful changes to the Caja del Rio.

**VI. Hydro power**

The draft SWEIS considers briefly the impacts of a hydropower demonstration facility planned for construction in a mostly undeveloped area in Technical Areas (TAs) 39 and 49, along NM-4. The proposed facility would be a closed-loop system with four reservoirs, two upper and two lower, connected by three 12-inch diameter water conveyance pipelines. The reservoirs would hold approximately 80 acre-feet of water and would be lined and covered to control seepage and evaporation. The facility would use pump-as-turbine units, allowing water to be pumped uphill to store energy and generate electricity when released. The initial design would support a minimum of 500 kW hydropower generation with a minimum release duration of 24 hours. The overall footprint would be approximately 20 acres. The initial fill of the reservoirs would take about two years, using water from a fire suppression line, and the facility would not be an annual consumer of potable water. The facility would illustrate the ability to use multiple sources of water, reduce or eliminate refilling of the reservoirs, and allow for multiple uses of the water beyond energy storage, such as for wildland fire fighting and material science experiments.

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<sup>3</sup> See Ex. A, Letter from H. Hughes, A. Hansen, and C. Bustamante to Joe Biden (Dec. 9, 2024); *see also* Santa Fe County Resolution No. 2022-030 (May 11, 2022).

<sup>4</sup> Draft SWEIS, Vol. 1, at 3-9 (table).

<sup>5</sup> Draft Environmental Assessment for the Los Alamos National Laboratory Electrical Power Capacity Upgrade Project (DOE/EA-2199).

## **VII. Decrease in spotted owl habitat**

Under the Modernized Operations Alternative, fifteen projects could potentially occur in undeveloped habitat for the Mexican spotted owl, requiring review under the LANL HMP and individual Section 7 consultation with the USFWS. The projects proposed under the Modernized Operations Alternative would potentially have the largest impact on ecological resources with the possible disturbance of 731 acres of previously undisturbed vegetation and wildlife habitat. Most of this land disturbance (641 acres) would occur if a solar PV array system was fully built on the nine proposed sites.

Under the Expanded Operations Alternative, eight projects, in addition to those under the Modernized Operations Alternative, could potentially occur in undeveloped habitat for the Mexican spotted owl. The projects proposed under the Expanded Operations Alternative would potentially disturb an additional 75 acres of previously undisturbed vegetation and wildlife habitat. The implementation of the Expanded Operations Alternative would disturb up to 806 acres of previously undisturbed vegetation and wildlife habitat (62 acres under the No-Action, 731 acres under the Modernized Operations, and an additional 75.2 acres under the Expanded Operations alternatives).

If the expansion is proposed, efforts should be taken to protect spotted owl habitat in other areas, such as leaving dead trees for nesting. Ideally with the no action alternative there is no need for the PV array system or the power line across the Caja del Rio.

## **VIII. LANL should abandon expanded or “surge” plutonium pit production.**

Notwithstanding the goals set by the 2022 Nuclear Posture Review, the United States remains committed to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). Article VI of the NPT includes pursuing negotiations towards nuclear disarmament. Continuing operations at LANL are intended to maintain the safety and reliability of the U.S. nuclear stockpile in a manner consistent with the NPT until nuclear disarmament is achieved. There is simply no need for LANL to pursue expansion of its pit production capacity, even if for purposes of a temporary “surge” in production. President Trump has put the issue best: “There’s no reason for us to be building brand new nuclear weapons, we already have so many. . . [y]ou could destroy the world 50 times over, 100 times over.”<sup>6</sup> Given LANL’s obligation under NEPA to consider alternative ways to meet its operational goals, framing the issue as a binary choice between shutting the lab down outright or expanding pit production is unserious.

## **IX. Socio-Economic Impacts**

**Housing:** Los Alamos has had a housing problem since the Lab was built. A company town model was the first solution. Over time, with increased transportation options and openness of the operations occurring on the hill, the workforce of the lab has dispersed from the hill down to areas beyond. A significant portion of the LANL workforce lives in areas beyond the Los Alamos County

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<sup>6</sup> Associated Press, Trump wants denuclearization talks with Russia and China, hopes for defense spending cuts (Feb. 14, 2025), <https://apnews.com/article/trump-china-russia-nuclear-bbc1c75920297f1e5ba5556d084da4de> (last accessed February 19, 2025).



'hill', in Santa Fe and Rio Arriba Counties. More recently, workforce has begun to commute through Santa Fe County from Sandoval (Rio Rancho) and Bernalillo Counties (Albuquerque). This trend is continuing with the recent expansion of the workforce at LANL and is putting pressure on the housing stock in the area. A recent quote from a senior LANL official in response to the housing pressures felt in neighboring communities was "we pay enough for our workforce to find housing where they want". This is simply not true and the effect is a displacement of community members that see rapidly rising rents and property prices. LANL/NNSA should support a DOD style regional housing program that helps local communities plan and develop livable communities for residents of all incomes.

**Transportation:** As mentioned above, each day, thousands of workers drive to their workplaces inside the lab from communities as far as 90 miles away. This increased traffic is putting a toll on the regional roads and infrastructure. Continued work at LANL should support the maintenance and new infrastructure needs of the region in proportion to their economic impact due to the commuting needs of their workforce. Additionally, further investment in cleaner and more efficient solutions should be made such as bussing and carpooling.

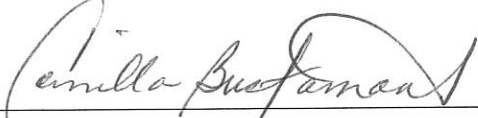
**X. Conclusion**

The federal Bayh-Dole Act directs our national laboratories to support the commercialization of the intellectual property (IP) that the national lab system creates. We encourage LANL to provide increasing support for this with additional funding and resources for these collaborative projects to be located in the Santa Fe Country/Los Alamos area.

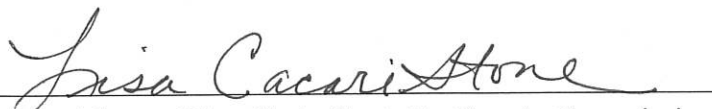
While we appreciate the economic growth and scientific advancements produced by Los Alamos National Laboratory, we must also recognize the environmental harms and negative effects on intergenerational health and human suffering in New Mexico, historically and into the future. We firmly oppose any expansion of Los Alamos National Laboratory that continues to produce plutonium pits.

We appreciate the opportunity to comment on the draft SWEIS.

Very truly yours,



Camilla Bustamante, Chair, Santa Fe County Commissioner, District 3



Lisa Cacari Stone, Vice Chair, Santa Fe County Commissioner, District 2



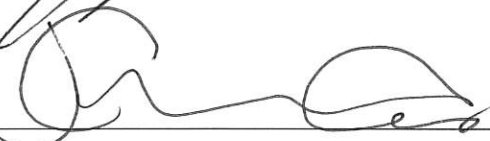
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Hank Hughes, Santa Fe County Commissioner, District 5



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Adam F. Johnson, Santa Fe County Commissioner, District 4



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Justin S. Greene, Santa Fe County Commissioner, District 1

