

# Protecting the Española Basin Sole Source Aquifer

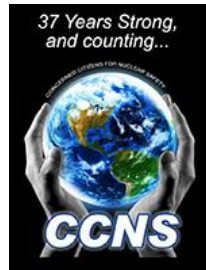
Hexavalent Chromium [Cr (VI)] Plume Contamination, Drinking-water Security,  
and a State–Federal Action Plan

## Radioactive & Hazardous Materials Legislative Interim Committee

Communities for Clean Water • Common Ground Rising • Concerned Citizens for Nuclear Safety • Espanola  
Basin Sole Source Aquifer designation continuing support

8-minute briefing

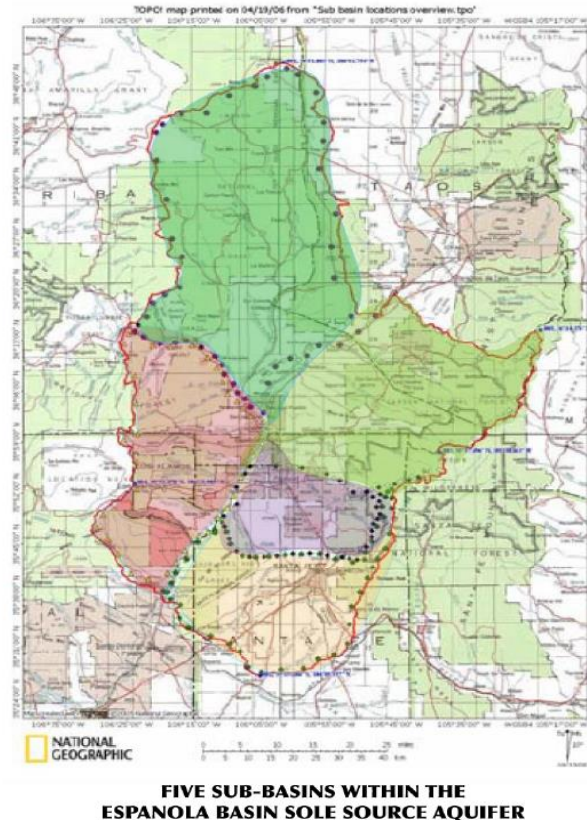
Talavi Cook  
CCW Member  
UNM-LA  
8/13/2026



# One Aquifer. An Entire Region Depends on It.

## MAPPING

- THERE ARE 5 SUB BASINS WITHIN THE DESIGNATION
- COVERS OVER 3,000 SQUARE MILES OF NORTHERN NEW MEXICO
- Espanola Basin System Sole Source Aquifer System (EBSSA)
  1. Lower Santa Fe River basin, in **Orange**
  2. Canada Ancha/Rio Pojoaque sub-basin in **Violet**
  3. Picuris /Mountains /Truchas Range sub-basin **Light Green**
  4. Pajarito Plateau sub-basin in **RED**
  5. Lower Rio Chama and NE tributary valleys/Abiquiu Dam to Rio Grande in **Green**



- Federally designated under Safe Drinking Water Act §1424(e) in 2008
- More than 3,000 square miles and five interconnected sub-basins
- Pueblos, Española, rural mutual domestics, northern Santa Fe County and portions of Los Alamos County rely on the basin
- Designation reflects the absence of a reasonably available alternative drinking-water source

# What Sole Source Aquifer Designation Means — and Does Not Mean

## IT DOES

- Recognize the aquifer as a critical drinking-water source
- Require EPA review of qualifying federally financially assisted projects that may contaminate the aquifer
- Allow protective conditions or mitigation in that federal-assistance review

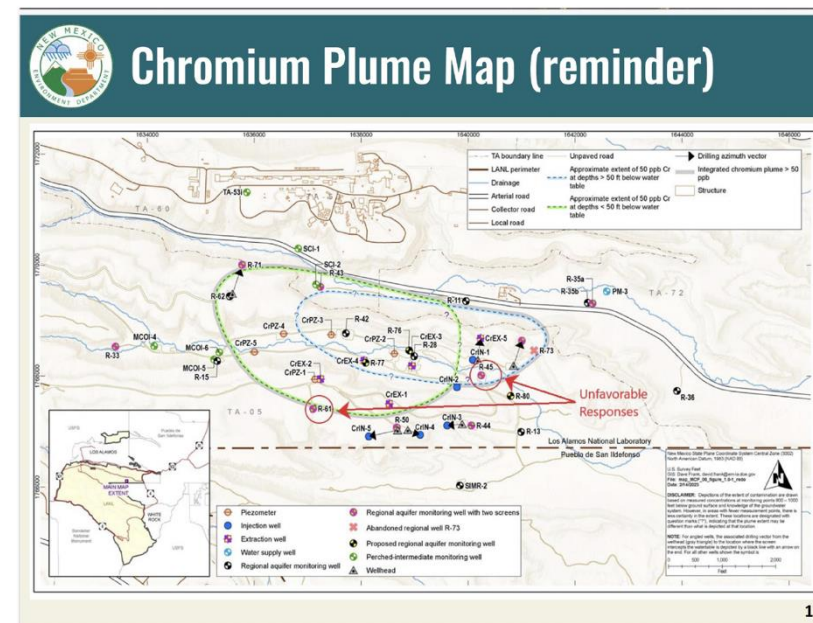
## IT DOES NOT

- Create an automatic cleanup fund
- Replace DOE responsibility for LANL cleanup
- Automatically finance Pueblo or municipal drinking-water infrastructure

# The Hexavalent Chromium Plume Has Reached the Regional Aquifer

November 2025: the problem moved from remediation failure to regional drinking-water protection

- NMED reported hexavalent chromium in the regional aquifer beneath Pueblo de San Ildefonso
- NMED ordered injection operations under Discharge Permit No. DP-1835 stopped
- The existing remedy and plume behavior require renewed scrutiny, independent monitoring, and transparent modeling
- The plume remains an unresolved groundwater threat



18

## MONITORING EXISTS — BUT PROTECTION GAPS REMAIN

### DOE/N3B Already Monitors LANL Contamination

DOE/N3B operates an extensive monitoring program associated with LANL legacy-waste cleanup, including groundwater, surface water and stormwater monitoring.

The program monitors contaminants including:

**Hexavalent Chromium • RDX/High Explosives • PFAS • Radionuclides • Metals**

### The Gap Is Regional Drinking-Water Protection

We are not asking legislators to pay for monitoring DOE is already doing.

**We are asking for support to identify and fund the protection gaps between DOE's cleanup network and the drinking-water systems of the broader federal designation Española Basin Sole Source Aquifer.**

#### What Is Needed

##### Independent Early Warning

- Identify gaps in the existing monitoring network
- Sentinel monitoring between contamination and drinking-water supplies
- Independent and Pueblo-controlled monitoring

##### Regional Drinking-Water Protection

- Integrate Pueblo, municipal and mutual-domestic systems
- Updated regional groundwater and plume modeling
- Drinking-water infrastructure and emergency resilience
- Transparent, publicly accessible data

#### BOTTOM LINE

- **DOE monitoring is designed primarily around LANL cleanup. Our task is to build on that work and ensure that the entire federally designated Sole Source Aquifer has the independent early-warning monitoring and drinking-water infrastructure necessary to protect the communities that depend upon it.**
- **Source:** DOE/N3B LANL Legacy Waste Cleanup groundwater-monitoring program; EBSSA congressional and community briefing materials.



# Three Funding Rails — Three Different Jobs

## 1 CLEANUP

**DOE Environmental Management**

Contain and remediate the  
LANL hexavalent chromium  
plume

## 2 DRINKING WATER

**Drinking Water State Revolving  
Fund • Tribal programs •  
State/federal infrastructure**

Monitoring, treatment,  
redundancy, backup supply

## 3 SSA CAPACITY

**EPA • Congressional  
appropriations**

Restore protection and  
mitigation capacity for  
designated aquifers

**“Cleanup, drinking-water infrastructure, and Sole Source Aquifer protection are three different jobs.”**

# What Infrastructure Is Needed Now?

## REGIONAL EARLY-WARNING NETWORK

- Sentinel monitoring wells
- Pueblo-controlled monitoring capability
- Independent groundwater sampling
- Updated hydrogeologic and plume modeling
- Publicly accessible monitoring data

## DRINKING-WATER RESILIENCE

- Redundant production wells
- Treatment capability where needed
- Emergency / backup water supply
- Regional interconnections where feasible
- Protection of recharge areas

# FY2027 Federal Appropriations Request — Submitted March 9, 2026

**\$25 MILLION**

National Sole Source  
Aquifer protection /  
mitigation request

Interior, Environment, and Related  
Agencies

- Direct funding language: \$25M for SSA mitigation/protective measures under SDWA §1424(e)
- Proposed tribal set-aside: not less than \$5M
- Proposed EBSSA-focused allocation for monitoring, infrastructure resilience, and remediation oversight
- Committee report language directing EPA to assess EBSSA resource needs
- Separate DOE language seeks full corrective-action funding for hexavalent chromium containment

# What We Are Asking of the New Mexico Legislature

- Support the FY27 federal Sole Source Aquifer appropriations request
- Request full DOE funding for containment and cleanup of the LANL hexavalent chromium plume
- Support a regional EBSSA monitoring and drinking-water infrastructure assessment
- Support Pueblo, municipal, and mutual-domestic participation in designing the monitoring network
- Request regular public reporting from DOE, NMED, and EPA on plume migration, monitoring, and cleanup performance
- Develop a state funding strategy that can leverage federal drinking-water and infrastructure dollars

**The designation cannot become merely a line on a map. We need monitoring before contamination reaches drinking-water wells.**

# Resources

EBSSA Resolution

[https://drive.google.com/file/d/1XhJmvUOi3xbAt0hzvj-pphkINslYo8sL/view?usp=drive\\_link](https://drive.google.com/file/d/1XhJmvUOi3xbAt0hzvj-pphkINslYo8sL/view?usp=drive_link)



1-page briefing

[https://drive.google.com/file/d/1XhJmvUOi3xbAt0hzvj-pphkINslYo8sL/view?usp=drive\\_link](https://drive.google.com/file/d/1XhJmvUOi3xbAt0hzvj-pphkINslYo8sL/view?usp=drive_link)

