



# New Mexico Environment Department

San Juan Generating Station  
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Ground Water Quality Bureau (GWQB)  
February 12, 2025



# San Juan Generating Station (SJGS)

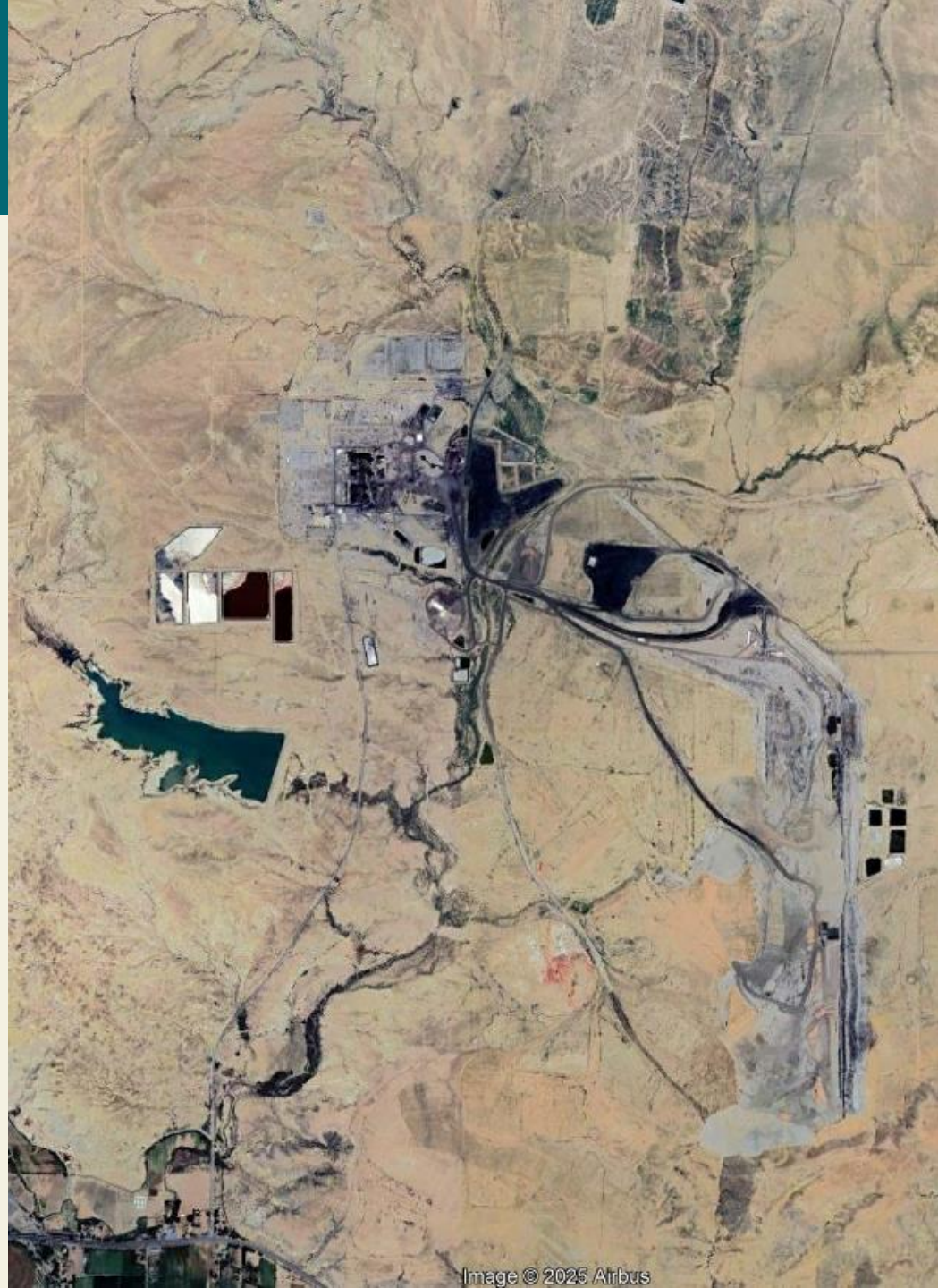
- The SJGS has a decades-long history of industrial activity.
- Groundwater contamination can affect drinking water, ecosystems, and public health.
- We are taking steps to monitor, assess, and clean up any contamination.





# HB142

- Requires remediation (abatement) plans for SJGS and San Juan Mine contamination.
- Prevents cleanup delays with stronger oversight and enforcement.





# HB142

- New Mexico Environment Department (NMED): Regulates water quality and pollution cleanup from the SJGS.
- Energy, Minerals & Natural Resources Department (EMNRD): Oversees San Juan Mine operations and land reclamation.





# GWQB Regulatory Framework

The New Mexico Water Quality Act (WQA), §§ 74-6-1 through 17 NMSA 1978, was created for the protection of surface and ground water quality, resulting in:

- Creation of a Water Quality Control Commission (WQCC)
- Adoption of the WQCC Regulations (20.6.2 NMAC) in 1977
- Establishment of Ground Water and Surface Water Standards



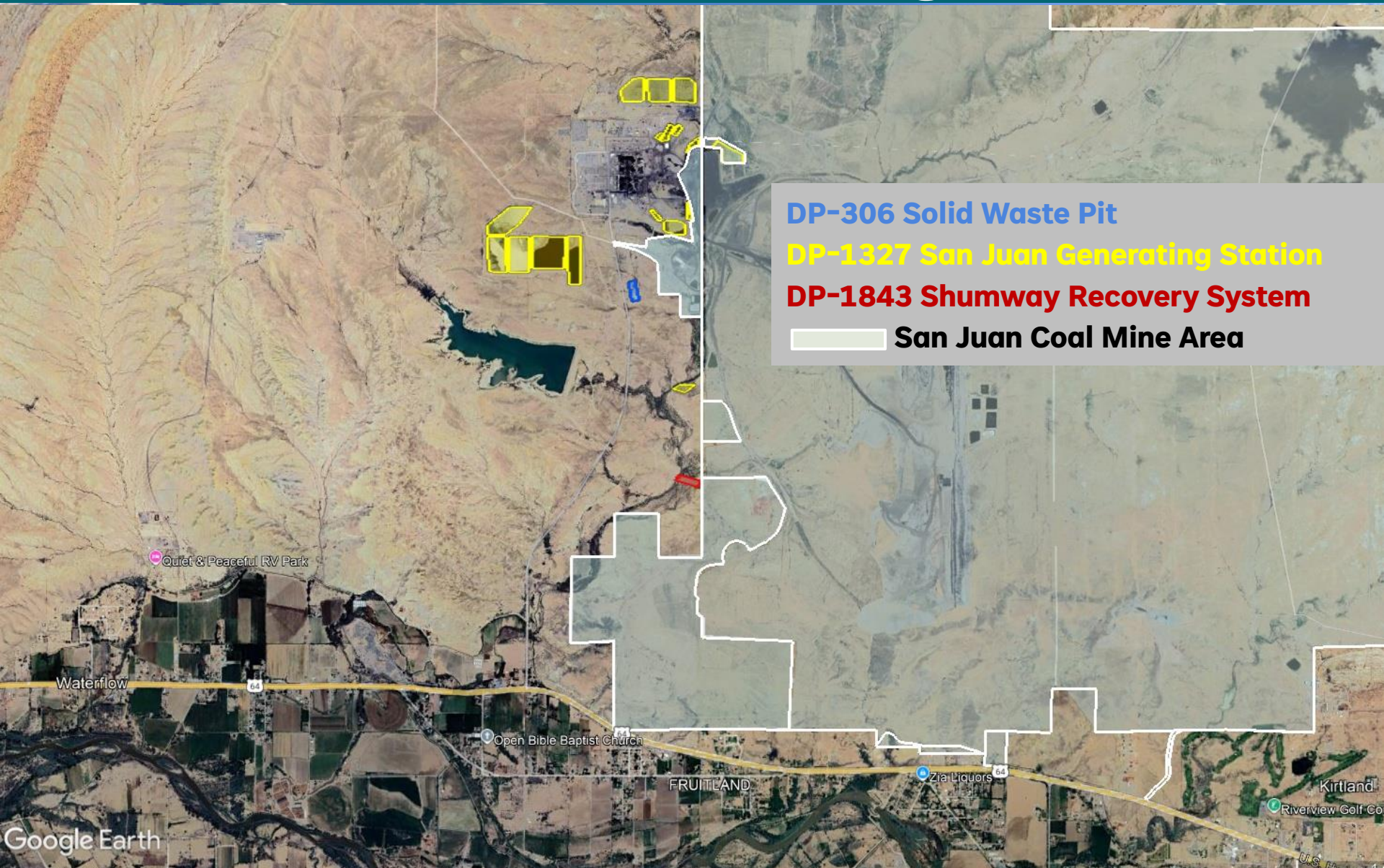
# GWQB Regulatory Authority

The WQCC Regulations provide for the protection of New Mexico's groundwater (10,000 mg/L TDS or less), and has authority to:

- Require Discharge Permits (DP) for discharges which may impact groundwater quality.
- Ensure compliance with WQCC Regulations and DPs.
- Require abatement plans in the event of groundwater contamination.



# GWQB Oversight at San Juan Generating Station



- DP-306 Solid Waste Pit
- DP-1327 San Juan Generating Station
- DP-1843 Shumway Recovery System
- San Juan Coal Mine Area



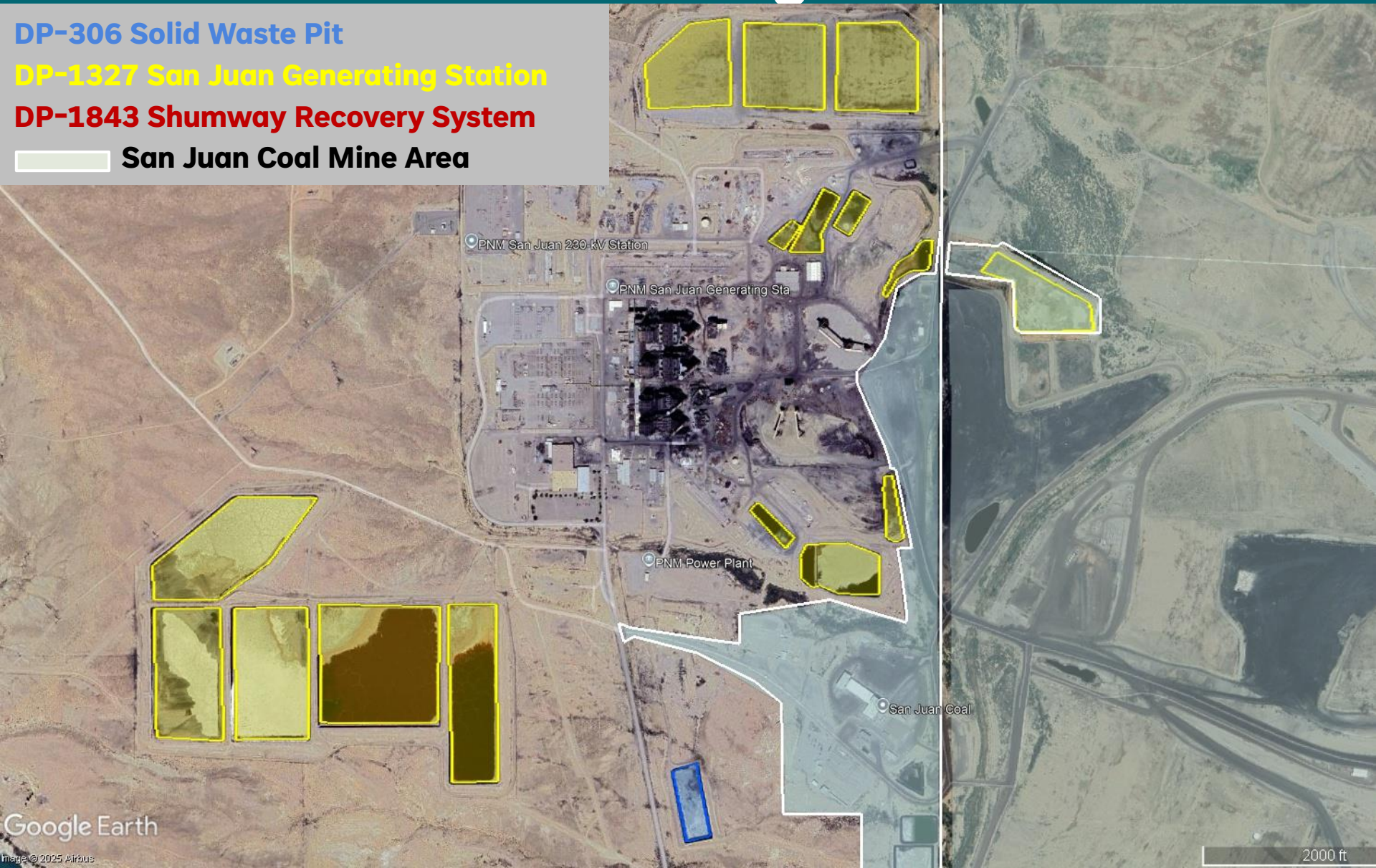
# GWQB Discharge Permits at San Juan Generating Station

**DP-306 Solid Waste Pit**

**DP-1327 San Juan Generating Station**

**DP-1843 Shumway Recovery System**

 **San Juan Coal Mine Area**





# DP-306: SJGS Solid Waste Disposal Pit

- ❑ Issued April 14, 2021; application for 2026 renewal received December 12, 2024.
- ❑ Activities authorized under DP-306 are limited to plant generated residual solid wastes placed in synthetically lined Solid Waste Disposal Pit.
- ❑ NMED approved Closure Plan on October 13, 2019 (20.6.2.3103 NMAC).
- ❑ NMED approved Financial Assurance for closure and post-closure care on May 11, 2020. (20.6.2.3107 NMAC)

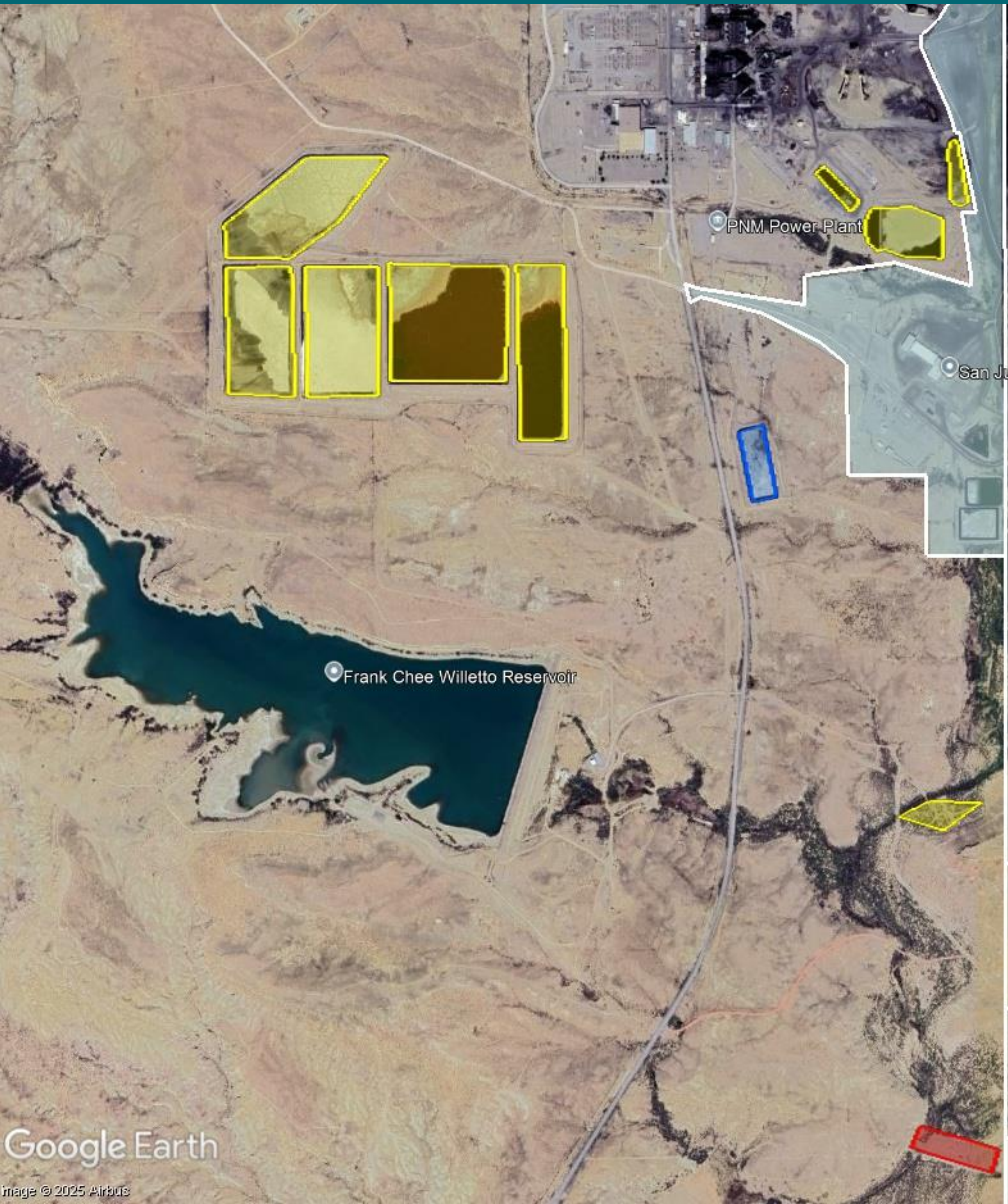


# DP-1327: San Juan Generating Station

- Issued April 14, 2021
- Activities authorized under DP-1327 are limited to discharges of wastewater, process water, storm water, and recovery trench water to ponds and basins.
- NMED approved Closure Plan on October 13, 2019.
- NMED approved Financial Assurance for closure and post-closure care on May 11, 2020.



# GWQB Discharge Permits at San Juan Generating Station

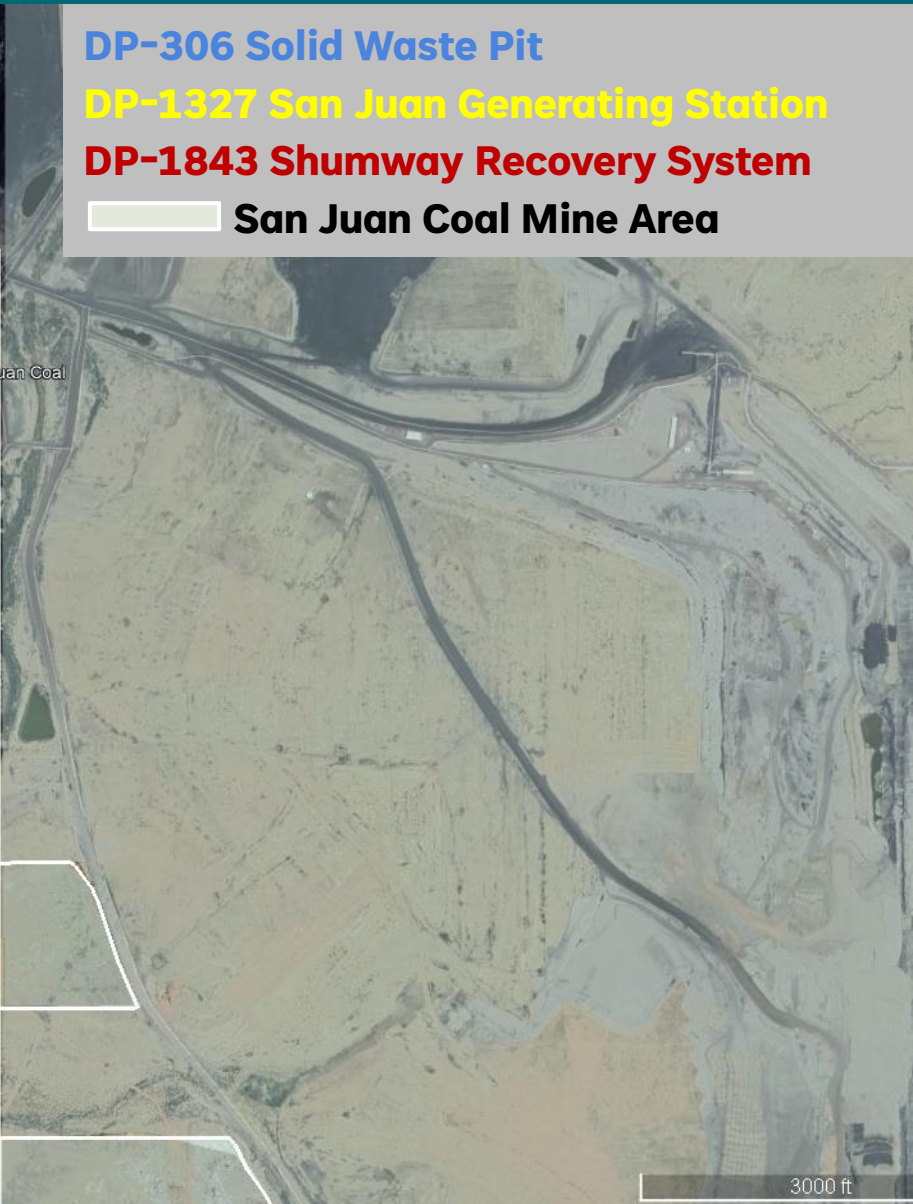


**DP-306 Solid Waste Pit**

**DP-1327 San Juan Generating Station**

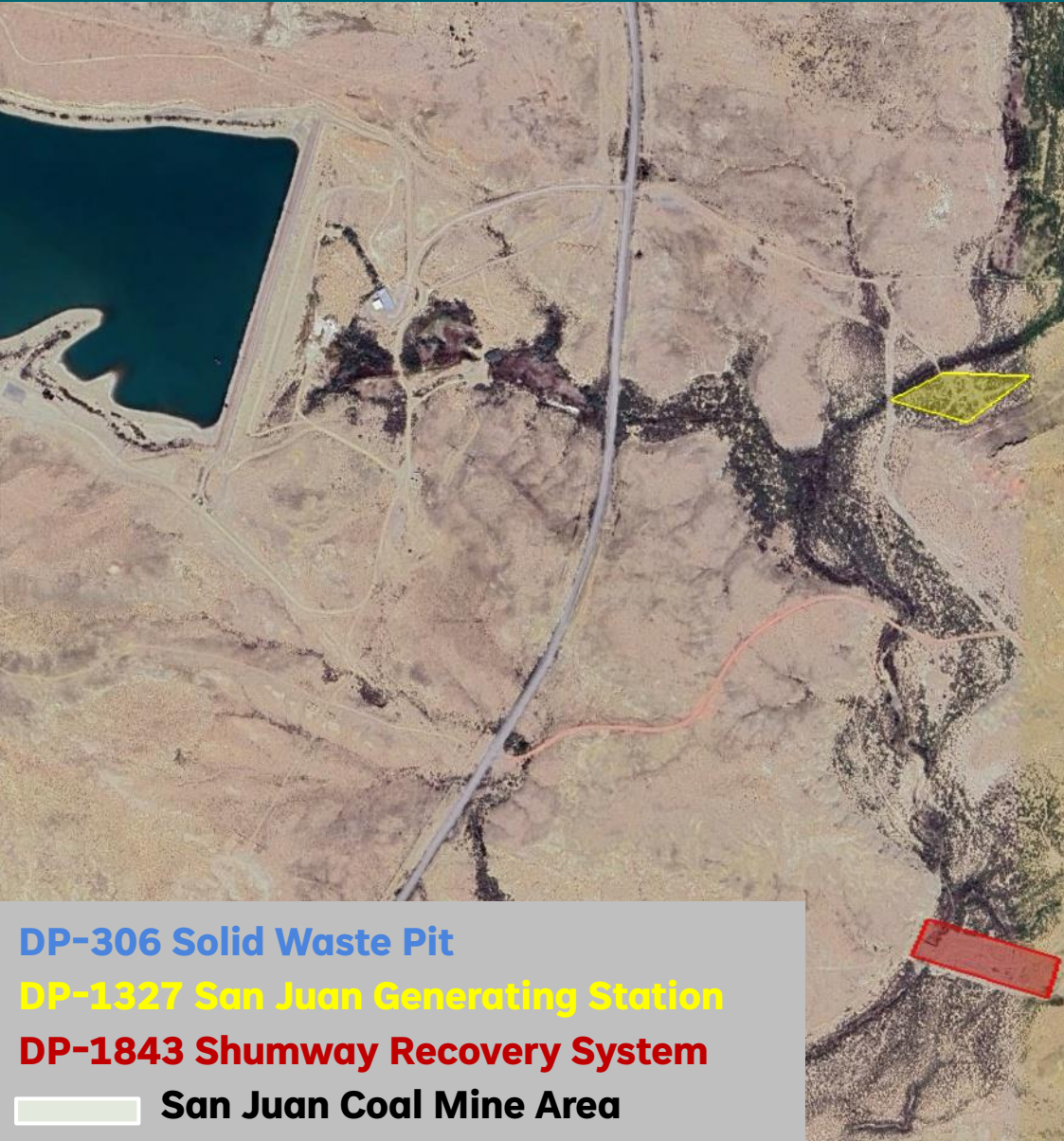
**DP-1843 Shumway Recovery System**

**San Juan Coal Mine Area**





# GWQB Discharge Permits at San Juan Generating Station



- DP-306 Solid Waste Pit**
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2000 ft



# DP-1843: Shumway Arroyo Groundwater Recovery Trench

- Application for renewal received
- Activities authorized under DP-1843 are limited to the discharge of groundwater from the Shumway Arroyo Groundwater Recovery System to Process Pond 2 synthetically-lined evaporation pond (DP-1327).
- Closure Plan and financial assurance will be required in upcoming Discharge Permit Renewal.



# Looking Ahead to Remediation

- NMED's GWQB monitors and cleans up groundwater pollution.
- HB 142 (2023) ensures industrial impacts at SJGS are addressed.

*Our goal is to identify contamination, track its movement, and take action to keep groundwater safe.*



# SJGS Site Assessment and Remediation Project Overview

Assess Site Conditions

- Review past groundwater data to identify gaps.
- Inspect the site for potential contamination sources.

Install Monitoring Wells

Evaluate Clean-up

Long-Term Protection



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- Implement clean-up strategy and prevent spread.



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Approximate SJGS Boundary

What was groundwater quality before SJGS?

What contaminants are of concern?

How has historical contamination been addressed?



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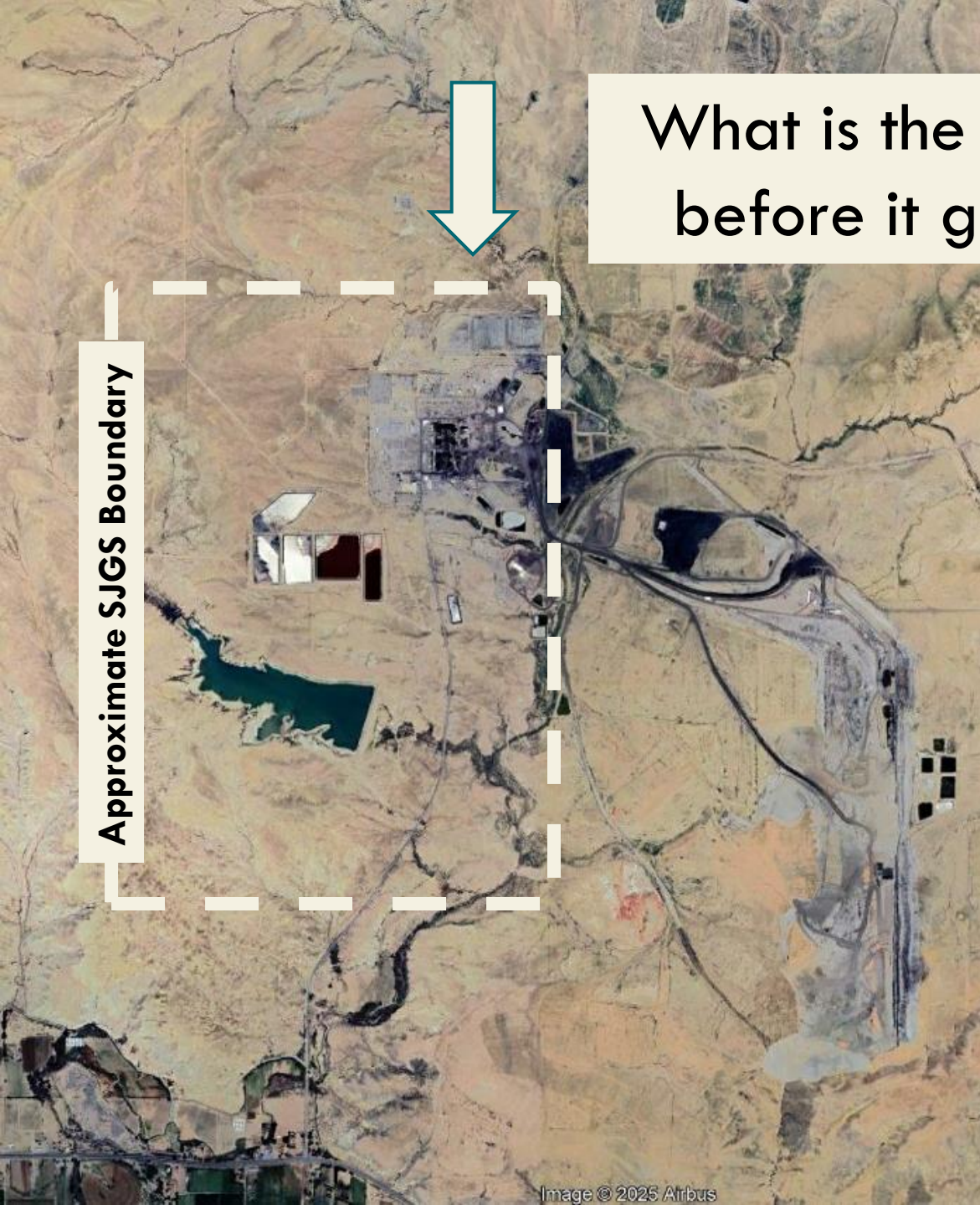
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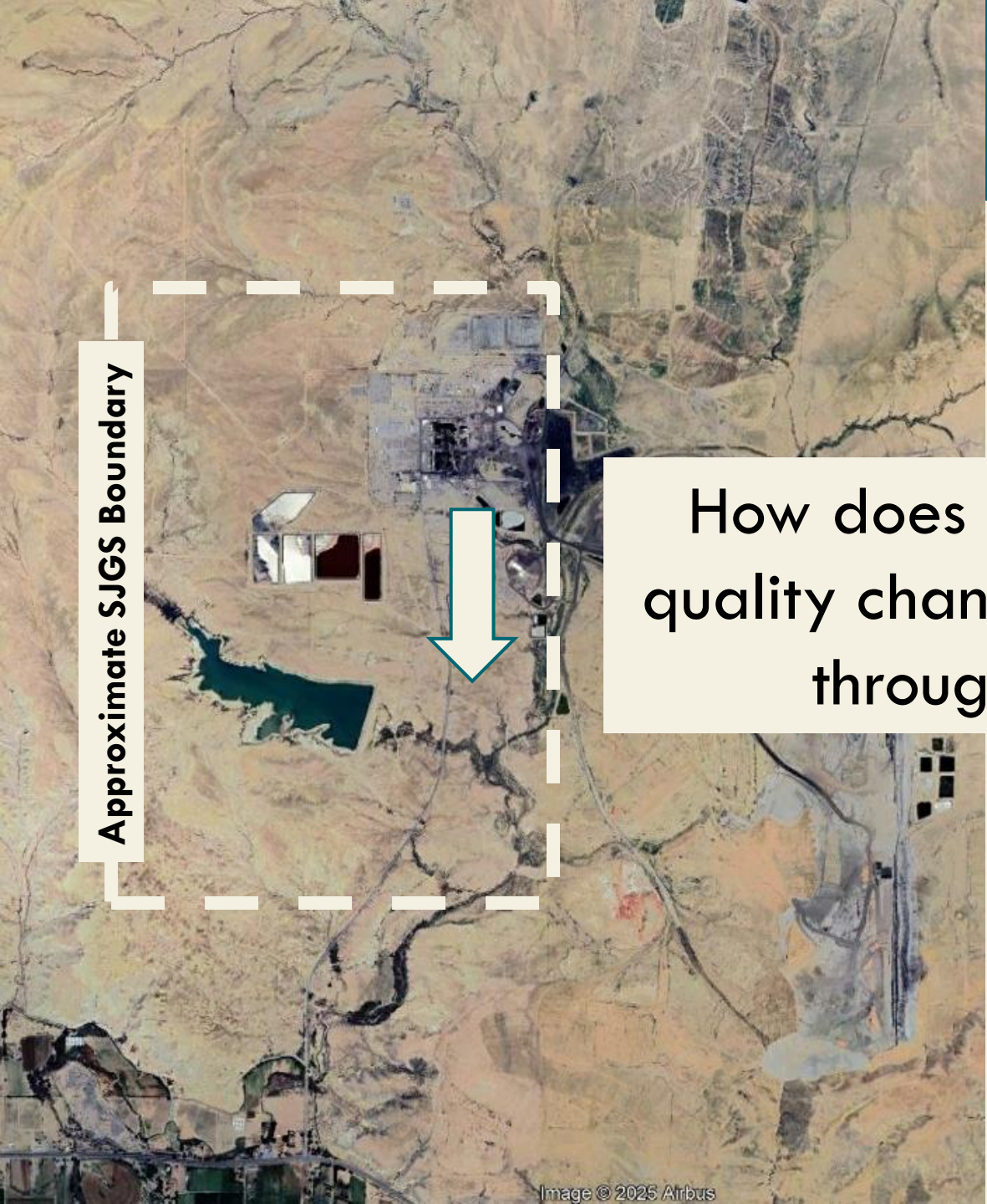
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What is the water quality before it gets to SJGS?

Approximate SJGS Boundary



A satellite image of a desert landscape. A dashed white box outlines a rectangular area in the center-left. Inside this box, there is a reservoir with dark blue water. To the right of the reservoir, there is a cluster of buildings and some infrastructure. A large white arrow with a blue outline points downwards from the top of the dashed box towards the buildings. The surrounding terrain is arid and brownish-yellow, with some sparse vegetation and winding roads or paths.

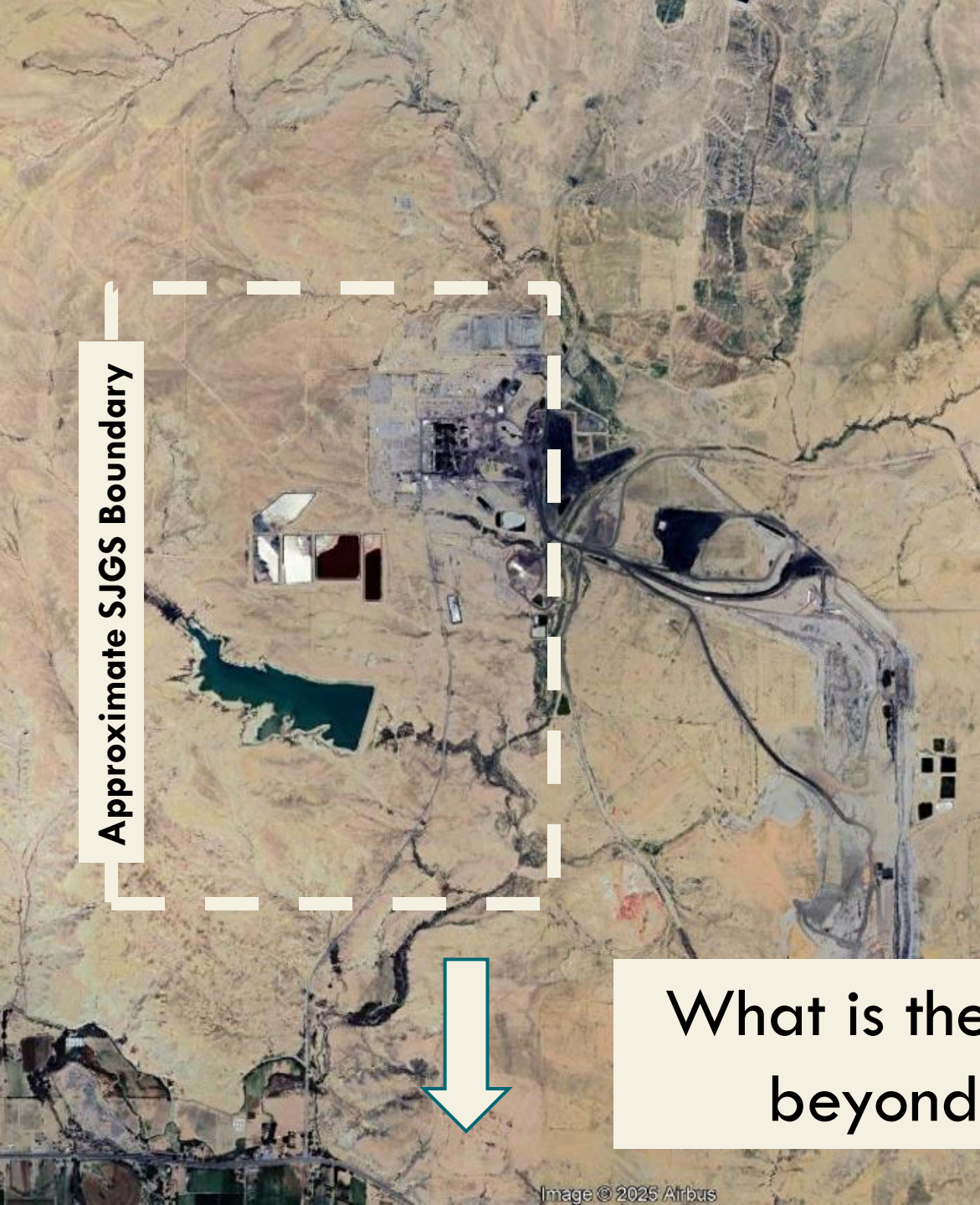
Approximate SJGS Boundary

How does groundwater quality change as it moves through SJGS?



Approximate SJGS Boundary

What is impacting groundwater?  
How?

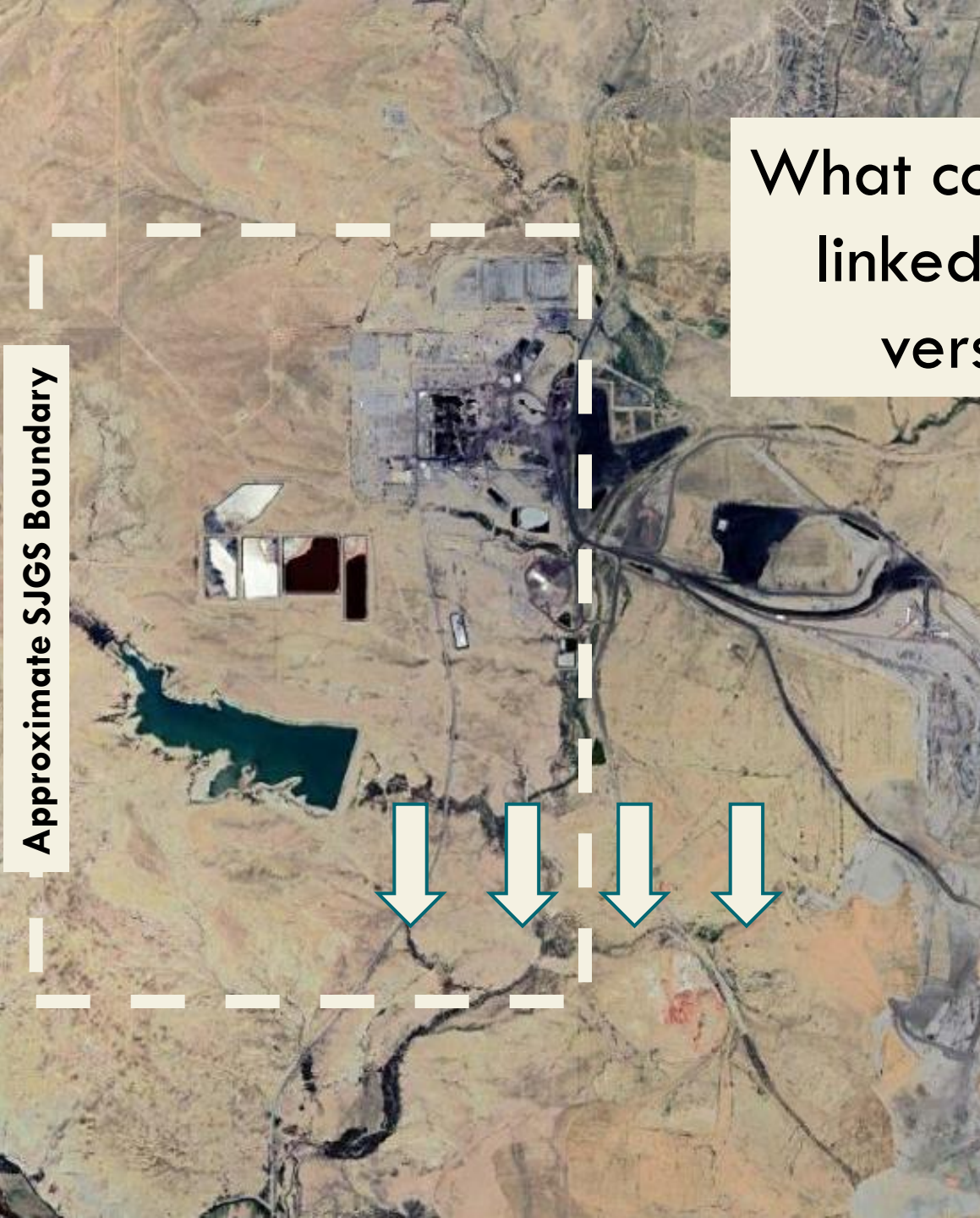


Approximate SJGS Boundary

What is the water quality beyond the SJGS?

What contamination is linked to the mine versus SJGS?

Approximate SJGS Boundary





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# Questions?

- GWQB Sites of Interest website will house Presentation(s)

- ▣ Summary and Fact Sheets
- ▣ FAQ and Q&A

<https://www.env.nm.gov/gwqb/gwqb-sites-of-interest/>

- Comment and Question Period open until February 28, 2025

- ▣ <https://bit.ly/SJGSFeb12>

