



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**



2023 Overview of the Individual Permit for Storm Water at Los Alamos National Laboratory

Karly Rodriguez
Program Manager for Stormwater and IP
February 28, 2024



ENVIRONMENTAL MANAGEMENT
SAFETY ♦ PERFORMANCE ♦ CLEANUP ♦ CLOSURE





- What is a Storm Water Permit?
- Objectives of Permit
- Implementation of new Permit
- Work Performed in 2023
 - Inspections
 - Control Installation
 - Samples Collected
- Annual Updates to the SIP
- Plans for 2024





What is a Storm Water Permit?



- Storm water permits authorize permittees to discharge storm water from specific activities or facilities
- Part of the National Pollutant Discharge Elimination System (NPDES), the permitting program to protect and improve water quality
- NPDES is part of the Federal Clean Water Act administered by the U.S. Environmental Protection Agency (EPA)
- Individual storm water permit is a type of NPDES permit
- Permit need is determined by EPA and requirements are specific to a particular facility or activity
- Individual storm water permits are issued by EPA for a maximum of 5 years





Storm Water Monitoring Objectives

- Minimize pollutants of concern (POCs) in storm water runoff from sites potentially contaminated by historical activities at Los Alamos National Laboratory (LANL).
- Reducing pollutants in storm water means reducing or eliminating them with storm water control measures, such as earthen berms or rock check dams that detain the sediment to which contaminants typically bind.
- Installation of storm water control measures must be followed by comparison of storm water runoff sample results to screening levels, which assesses the effectiveness of the control measure and helps improve water quality.

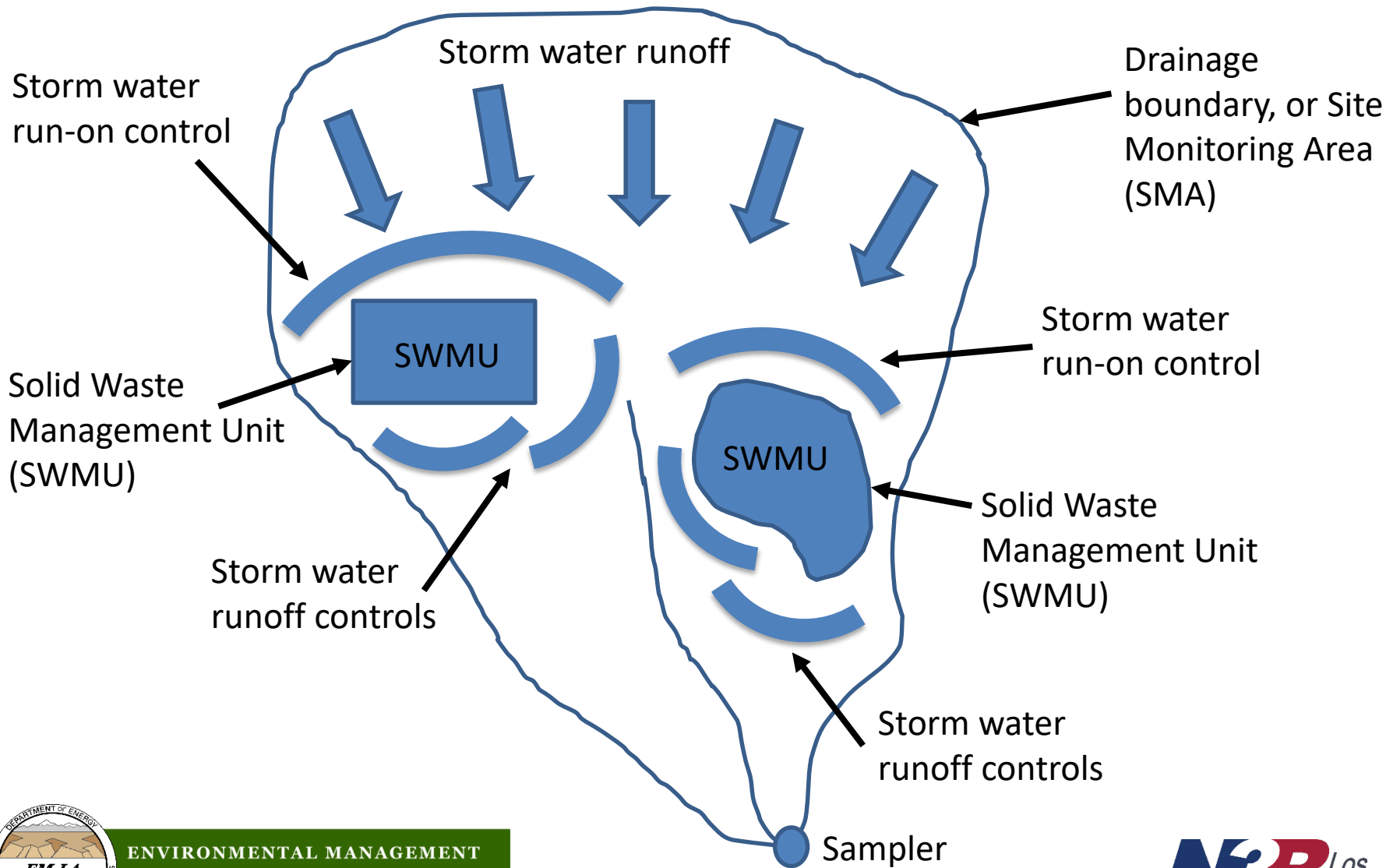


Installation of storm water controls at P-SMA-2.2



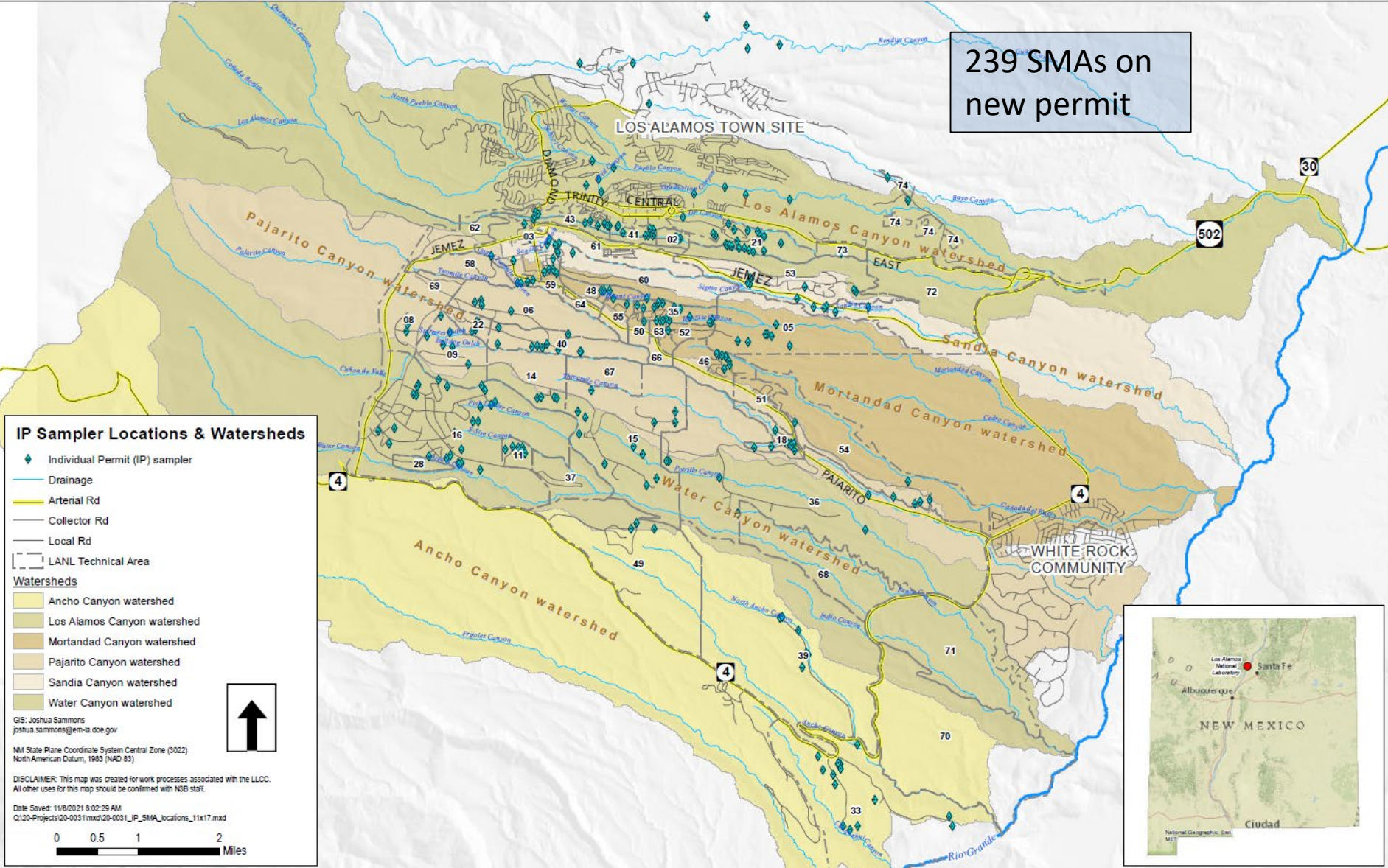


How Do We Monitor Storm Water Runoff?





239 SMAs on new permit



IP Sampler Locations & Watersheds

- Individual Permit (IP) sampler
- Drainage
- Arterial Rd
- Collector Rd
- Local Rd
- LANL Technical Area

Watersheds

- Ancho Canyon watershed
- Los Alamos Canyon watershed
- Mortandad Canyon watershed
- Pajarito Canyon watershed
- Sandia Canyon watershed
- Water Canyon watershed

GIS: Joshua Sammons
joshua.sammons@em-la.doe.gov

NM State Plane Coordinate System Central Zone (3022)
North American Datum, 1983 (NAD 83)

DISCLAIMER: This map was created for work processes associated with the LLCC.
All other uses for this map should be confirmed with NSE staff.

Date Saved: 11/8/2021 8:02:29 AM
Q:\20-Projects\20-0031\mxd\20-0031_IP_SMA_locations_11x17.mxd

0 0.5 1 2 Miles





- NMED Review and Public Comment Period completed January 30, 2023
- Initial SIP was implemented on May 1, 2023 Comments were received from EPA on May 2, 2023
- Response to EPA's comments were submitted on June 22, 2023
- EPA Approved the Initial SIP and issued a Minor Permit Modification on July 5, 2023





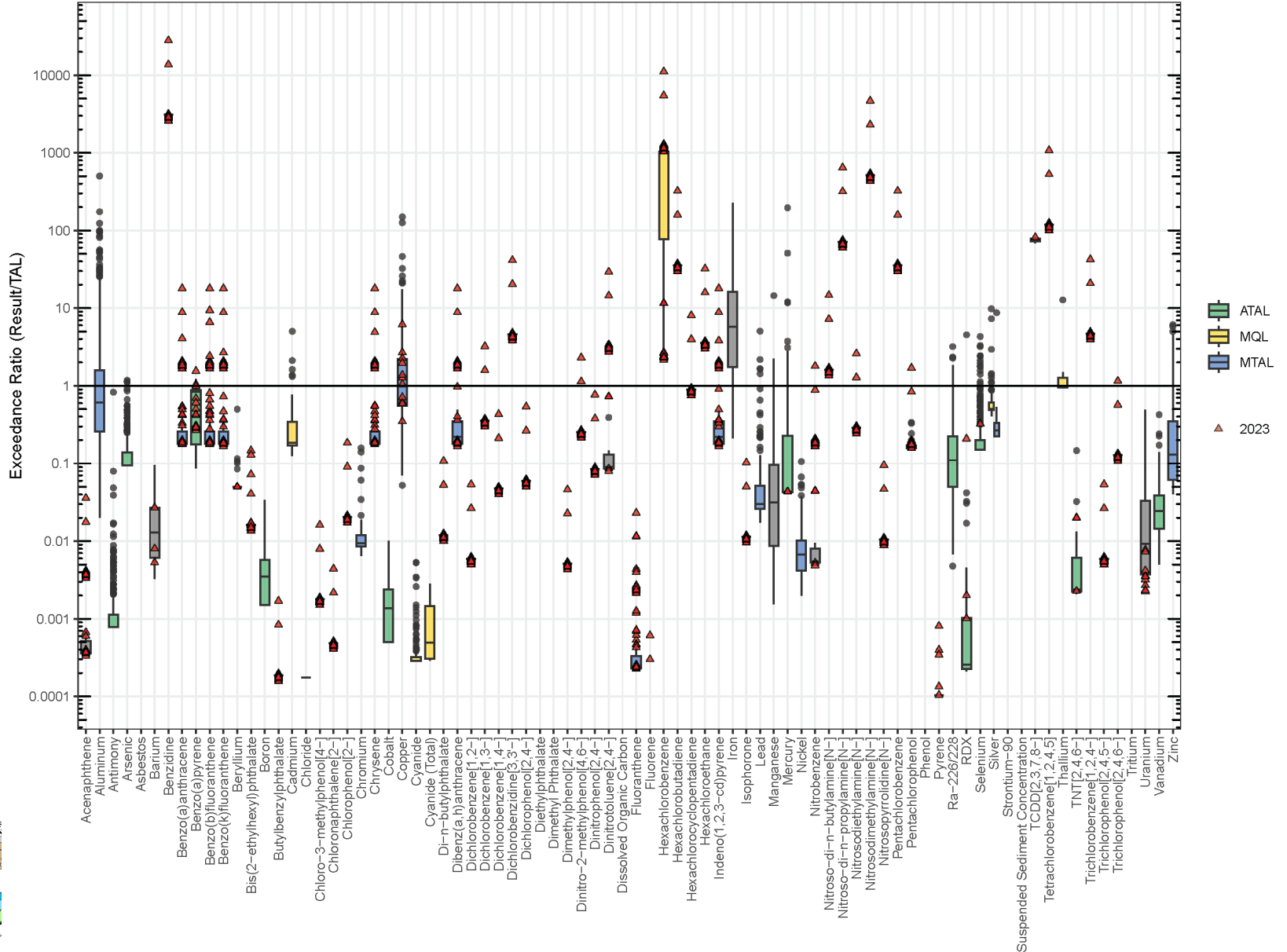
Work Performed in 2023

- Operation of 191 IP storm water samplers and 15 rain gages
- Sampler activations began on March 6, 2023
- Conducted:
 - 1,914 IP storm water sampler inspections
 - 189 post-storm inspections of storm water control measures
 - 288 soil disturbance inspections (construction related)
 - 255 rain gage inspections
 - 16 Target Action Level (TAL) exceedance inspections
- Collected 52 IP samples results which have been screened and discussed in the 2023 Sampling Implementation Plan (SIP)
- Installed 19 controls at 17 SMAs
- All samplers were deactivated for winter to avoid sampling snowmelt (not allowed in stormwater permits) by November 17, 2023





2023 Monitoring Summary





Completed Actions

- a. January 12 – Permittee to send draft SIP update to NMED.
- b. February 13 – NMED SWQB provided comments on draft SIP updates.

Upcoming Actions

- a. March 31 – Draft SIP due to EPA
 - a. Permittees will revise draft SIP updates based on NMED’s input.
 - b. Permittees will submit draft SIP updates to EPA for review and approval. Note: if no comments are received from NMED by February 11, Permittees may submit the draft SIP updates to EPA for approval without NMED input.
- b. April 31* – EPA will review proposed SIP updates, require revisions as necessary, and approve as a minor permit modification. Note: unless disapproved, Permittees may implement proposed SIP 30 days after submittal to EPA and update as necessary once the final SIP is approved.
- c. Please note – Per the Permit there is no public comment period for annual updates to the SIP, only the initial SIP. The initial SIP is the foundational document to establish monitoring suites and all updates will use the same process.

* Estimated Date





- Sampler activations to begin in March 2024
- Deployment and testing of a new satellite telemetry system, to reduce field visits and retrieve samples from the field faster
- 182 sampling locations to be activated for monitoring in 2024 based on the draft SIP

