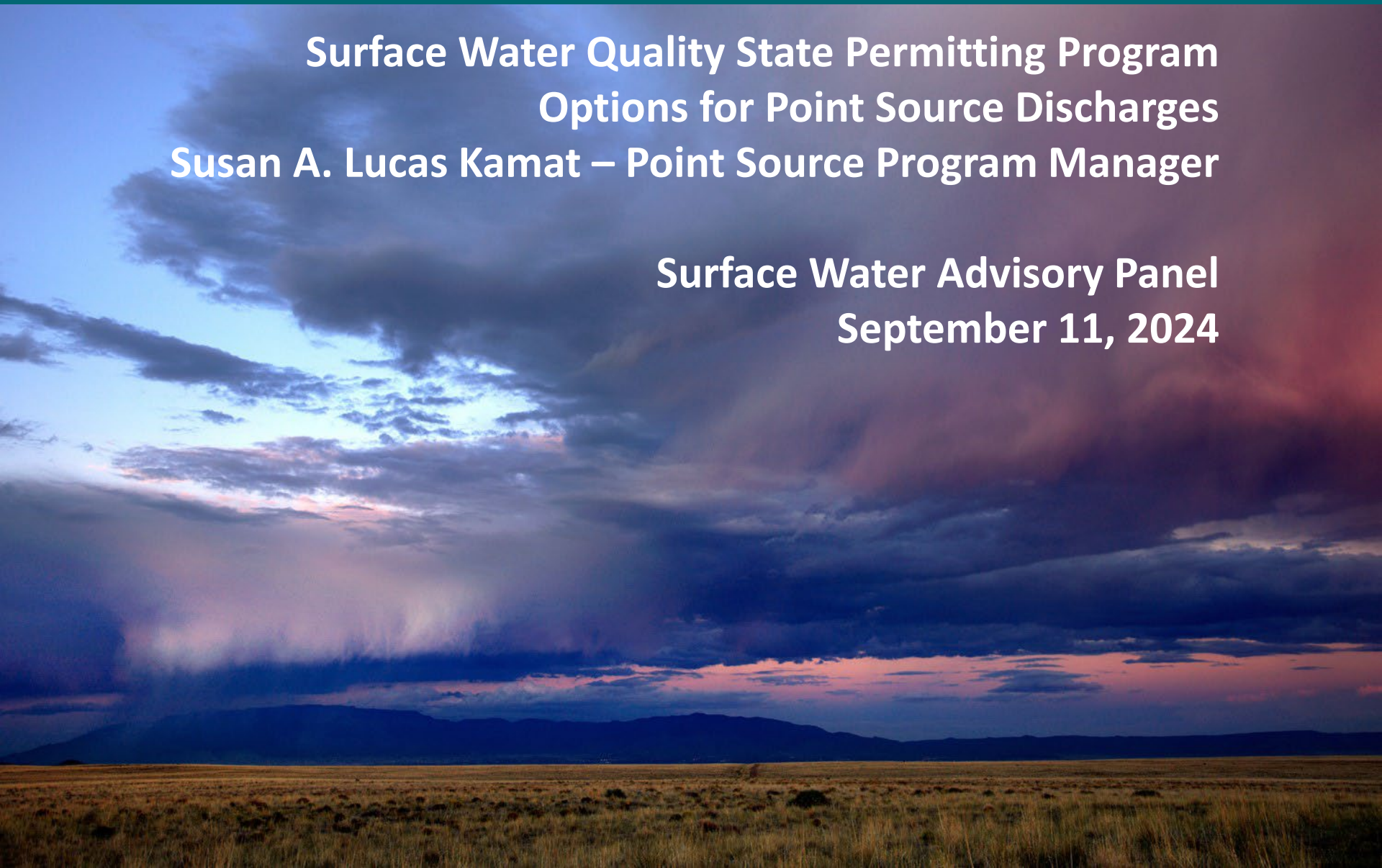
New Mexico Environment Department

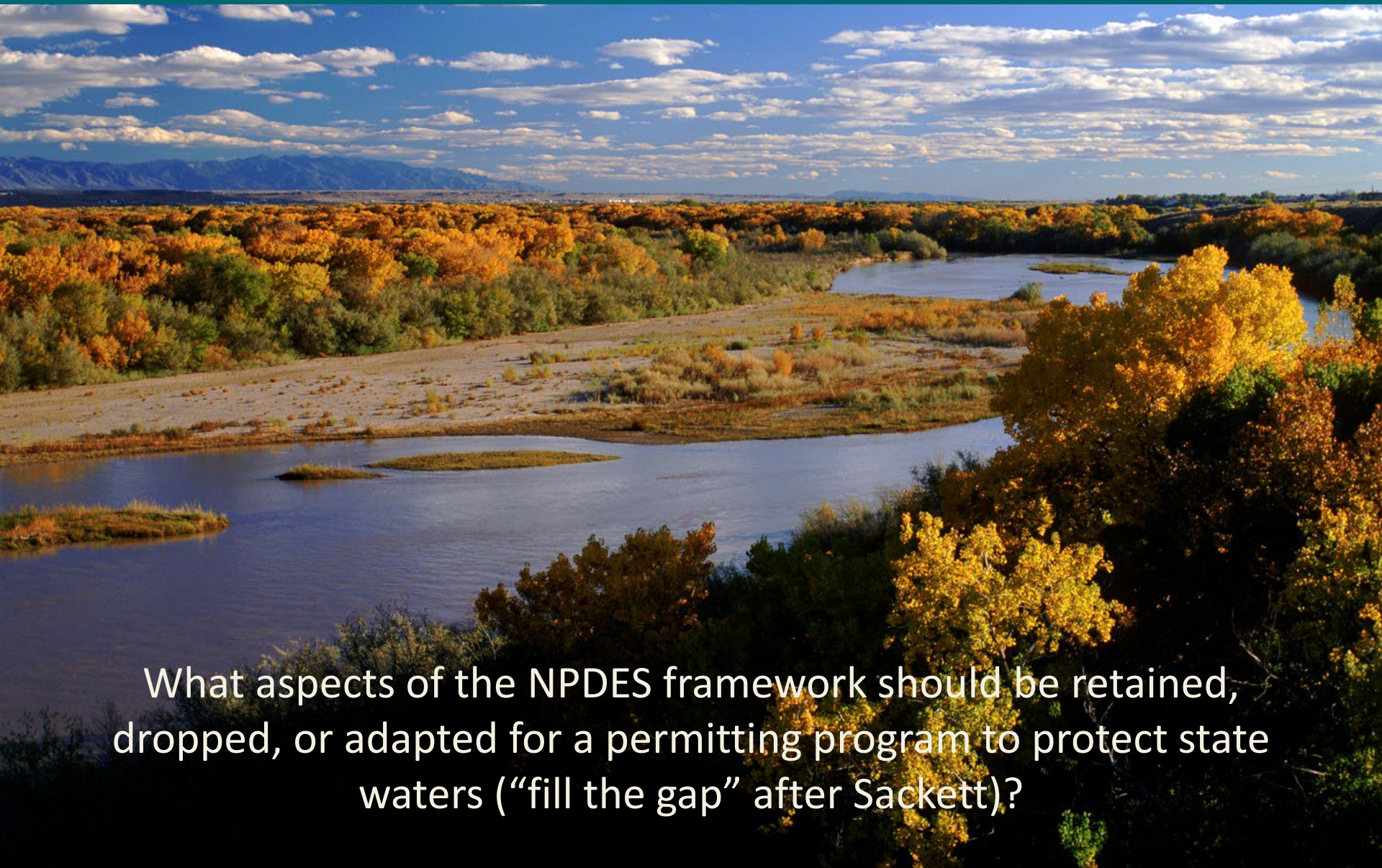


Surface Water Quality State Permitting Program
Options for Point Source Discharges

Susan A. Lucas Kamat – Point Source Program Manager

Surface Water Advisory Panel
September 11, 2024

Member Discussion at SWAP Meeting #4:

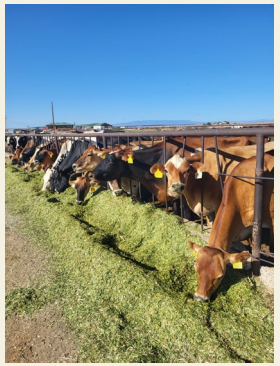


What aspects of the NPDES framework should be retained, dropped, or adapted for a permitting program to protect state waters (“fill the gap” after Sackett)?

NPDES Point Source Discharge Permit Program

- A point source is any single identifiable source of pollution from which pollutants are discharged, such as a pipe, ditch, ship or factory smokestack.
- Examples of point sources include wastewater treatment and water reclamation plants, industrial facilities, stormwater drainage systems, livestock operations, and other dischargers.
- Under Section 402 of the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program addresses water pollution by regulating point sources that discharge pollutants to waters of the United States.
- The NPDES permit program includes both individual permits and general permits.



Individual Permits for Treatment Works

NMPDES Permitting

Publicly Owned Treatment Works (POTWs) and Privately Owned Treatment Works (PrOTWs)

- Technology-Based Effluent Limits (TBELs)
  - Biological Oxygen Demand (BOD)
  - Total Suspended Solids (TSS)
- Water Quality-Based Effluent Limits (WQBELs)
  - Reasonable Potential Analysis
  - Antidegradation Analysis

Surface Water State Permitting

POTWs and PrOTWs

- What kind of TBELs could be implemented?
- WQBELs
  - Create reasonable potential analysis
  - Antidegradation Analysis outlined in New Mexico Antidegradation Policy

New Mexico Antidegradation Policy: https://www.env.nm.gov/surface-water-quality/wqmp-cpp/

POTW Pretreatment Programs

NMPDES Permitting

- Approve local municipalities and counties to perform permitting, administrative, and enforcement tasks for discharges into POTWs
- Protect POTW/WWTP infrastructure from upsets
- Reduce conventional and toxic pollutant levels discharged by industries and other nondomestic wastewater sources into municipal sewer systems and the environment

Surface Water State Permitting

- NPDES-style for POTWs with 5MGD design flow
- Pollution prevention plans
  - influent loadings, flow and design capacity
  - effluent quality conditions
  - pollution source identification
  - asset management plan
- Pollution minimization plans
  - Source identification and minimization
  - Pollutant-specific optimization plans

EPA Pretreatment: https://www.epa.gov/npdes/national-pretreatment-program

POTW and PrOTW Biosolids Programs

NMPDES Permitting

- Solids separated from liquids in a POTW/PrOTW
- "Biosolids" and "sewage sludge" are used interchangeably
- Requires biosolids to be processed, handled, and land-applied in a manner that minimizes potential risk to human health
- Divided into "Class A" and "Class B" designations based on treatment methods for pollutants, pathogens and vector attraction reduction

Surface Water State Permitting

- Water Quality Act allows State to regulate sludge
- New Mexico cites definitions but does not take enforcement (i.e., EPA retains enforcement)
  - Keep Class A and Class B designations for pathogen control
  - Disposal methods and use include land application, composting, landfilling, and incineration
  - Allow New Mexico-specific siting requirements for land application
  - Septage disposal issues – septage haulers need to meet pathogens requirements
  - Potential PFAS issues

EPA Biosolids: https://www.epa.gov/biosolids/basic-information-about-biosolids

Concentrated Animal Feeding Operations (CAFOs)

NPDES Permitting

Surface Water State Permitting

- Benefits in a state surface water CAFO permit program
  - Pollution management plan for manure (nitrogen and phosphorus)
  - Releases already covered under 20.6.2.1203 NMAC
  - State CAFO program would provide "shield" in case of releases/discharges; Does the industry want that protection
  - New Mexico already has groundwater monitoring for nitrogen through Dairy Rule (20.6.6 NMAC)
  - Outreach and technical assistance through non-regulatory program using tools, guidance, operator training

EPA AFO/CAFO webpage: https://www.epa.gov/npdes/animal-feeding-operations-afos
EPA CAFO permit: https://www.env.nm.gov/wp-content/uploads/sites/25/2017/07/NMG010000-CAFO-NM-20160901.pdf
EPA Compendium State Programs: https://www.epa.gov/npdes/animal-feeding-operations-compendium-state-permits-and-programs

Municipal Separate Storm Sewer System (MS4) Permits

NMPDES Permitting

Photo: SSCAFCA

Surface Water State Permitting

- Identify urban area populations the state would permit under an MS4
- Surface water basin-based permit coverage
- How to estimate predevelopment hydrology

EPA Stormwater Discharges form Municipal Sources: https://www.epa.gov/npdes/stormwater-discharges-municipal-sources
NPDES Stormwater General Permit for Small MS4s in New Mexico: https://www.epa.gov/npdes-permits/npdes-stormwater-general-permit-small-ms4s-new-mexico
NPDES Stormwater General Permit for MS4s in the Middle Rio Grande Watershed in New Mexico
https://www.epa.gov/npdes-permits/npdes-stormwater-general-permit-ms4s-middle-rio-grande-watershed-new-mexico

Stormwater, Construction Construction General Permit (CGP)

NMPDES Permitting

Surface Water State Permitting

- Clearer and more concise explanation of considerations and incorporations of total maximum daily loads (TMDL) and impairments in permit language
- New Mexico-specific Stormwater Pollution Prevention Plan templates
- Identify where permits are required - potentially use buffer areas from surface waters of the state
- Include Low Erosivity Waiver
- Seasonal inspection timeframes to reflect New Mexico precipitation patterns

Construction General Permit: https://www.epa.gov/npdes/2022-construction-general-permit-cgp

Stormwater, Industrial Multi-Sector General Permit (MSGP)

NMPDES Permitting

Surface Water State Permitting

- Clearer and more concise explanation of considerations and incorporations of total maximum daily loads (TMDL) and impairments in permit language
- New Mexico-specific Stormwater Pollution Prevention Plan templates
- Include No Exposure Certification
- Changes to sector-specific pollutant monitoring

Multi-Sector General Permit (MSGP): https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-epas-2021-msgp

Other Permits and Considerations

- Other NPDES permits
  - Pesticide General Permit
  - Hydrostatic Test General Permit
  - Wildfire General Permit (under development)

- Permit conditions
  - 10 yr. permit term (would require Water Quality Act Amendments, current statute defines permit terms as 5 yrs. from the day facility starts discharging or 7yrs if you permitted before discharge); permit review and reopening clauses

Surface Water State Permitting Program Options for Point Source Discharges

Member Discussion at SWAP Meeting #4:

a. From your perspective what aspects of the NPDES framework are most important to retain?

b. What adaptations would you suggest to improve efficiency or improve water quality protection?

c. What factors should be considered for various facility types and community interests, such as POTWs, MS4s, industrial and other non-POTWs, construction activities, CAFOs, downstream water users, aquatic habitats?