2023 Rural Water Summit

Thursday, August 31, 2023

9:00AM — 4:00PM

McKinley County

2nd Floor Training Center

AGENDA

9:00am – 9:20am -- Welcome & Introductions

9:20am – 10:20am -- Keynote Address

10:20am – 11:00am – Regional Water Collaboration

11:00am – 11:10am -- BREAK

11:10am – 12:00pm -- Regional Water Collaboration (cont.)

12:00pm – 1:00pm – LUNCH & WLI Graduation Ceremony

1:00pm – 1:45pm – Presentation: *How To Get From Here To There*

1:45pm – 2:30pm – NMED Partners Presentations

2:30pm – 2:40pm – BREAK

2:40pm – 3:40pm -- NMED Partners Presentations (cont.)

3:40pm – 3:50pm – Funding Opportunities

3:50pm – 4:00pm -- Closing & Adjourn

WELCOME & INTRODUCTIONS
9:00AM – 9:20AM

Rep. Harry Garcia, District 69

- State Representative
- Vice-Chair, House Transportation, Public Works, & Capital Improvement
- Member, House Appropriations & Finance Committee
- Member, Legislative Finance Committee
- Chair, Military & Veterans' Affairs Committee

KEYNOTE ADDRESS

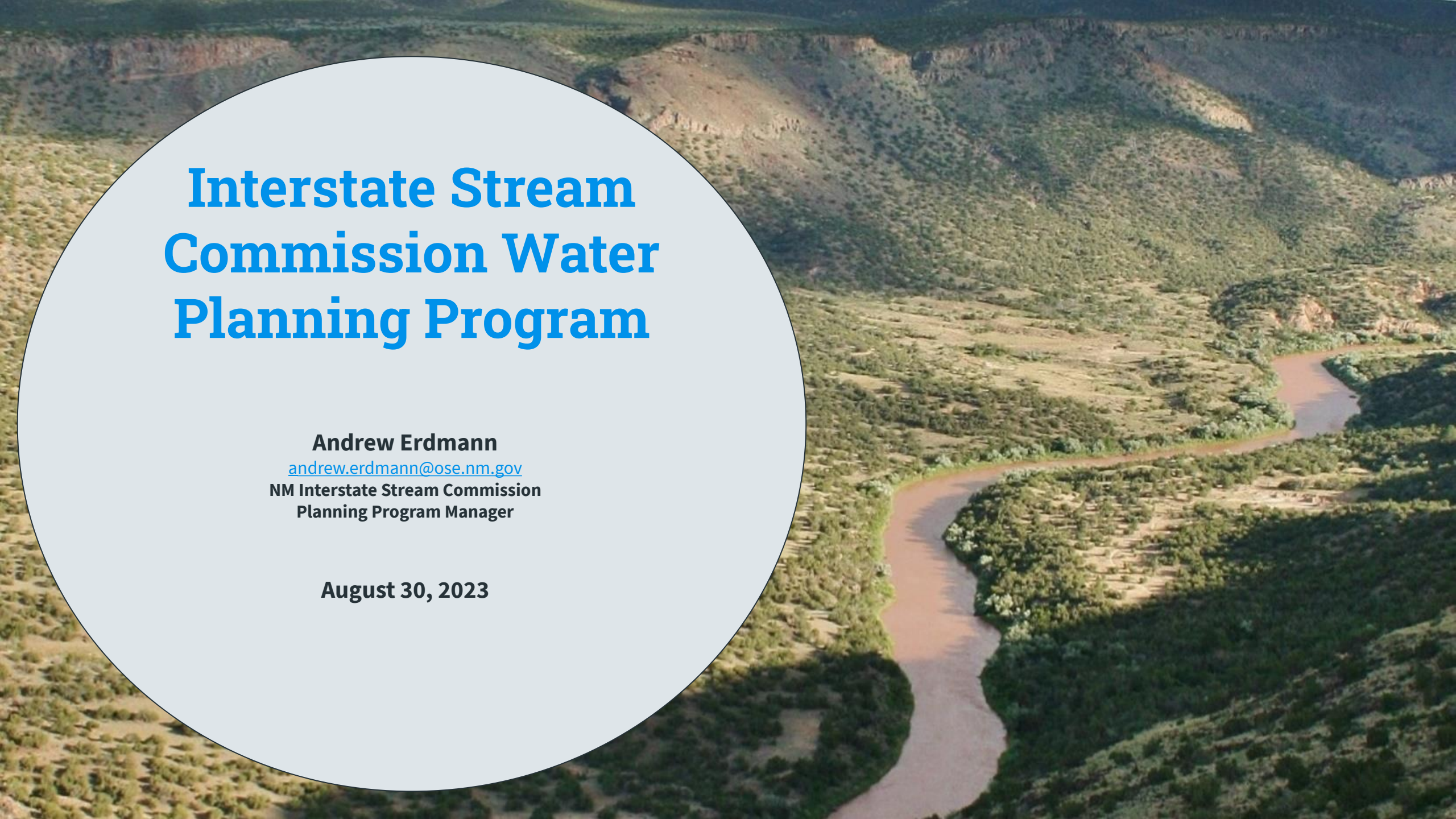
9:20AM – 10:20AM

Andrew Erdmann, State Engineer
Interstate Stream Commission

Interstate Stream Commission Water Planning Program

Andrew Erdmann
andrew.erdmann@ose.nm.gov
NM Interstate Stream Commission
Planning Program Manager

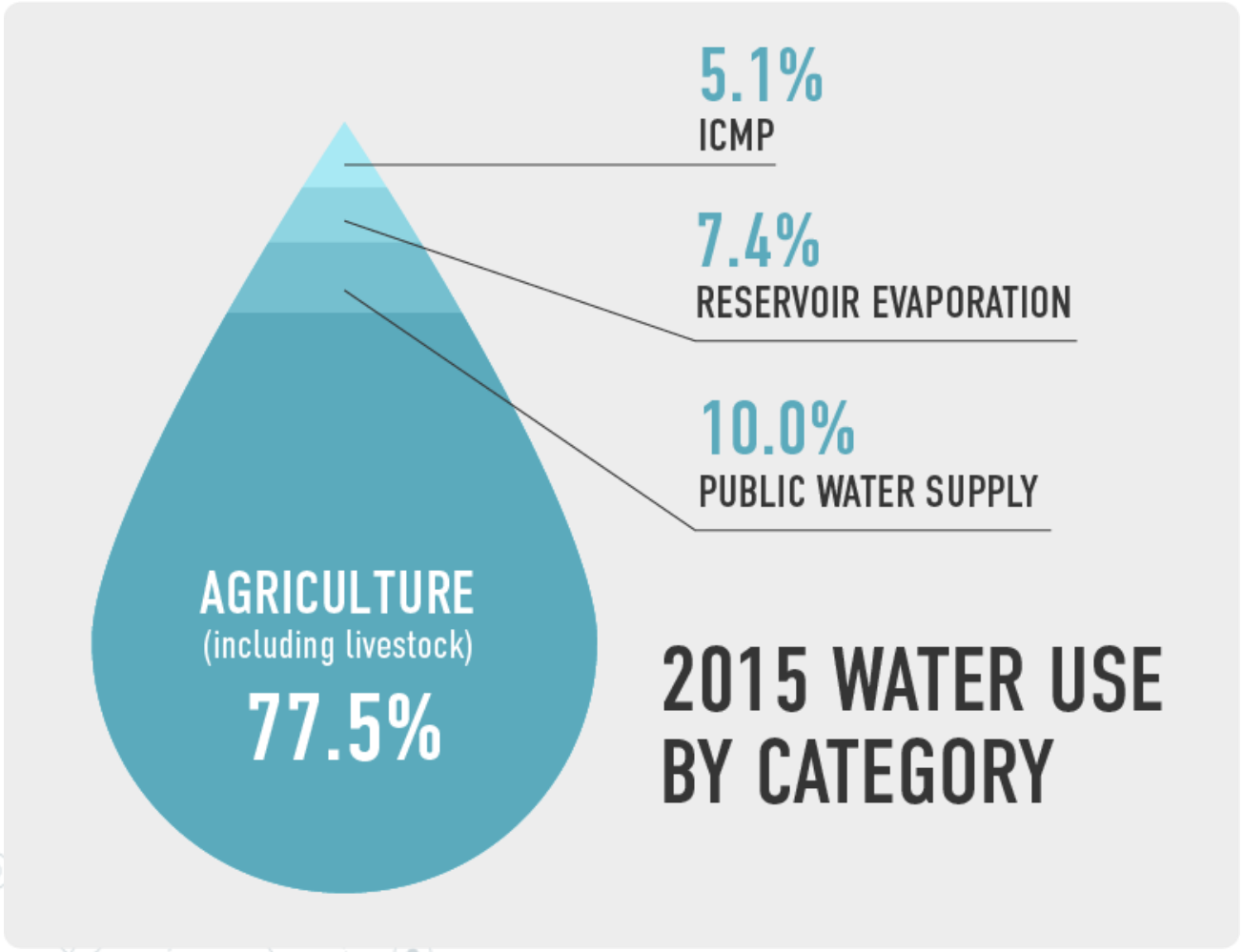
August 30, 2023



Water Planning in NM – Presentation Outline

- Challenges
  - The Status Quo
  - Major Challenges
- Planning Efforts
  - State Water Planning
  - Regional Water Planning

Water Planning Challenges: The Status Quo



- Agriculture is the largest water user in New Mexico
- Water Rights are administered based on priority dates
- Levels of groundwater use are not sustainable
- Interstate compacts and endangered species flow requirements exist

NEW MEXICO'S WATER FUTURE = DRIER / MORE VARIABLE

- Anticipated continued changes in climate will mean less water is available while demands continue to increase.
- Given this new reality, we must plan ahead to ensure continuing economic development and the needs of all New Mexicans are met.

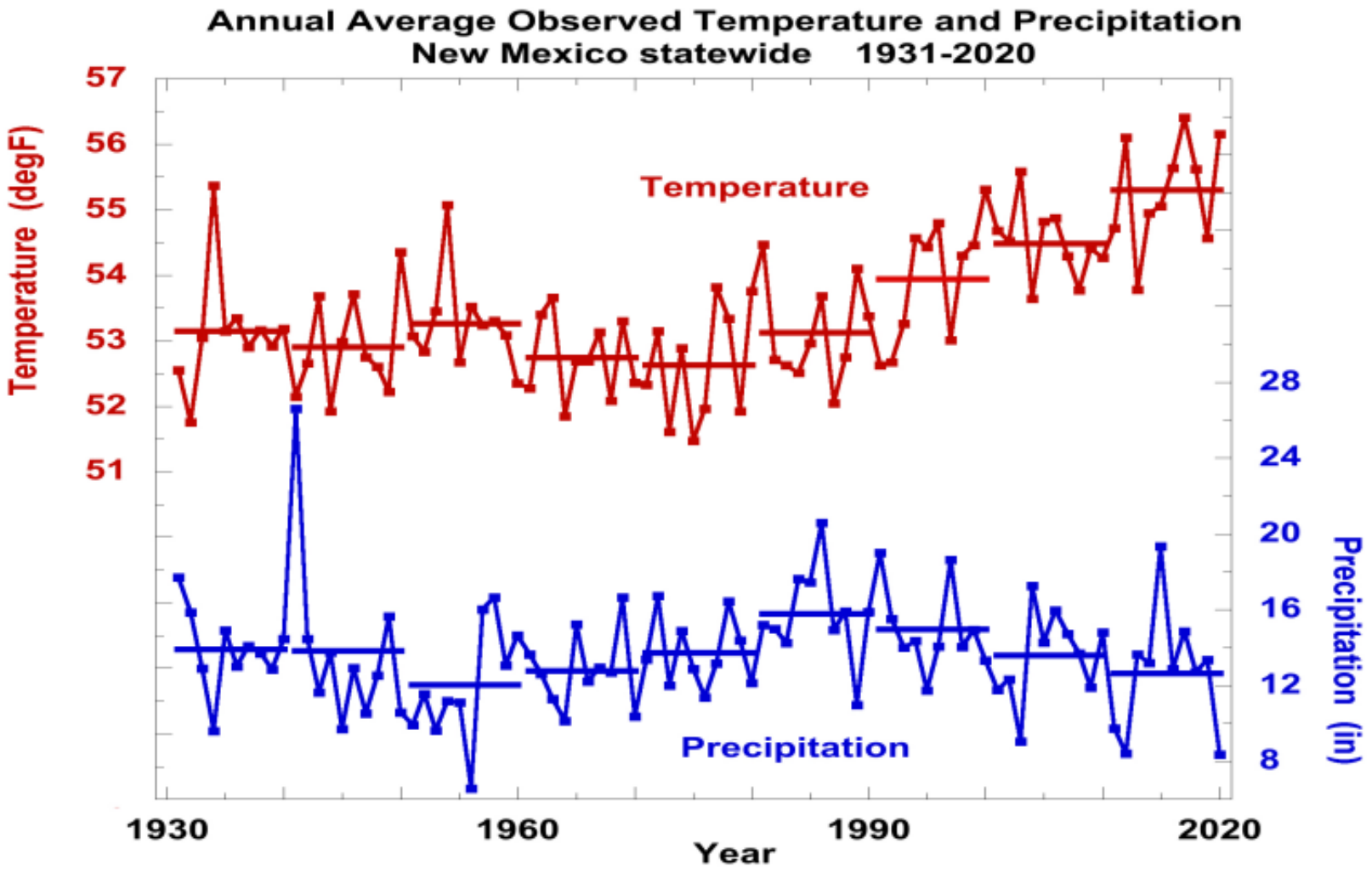
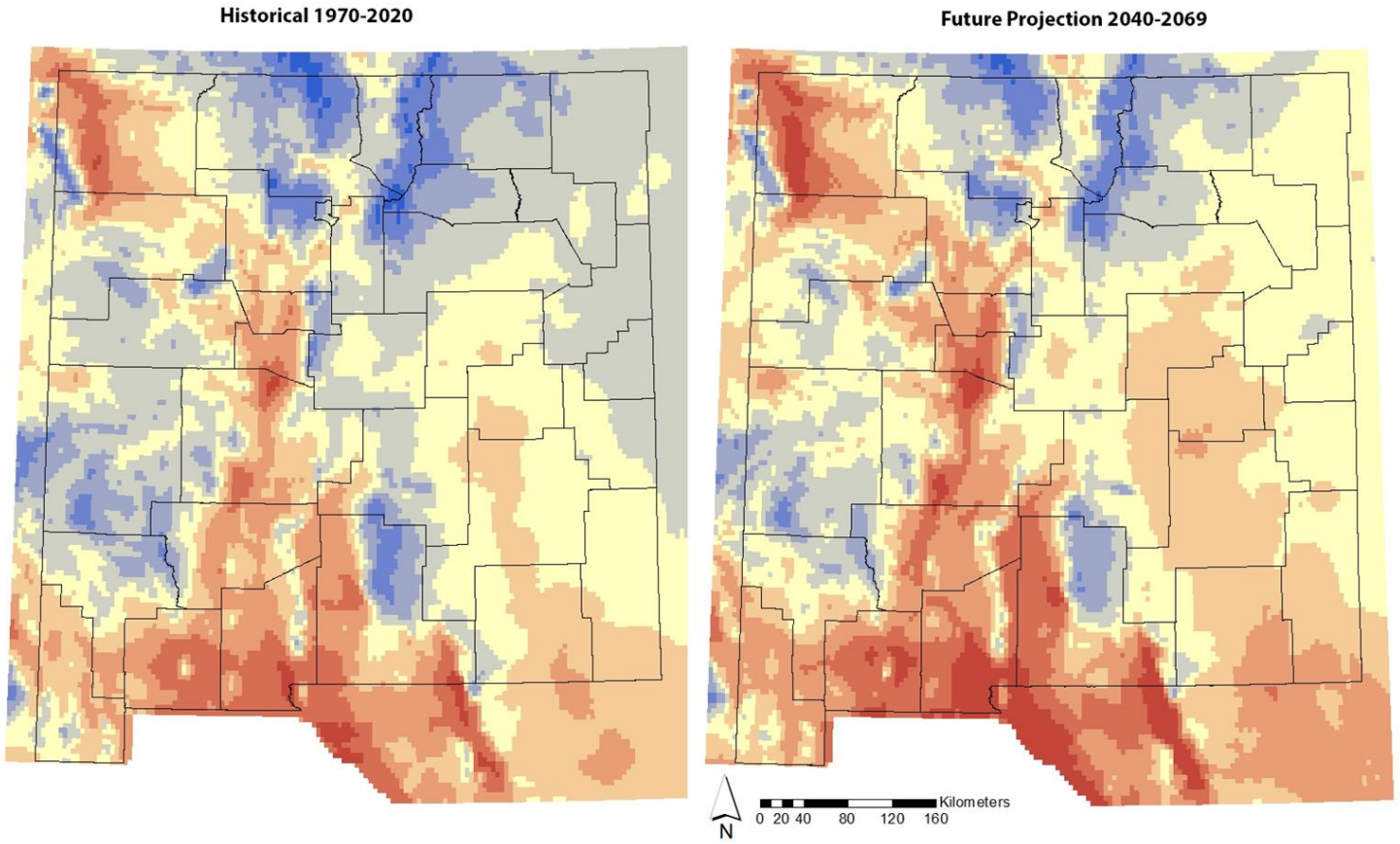
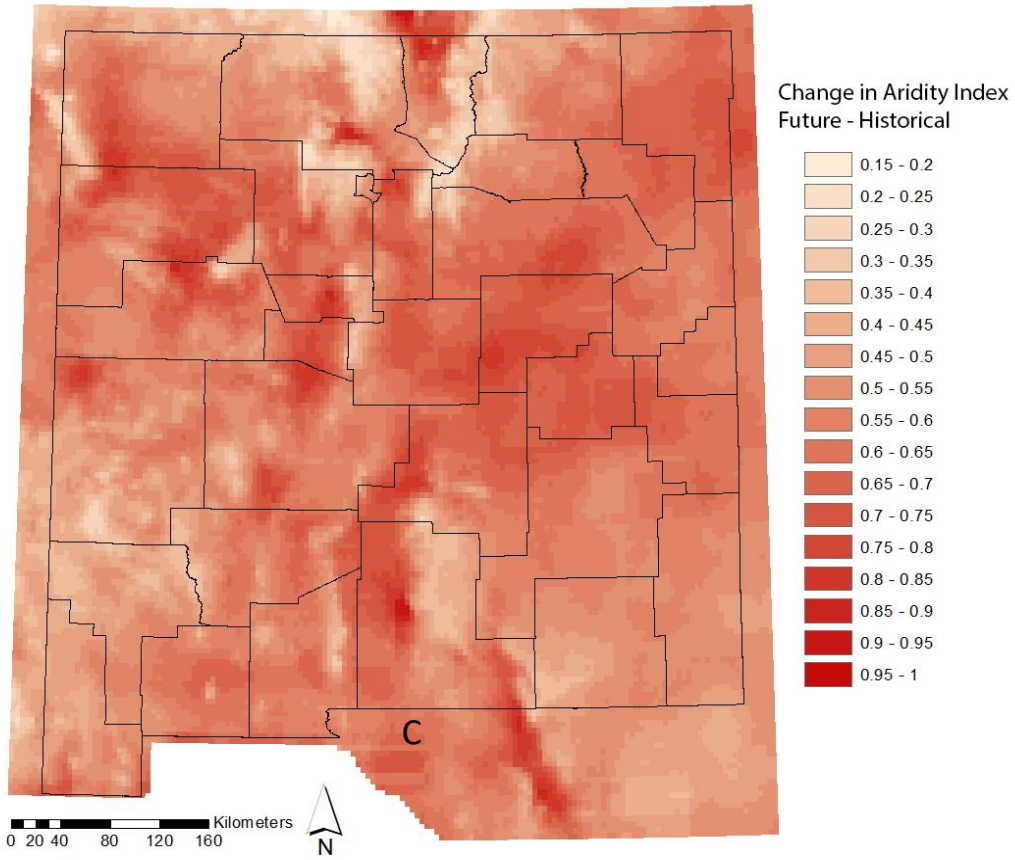


Image from Climate Change in New Mexico over the Next 50 Years: Impacts on Water Resources

Aridity in New Mexico





Projected change in the aridity index over New Mexico. (a) Average aridity index from 1970-2000 data, (b) Average aridity index from 2040-2069 projections, generated from 20-model ensemble RCP8.5. (c) Difference between 2040-2069 and 1970-2000 aridity indexes. Aridity index is defined as the ratio of average potential evapotranspiration to the average precipitation.

Image from [Climate Change in New Mexico over the Next 50 Years: Impacts on Water Resources]

Temperature Change in New Mexico

- Temperature increase will occur throughout the entire state.
- Especially high in the Northwest part of the state.

Annual average temperature simulated by 20 CMIP5 climate simulations by different models, spatially averaged over the state of New Mexico. Temperature change is defined as the difference between two thirty-year averages: (2040-2069) minus (1971-2000); the central years of these averaging periods are 70 years apart, so this plot represents 70-year temperature changes across the state.

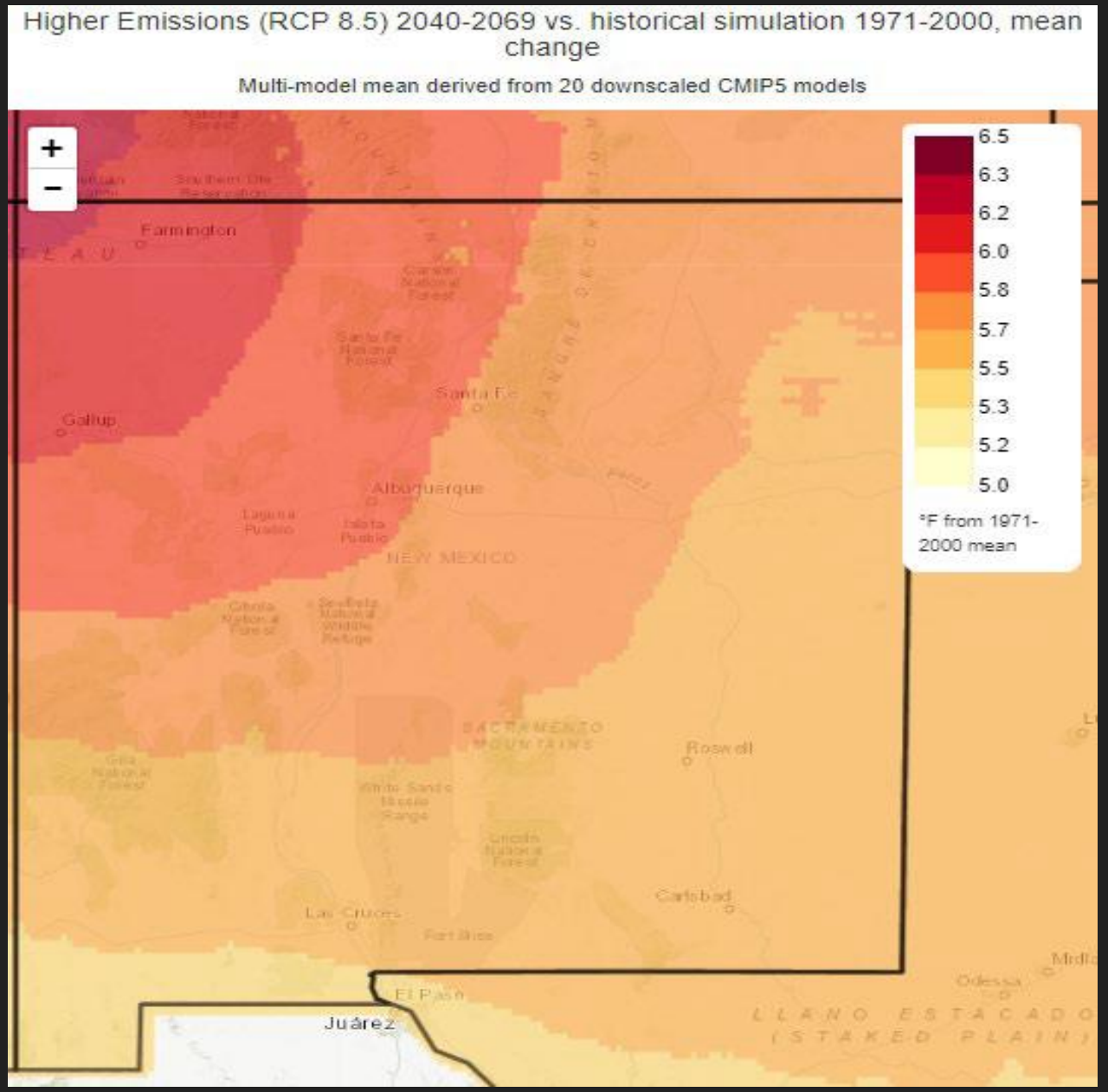
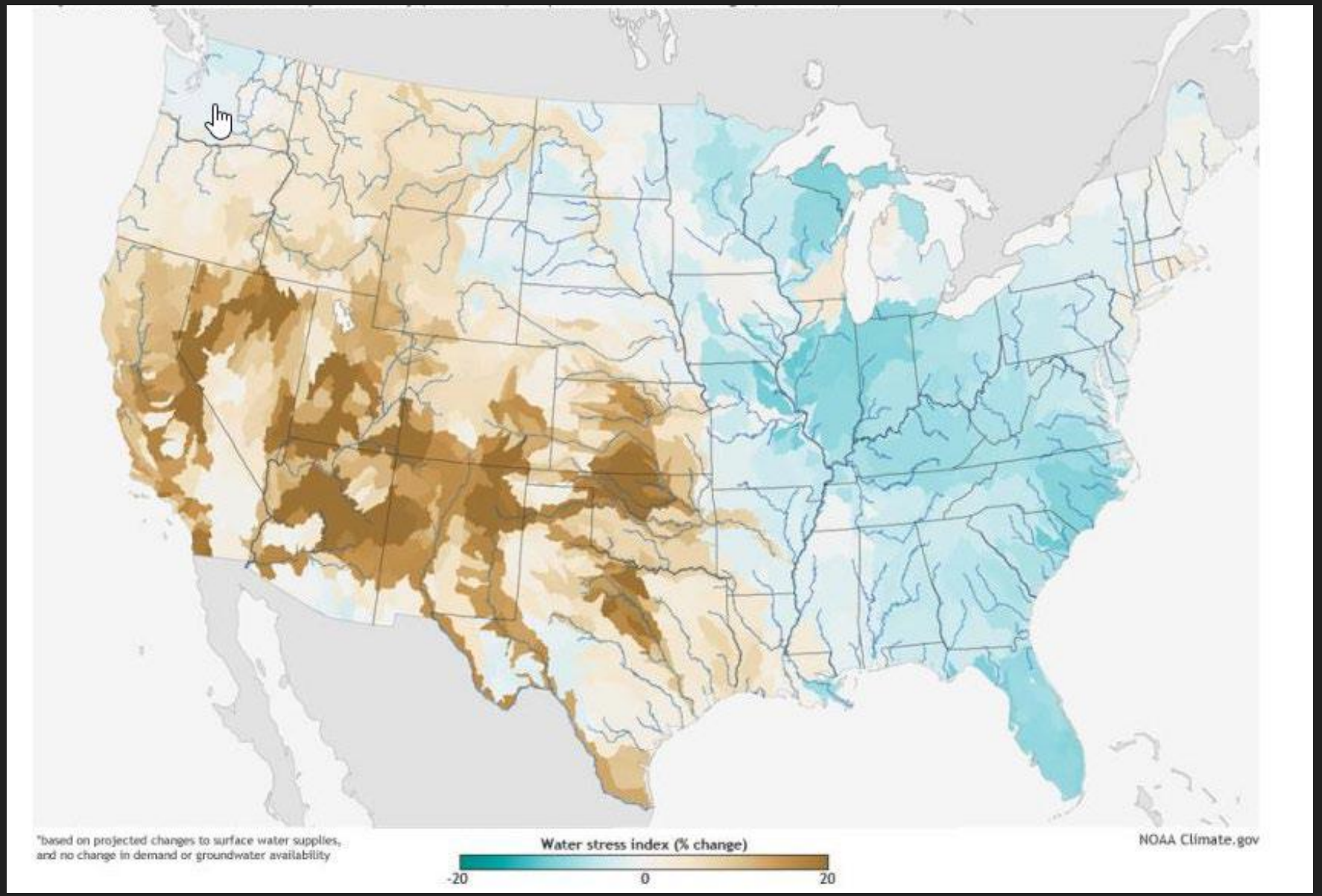


Image from Climate Change in New Mexico over the Next 50 Years: Impacts on Water Resources

Climate Change: National Water Stress Index

- The eastern half of the country can expect more water,
- the west can expect more water stress.



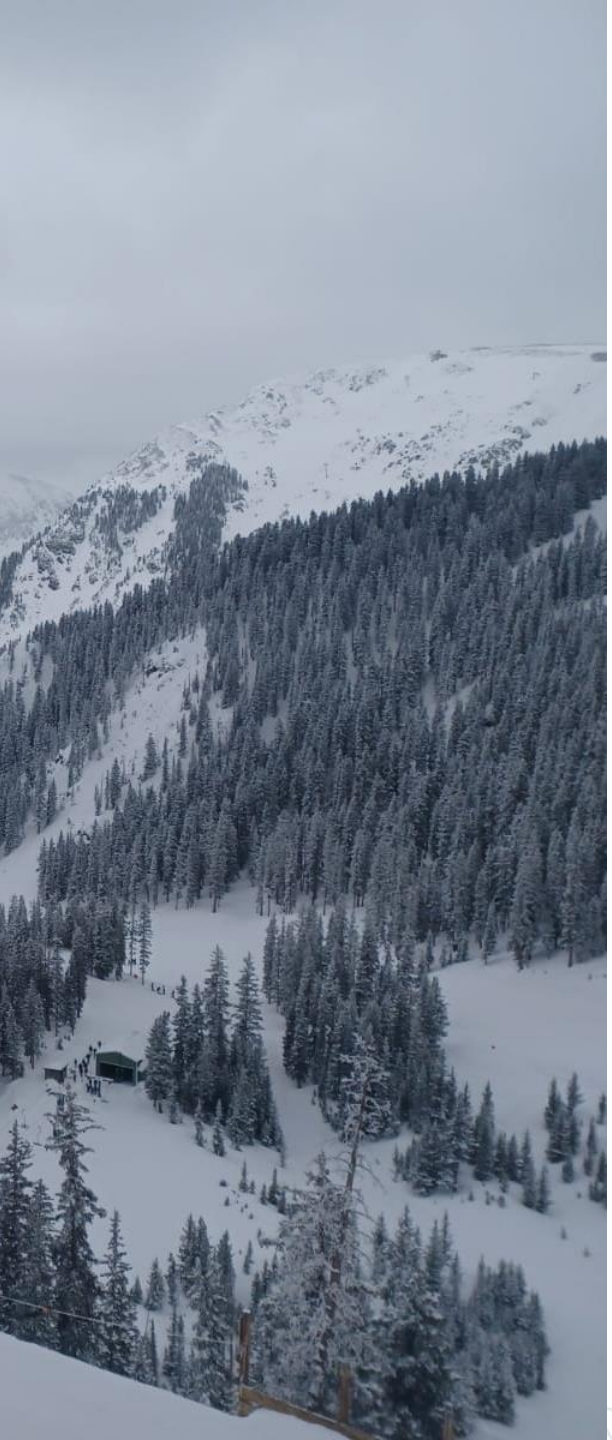
Projected change in water stress by mid-century (2040-2061) compared to historical average (1900-2668 1970). Lindsey, 2013.

Image from Climate Change in New Mexico over the Next 50 Years: Impacts on Water Resources

Additional Major Problems Facing New Mexicans in the Coming Decades

- Persistent drought being exacerbated by rising average annual temperatures
- Catastrophic wildfires resulting from watersheds devastated by drought
- Declining aquifers resulting from reduced surface water supplies
- Aging water and wastewater infrastructure, hitting rural systems hardest
- Need for stormwater control investments as intense monsoon events rise
- Lack of consistent funding for proper human capacity development at all levels of government and the private sector
- Need for long-view planning and investment to correct years of under-funding

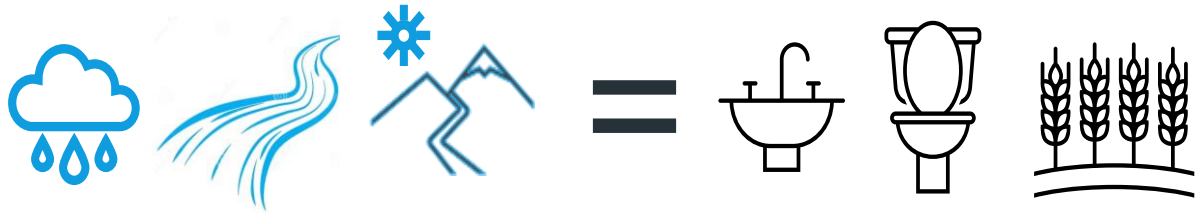
We are already seeing these changes.
These impacts will ultimately affect all New Mexicans.



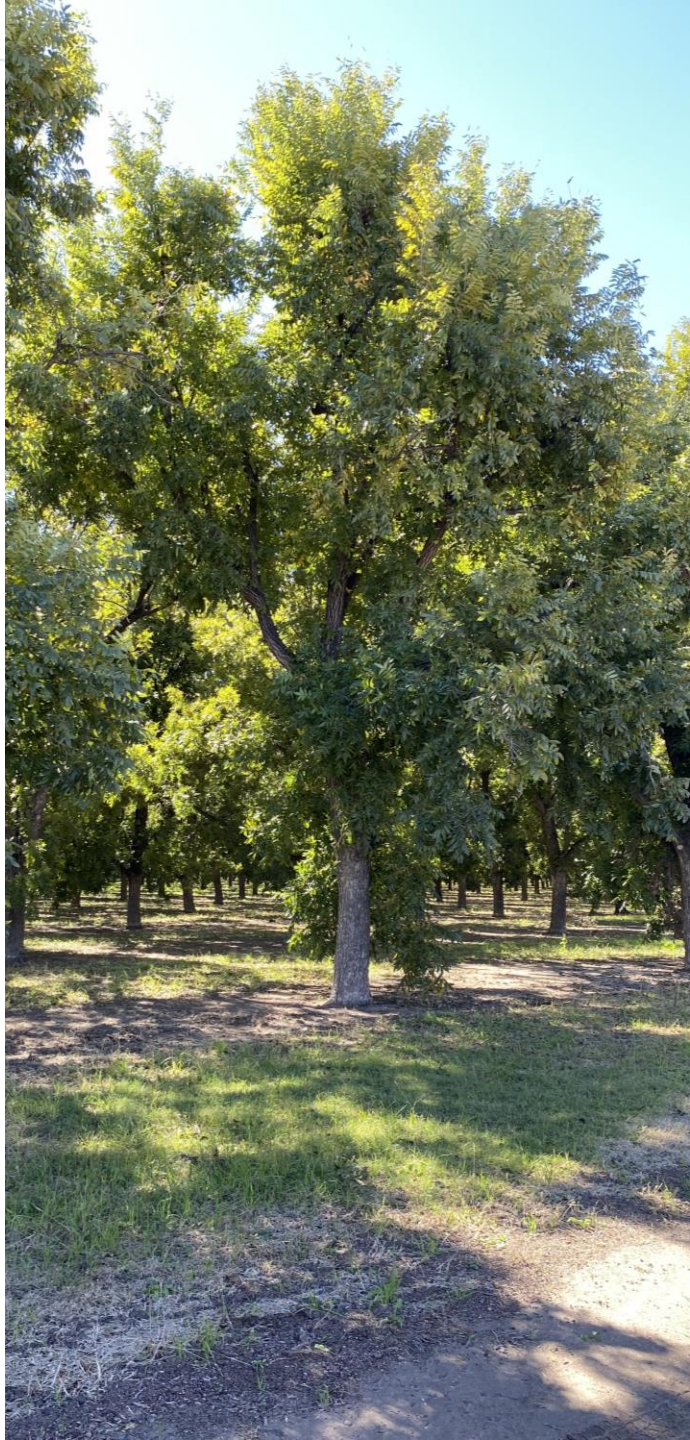
New Mexico needs to find a new Water Balance

Water Availability

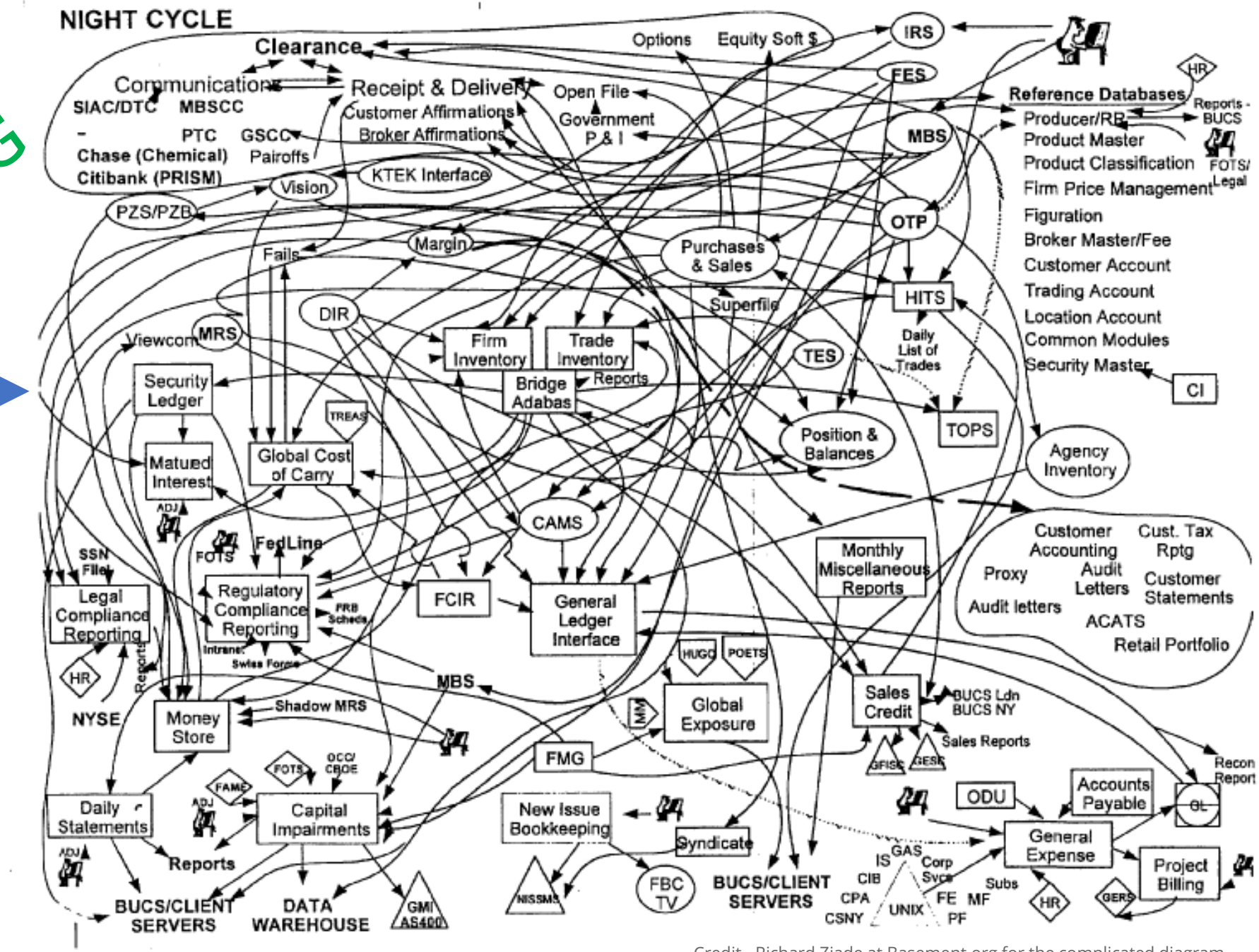
Water Need



WATER BALANCE



PLANNING



Credit - Richard Ziade at Basement.org for the complicated diagram

NMISC's Water Planning Program

State Water Plan

Updated every 5 years

Regional Water Planning

Updated Statue 2023

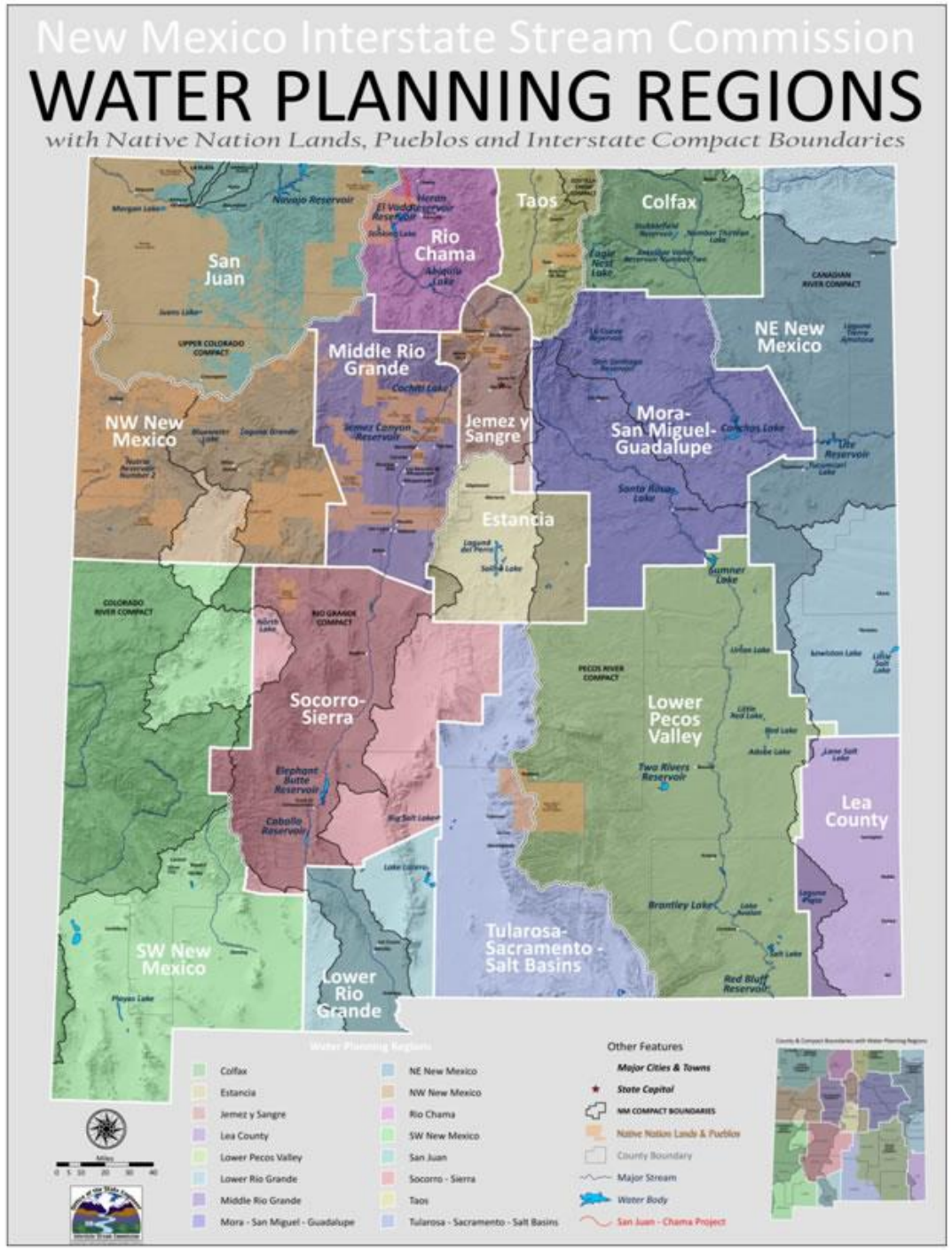
SB337: Water Security Planning Act

State Water Plan

- Last updated in 2018
- Review is required every 5 years at a minimum
- Extensive statutory requirements
- Update will be a review of statutory requirements and a timeline of how to address those given climate change projections

Regional Water Planning

- First began in 1987 in response to TX claims on NM water
- Two rounds of regional water planning have occurred throughout NM
- SB 337 was just passed during the legislative session = Water Security Planning Act to reinvigorate regional water planning



The Water Security Planning Act

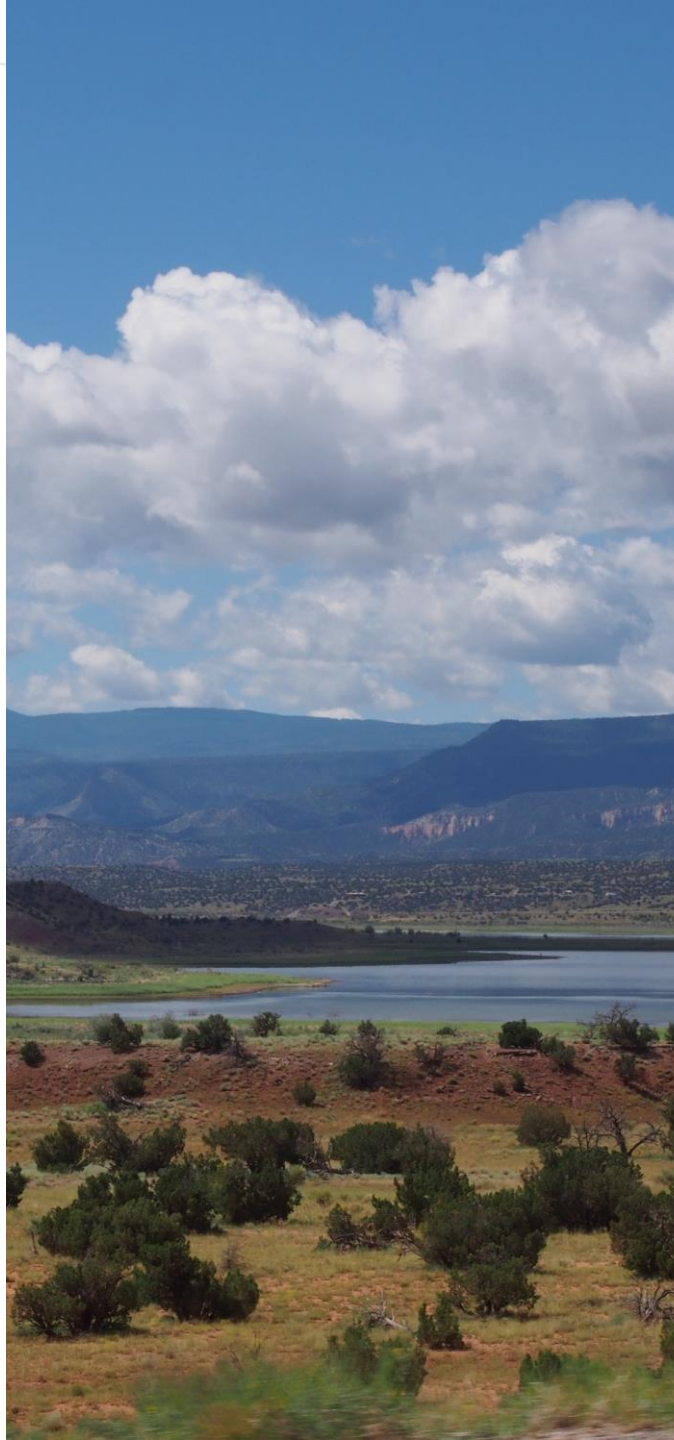
New statute requires that regional water planning will:

- Ensure scientific integrity through the best available data, science and models
- Build on and incorporate existing planning efforts, and not be redundant
- Be grounded in state water law, including respecting existing water rights and the doctrine of prior appropriation
- Support implementation through prioritization of projects and activities and reporting mechanisms for decision-makers
- Increase local capacity through increased and more consistent support
- Involve robust public engagement every step of the way

Implementation of effective solutions requires engagement from local communities.

Next Steps:

- Water Security Planning Act:
  - Rulemaking and guidelines
  - Need for robust public involvement
  - Formation of a Tribal Advisory Council
  - All-hands-on-deck moment
- Momentum on:
  - Funding mechanisms for water infrastructure
  - Federal funding - ensuring NM takes full advantage of currently available $$
  - Groundwater data and management
  - State and local capacity development
  - Supporting water planning next steps



Water Security Planning:

What the rules will address

- The boundaries & number of regions
- Criteria for ISC approval of a regional security plan
- Procedure for regional water planning entities to develop and notify the ISC of regional public welfare issues
- Composition of regional water planning entities
- Procedure for regional water planning entities to consider public welfare values and the needs of future generations

This list is a minimum only

Water Security Planning: What the guidelines will address

- How stakeholders will be identified
- Requirements for public input, proposal contents, and collaboration with state agencies
- Process for approval of grants or loans
- Metrics for reporting
- Procedure and scheduling for regional plan implementation
- [illegible]

SB 337:
Developing Rules & Guidelines

- Laying the Groundwork for Robust Public Involvement
  - Data Visualization Work with NM Firm
  - Outreach & Communication Strategy
  - Developing Proposed Boundaries & Processes
- Conducting Public Meetings & Targeted Outreach
  - Public Meetings Statewide
  - Web-Based input portal
  - Targeted Outreach
- Reporting on Findings of Engagement Process
- Development of Proposed Rules & Guidelines
  - Rule Promulgation
  - Guideline Adoption

THANK YOU
QUESTIONS?

Andrew Erdmann
NM Interstate Stream Commission
Planning Program Manager

REGIONAL WATER COLLABORATION

10:20AM – 11:00AM

Regional Water Planning Organization (RWPO)

Angelina Grey, Office Manager
Regional Water Planning Organization
Northwest New Mexico Council of Governments

Water & Environment Office

Overview of the NWRWPO

Purpose

- Regional program to work closely with state agencies
  - NMED
  - ISC
  - OSE
- Program focus on water resiliency, environmental stewardship, drought contingency and climate change
- Joint Committee selection
  - Water/wastewater planning
  - Project development and prioritization
  - Enhance community involvement and public official engagement

Function 1: Long-Range Planning & Implementation

Task 1 – Coordinate long-range regional water planning.

Task 2 – Create and implement a strategic plan.

Deliverables:

1) Planning inventory
2) Water/Wastewater project listing

Function 2: Data & Mapping

Task 1 – Collect and manage data.

- In progress

Task 2 – Assist RWPO members and coordinate with OSE, NMED staff.

Task 3 – Coordinate with other state agency partners.

- NMED
- RCAC

Deliverables:

1) Data needs
2) Water maps

Function 3: Project Development & Monitoring

Task 1 – Assist project applicants and public water systems.

Task 2 – Evaluate and manage preliminary project review and process.

Task 3 – Provide assistance and information to local governments.

Task 4 – Track the progress of statewide Water/Wastewater Improvement Program and consistent communication with OSE, NMED.

Deliverables:

1) ICIP
2) Projecteering Portal Integration

Function 4: Small Systems Support

Task 1 – Coordinate and participate with NMED staff and partners.

Task 2 – Coordinate and participate with the COGs and state agency partners to assist RWPO members and districts.

Task 3 – Monitor development of federal and state laws affecting the water systems and communities.

Task 4 – Attend RWPO Roundtable and special meetings.

Task 5 – Attend state and national conferences, training sessions and/or special meetings.

Task 6 – Participate in miscellaneous water-related programs and special projects.

Deliverables:

1) Board training for systems
2) Asset management training

Function 5: General RWPO Support

Task 1 – Organize and facilitate all RWPO meetings.

Task 2 – Maintain bylaws that clarify and document member entities, roles and responsibilities, including voting/election protocols.

Task 3 – Conduct Outreach Activities.

Task 4 – Maintain a website.

Task 5 – Coordinate training and professional development opportunities for RWPO members.

Deliverables:

1) Water Commons Meetings (2-3)

Function 6: RWPO Administration

Task 1 – Produce work products.

- Templates
- Water Log

Task 2 – Solicit and utilize input from RWPO board members to develop the two-year Regional Work Program.

Task 3 – Develop an annual budget based on the tasks.

Task 4 – Maintain a Public Participation Plan.

- Draft

Task 5 – Submit the COG Financial Audit for each State Fiscal Year.

Deliverables:

1) Develop Quarterly Report Template

BREAK

11:00AM – 11:10AM

REGIONAL WATER COLLABORATION

11:10AM – 12:00PM

Rural Communities Assistance Corporation
Karen Pereira Tapias
Rural Development Specialist

Northwest New Mexico Utility Authority
Jason Sanchez
Receiver for the Yahtahey Water and Sanitation District,
Secretary/Treasurer for the Northwest New Mexico Utility Authority

LUNCH
12:00PM – 1:00PM

Water Leadership Institute
Laura Dubin
Rural Development Specialist
Rural Communities Assistance Corporation

- Ramah Water & Sanitation District
- Catalpa Water Association
- White Cliffs Mutual Domestic Water Users Association
- Gamerco Water & Sanitation District
- Bluewater Water & Sanitation District
- San Rafael Water & Sanitation District


LUNCH
12:00PM – 1:00PM
Water Leadership Institute
Laura Dubin
Rural Development Specialist
Rural Communities Assistance Corporation
LUNCH
12:00PM – 1:00PM
Water Leadership Institute
Laura Dubin
Rural Development Specialist
PIPELINE
PROUD

PRESENTATION

1:00PM – 1:45PM

How To Get From Here To There…

James Markham
Southwest Environmental Finance Center

Getting from Here to There

Developing Roadmaps to Compliance and Funding

Thursday, August 31, 2023

SOUTHWEST ENVIRONMENTAL FINANCE CENTER

EFCN
environmental finance center network

What are the Southwest Environmental Finance Center and EFCN?

SOUTHWEST ENVIRONMENTAL FINANCE CENTER

Heather Himmelberger
Director

Matt Ziegler
Tribal Drinking Water Program Director

Dawn Nall
Project Director

Hayley Hajic
Project Director

Ryan Magee
Program Coordinator

Constanza Kremer
Undergraduate Research Assistant

Frank Roth
Project Director

joni palmer
Project Director

Tucker Colvin
Research Scientist

James Markham
Research Engineer

A.J. Barney
Research Engineer

Clayton Rimbert
Lead Animator

Mark Ogrentz
Research Scientist

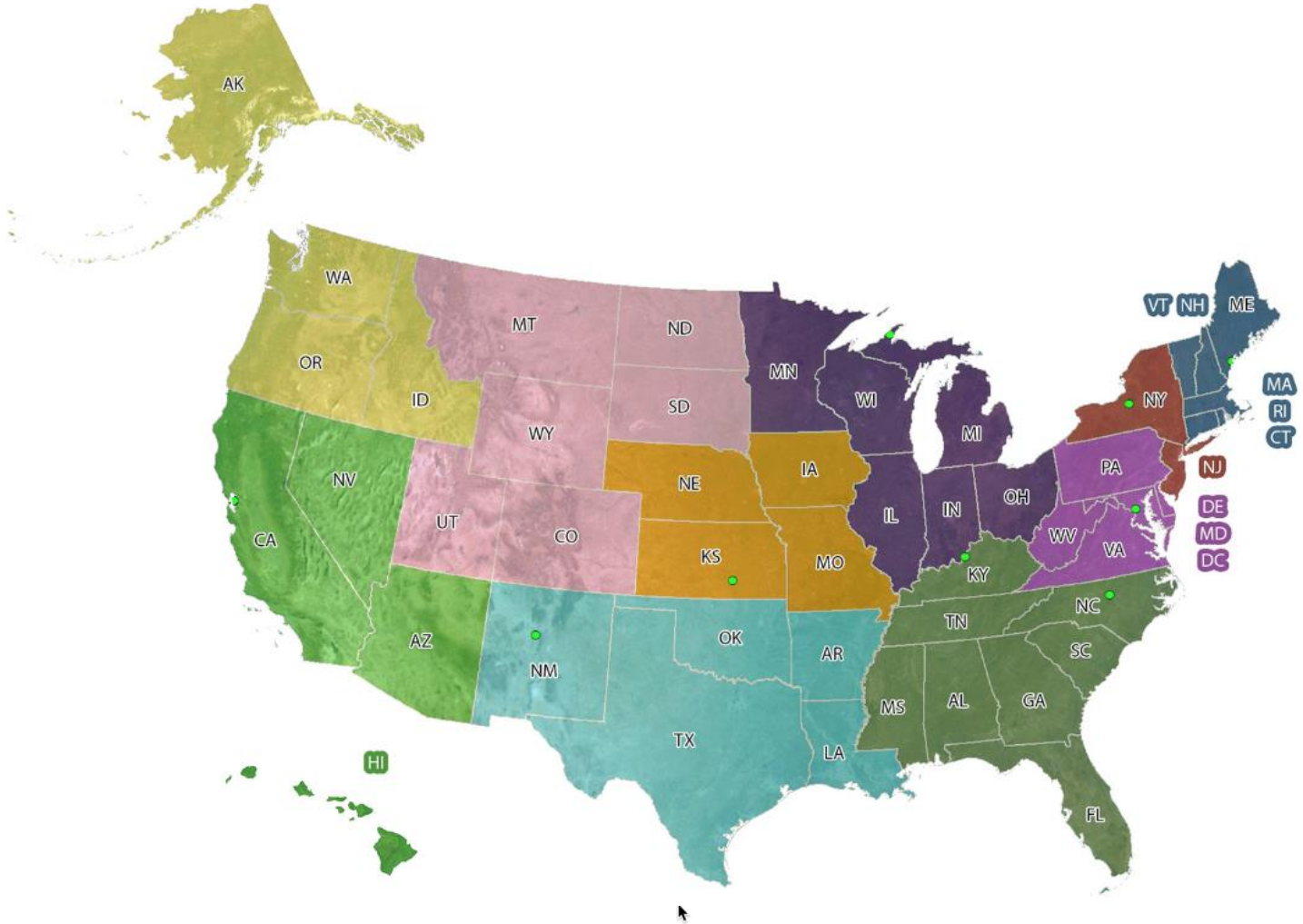
Luke Andrews
Research Scientist

Shannon Pepper
Research Scientist

Sandi Blanton
Research Scientist

Sami Stroud
Communications and Outreach Specialist

Heather Sissons
Program Planning Officer



SOUTHWEST ENVIRONMENTAL FINANCE CENTER

New England Environmental Finance Center

WICHITA STATE UNIVERSITY
HUGO WALL SCHOOL OF PUBLIC AFFAIRS
Environmental Finance Center

Environmental Finance Center
Syracuse University

ENVIRONMENTAL FINANCE CENTER

EFCWest
Environmental Finance Center West

UNC ENVIRONMENTAL FINANCE CENTER

ENVIRONMENTAL FINANCE CENTER AT SACRAMENTO STATE

Great Lakes Environmental Infrastructure Center
Environmental Finance Center for Region 5

EFCN
environmental finance center network

OVER 32,000
WATER AND WASTEWATER PROFESSIONALS TRAINED

685
COMMUNITIES AND UTILITIES HAVE RECEIVED DIRECT HELP FROM EFCN

Some Areas of Expertise

Asset Management

Rate Setting and Fiscal Planning

Leadership Through Decision-making and Communication

Water Loss Reduction

Energy Management Planning

Accessing Infrastructure Financing Programs

Workforce Development

Water Conservation Finance and Management

Collaborating with Other Water Systems

Resiliency Planning

Managing Drought

We promote **self-reliance** through innovative **training** and **assistance** focused on **actionable results**.

Utility Challenges:
What are you facing?

Financial Compliance Issues

Regulatory Compliance Issues

New Mexico Environment Department
Ground Water Quality Bureau - Monitoring Report

DP #: #####_____ Facility Name: *Some Village Sewer Plant*

Today's Date: ***08/31/2023*** This report is due (circle date): Feb 1 May 1 **Aug 1** Nov 1 Year: ***2023***

Name and phone number of GWQB Reviewer: Avery Young, 505-699-8564, avery.young@env.nm.gov

The following page is provided to assist you in reporting your monitoring data. Retain a copy of all monitoring reports for your records. **Keep this original so that copies can be made for future submittals.**

Influent Meter readings Meter units (and multiplying factor): _____
Please fill in the first line with the previous reading for ease of calculation

Date read	Meter reading	Monthly water use (gal)	Volume of water used for irrigation (gal)	Monthly discharge volumes (gal)	Gallons per day
Apr 30, 2023	***15772072***	450960	0	450960	15032
May 31, 2023	***16673397***	901325	0	901325	29075
Jun 30, 2023	***17322297***	648900	0	648900	21630

Treatment Issues

Treatment Issues

Water Quality

Water Loss

Source Issues

Capacity Issues

Aging Infrastructure

Lead Service Lines


There's a lot
you can't see

Funding Issues

Utility Challenges:

How are you facing them?

Developing Roadmaps

Concrete plans to get from here to there…

If only it were so easy.

Build a Team

SOUTHWEST
ENVIRONMENTAL
FINANCE CENTER

RCAC
www.rcac.org

NEW MEXICO
RURAL WATER
ASSOCIATION

NEW MEXICO
FINANCE**AUTHORITY**


WE WANT YOU

Assess Your Capacity

How you got here, doesn't really matter

Assess Your Operations

Assess Your Operations

would you fly?

Regulatory Compliance

- Who issued your permit(s)?
- What is your permit status?
- What are your testing requirements?
- What are your reporting requirements?
- What's your violation status?
- Etc.

D

T

N

Nov 1 Year: *2023*

ung@env.nm.gov

monitoring reports for your
als.

In
Pl

Da	ischarge gal)	Gallons per day
Ap		15032
Ma		29075
Ju		21630

Regulatory Compliance

Do you have SOPs to follow?

Are staff following them?

Do you need assistance drafting SOPs?

Do you and your staff need training?

Etc.

D

T

N

Nov 1 Year: *2023*

ung@env.nm.gov

monitoring reports for your
als.

In
Pl

Da					ischarge gal)	Gallons per day
Ap						15032
May 31, 2023	***16673397***	901325	0	901325		29075
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Financial Compliance: Loans & Regs

Who are your lenders?

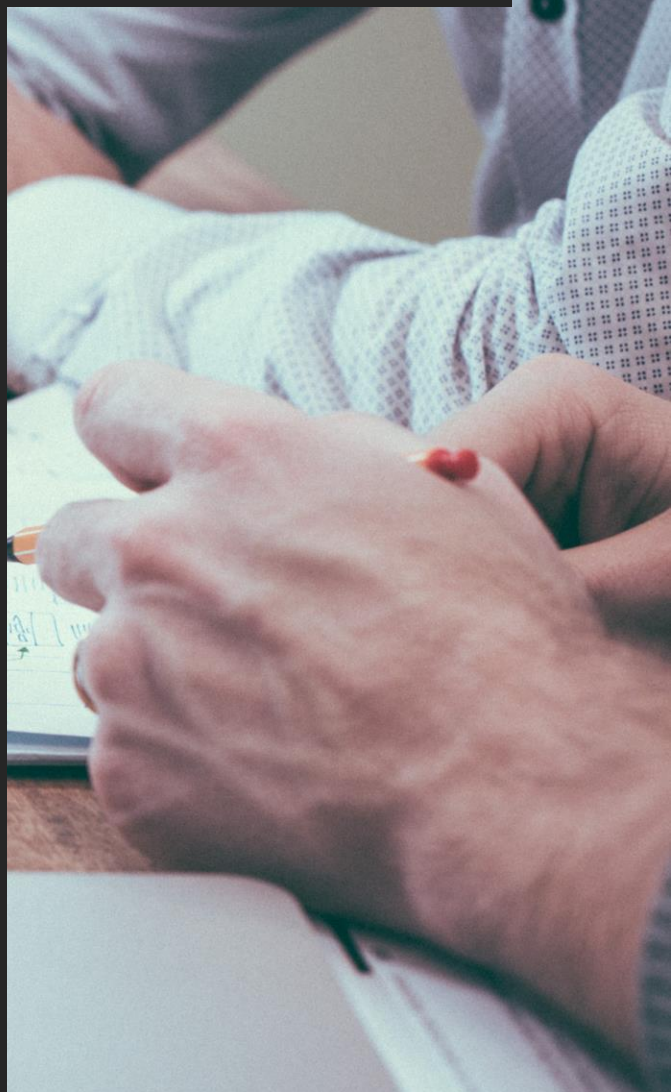
What is your repayment status?

Do you know what's in the agreements?

What are your reporting requirements?

Are you completing audits as required?

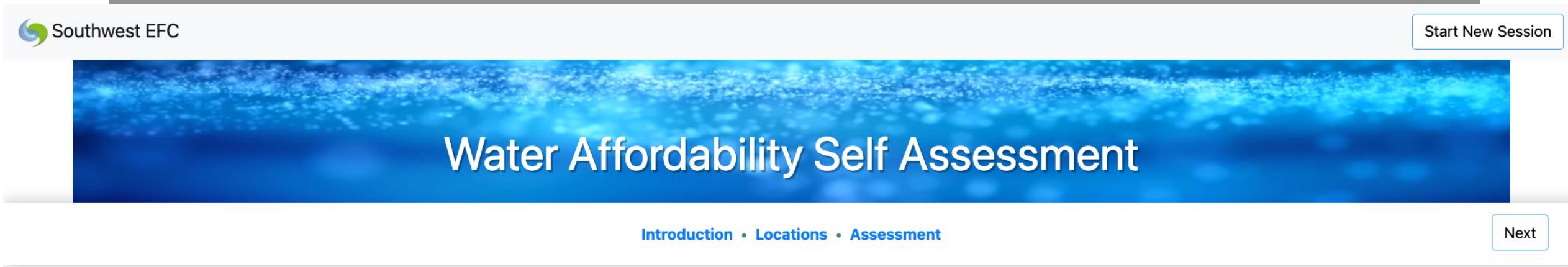
Etc.



Assess Your Finances

Assess Your Finances

Assess Your Affordability



Instructions

Welcome to the Southwest Environmental Finance Center's Water Affordability Self-Assessment. You can use this tool to assess whether your rates are affordable according to several different measures, including median household income, percentage of population at or below the poverty level, and the number of hours at minimum wage needed to pay the bill. You can also use it to do an analysis of which of your customers would be most affected by changes in your rate structure.

The data used for these comparisons come from the US Census Bureau and is specific for your location(s). You will have an opportunity to select your locations (state, county, city and zip codes) to the level that works best for you.

At any point in your use of this tool, you can leave the tool and the data you entered will be saved for you. When you return using the same browser on the same computer, you can continue your work, unless you clear your browser cache or choose "Start New Session" in the upper right of the page.

NOTE: This tool uses cookies. If you have disabled cookies in your browser, the tool will not work. If you want to use the tool, please go into your browser and allow cookies.

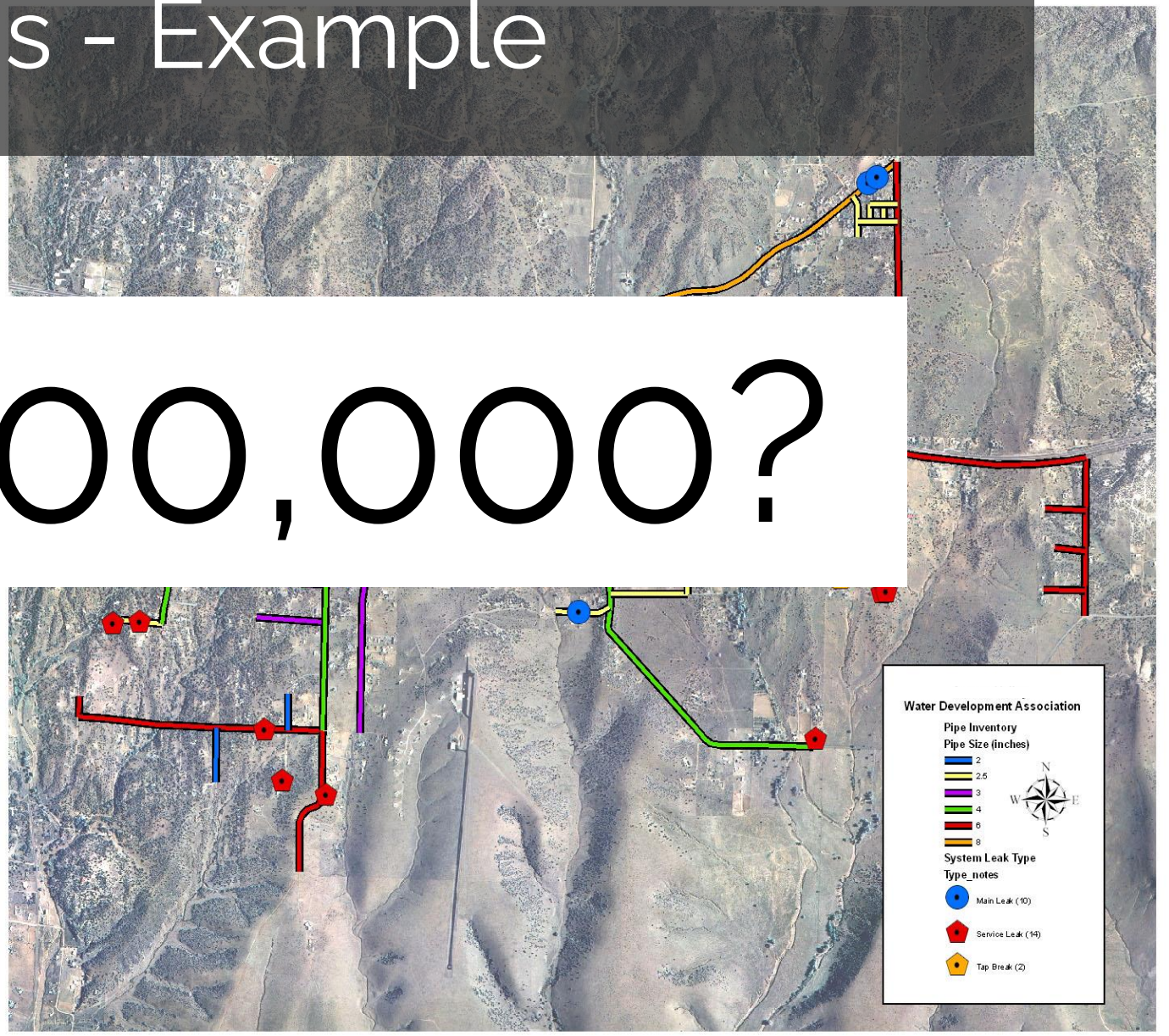
Assess Capital Improvement Plans

Assess your needs


Are you making the right decisions?

Assess Your Needs - Example

$5,000,000?



Assess Your Needs - Example

$4,950,000 Saved

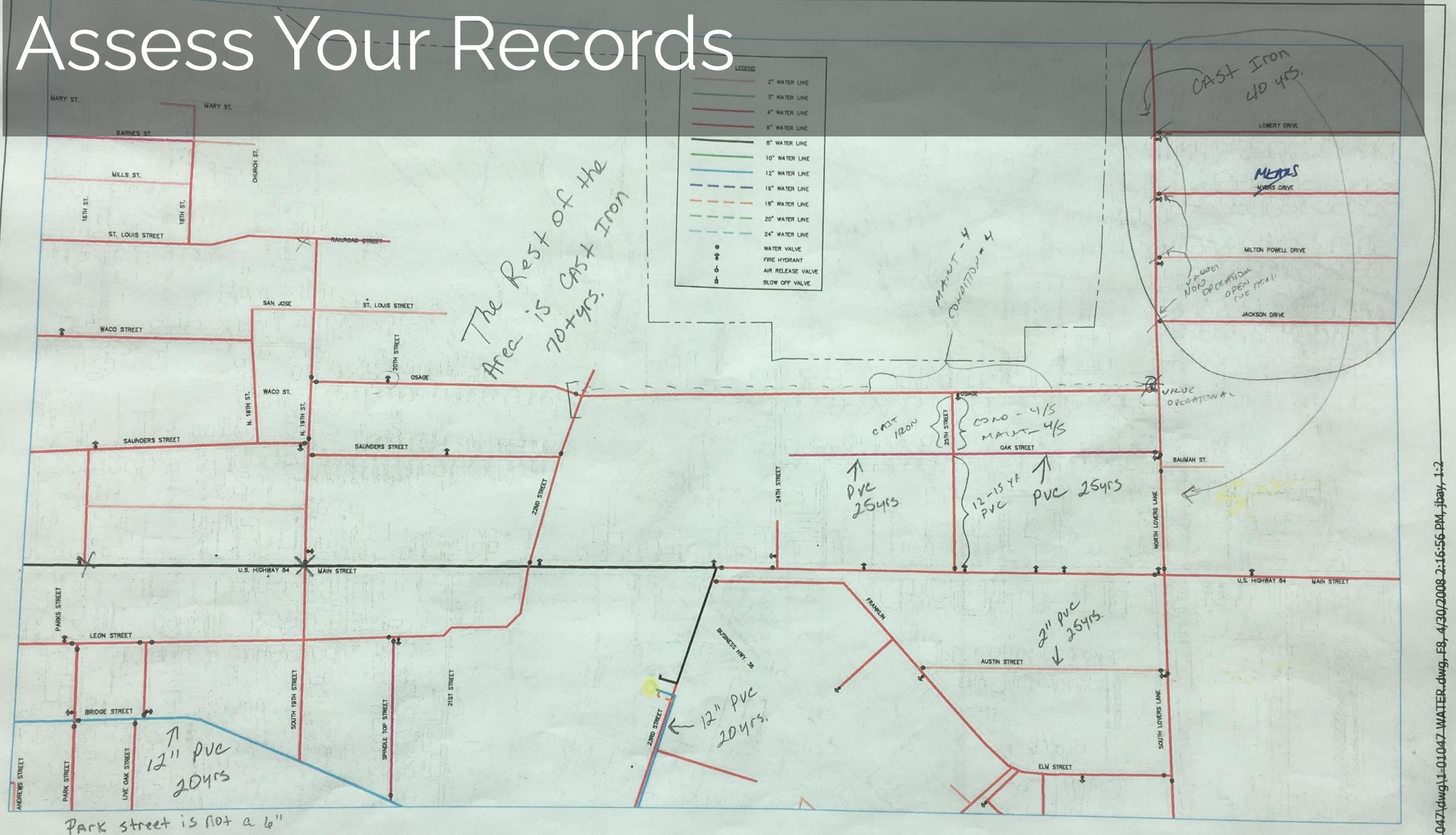
Monetary Benefit: Cost Avoidance

Non-Monetary Benefits: Social & Environmental

Assess Your Records

	A	B	C	D	E	F	G	H	I
1	**WATER & SEWER LEAK CALL LOG**								
2	WA/SE	DATE	TIME	ADDRESS	USER	CALLED	NOTES	UPDATES	WORK TICKET #
3	WA	2/9/2016	10:38AM	OLD HILLSIDE NURSING HOME	BH	RM	FIRE HYDRANT RUNNING	CREW WORKING ON LINE PER RM @ 10:50AM	48674
4	STREET	2/9/2016	11:24AM	1008 PLEASANT	DD	RM	LEAK IN THE STREET	FIXED	48642
5	SE	2/10/2016	10:00AM	400 FINNIMORE	BH	RM	SEWER BACKED UP AT STREET	UNCLOGGED	48683
6	WA	2/10/2016	10:00AM	3502 RIVER ROAD	BH	RM	A CAR HIT THE FIRE HYDRANT	FIXED DA/CN 2-22-16	48644
7	WA	2/10/2016	10:00AM	CORNER OR 22ND AND WACO	BH	RM	LEAK FILLING UP CULVERT		
8	SE	2/10/2016	10:36AM	2015 WACO STREET	DD	RM	RAW SEWER SHOOTING UP IN AIR FROM CLEAN OUT	UNCLOGGED	48684
9	WA	2/10/2016	3:15PM	1105 S LOVERS LANE	BH	RM	METER LEAK	FIXED	48647
10	WA	2/10/2016	3:30PM	206 FIELDSTONE	DD	RM	LEAK-METER WAS RUN OVER BROKE CUTOFF	FIXED	48648
11	WA	2/10/2016	3:32PM	119 N 28 ST	BH	RM	LEAK @ METER	FIXD	48649
12	WA	2/10/2016	3:57PM	119 N 28 ST	BH	RM	CUSTOMER CALLED AGAIN AND SAID METER LEAK WAS VERY LARGE. CALLED RODNEY TO LET HIM KNOW	FIXED	48649
13	WA	2/11/2016	9:00AM	28TH AND MEARS	BH	RM	WATER SHOOTING OUT OF MANHOLE	FIXED	48687
14	WA	2/11/2016	9:00AM	BLESSINGS BUILDING	BH	RM	WATER LEAK BEHIND BUILDING	FIXED	48671
							CALLED LAST NIGHT AT 8 AND THEY		

Assess Your Records



The Team Can Help Assess Solutions

What assistance is needed?

Which team members have the tools?

Which team members have capacity?

Financial Compliance Assistance

Regulatory Compliance Assistance

New Mexico Environment Department
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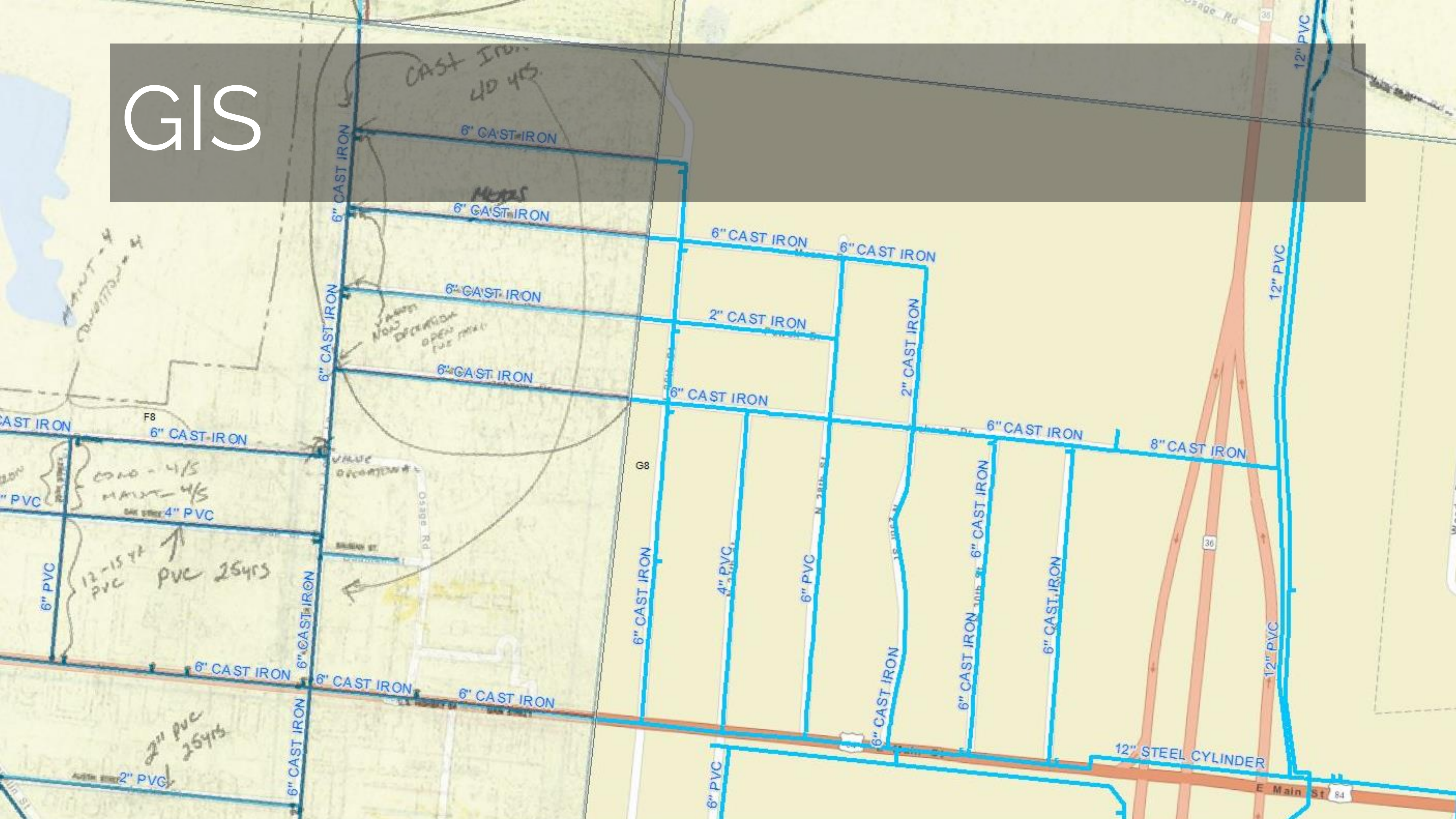
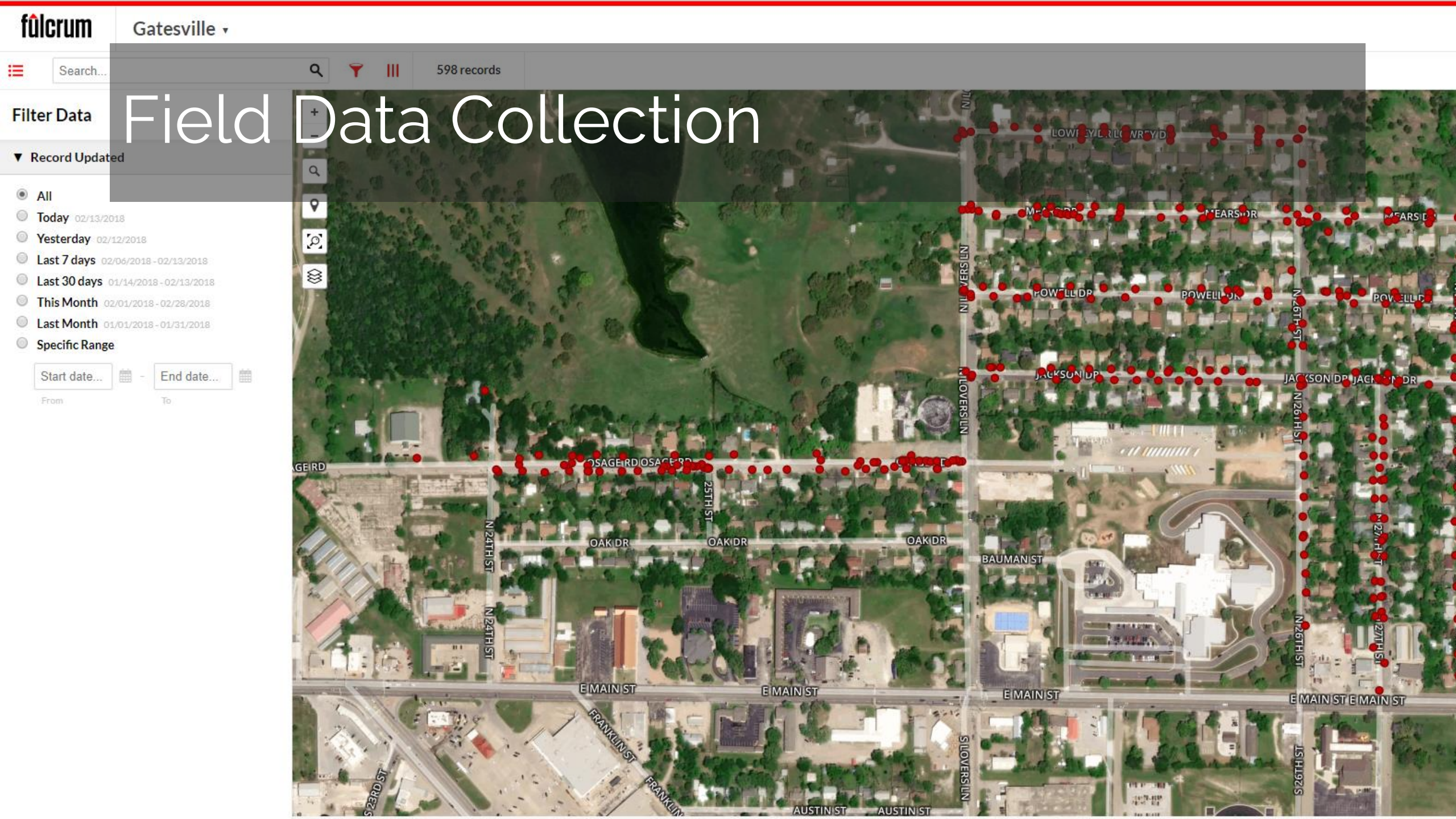
Jun 30, 2023	***17322297***	648900	0	648900	21630

GIS

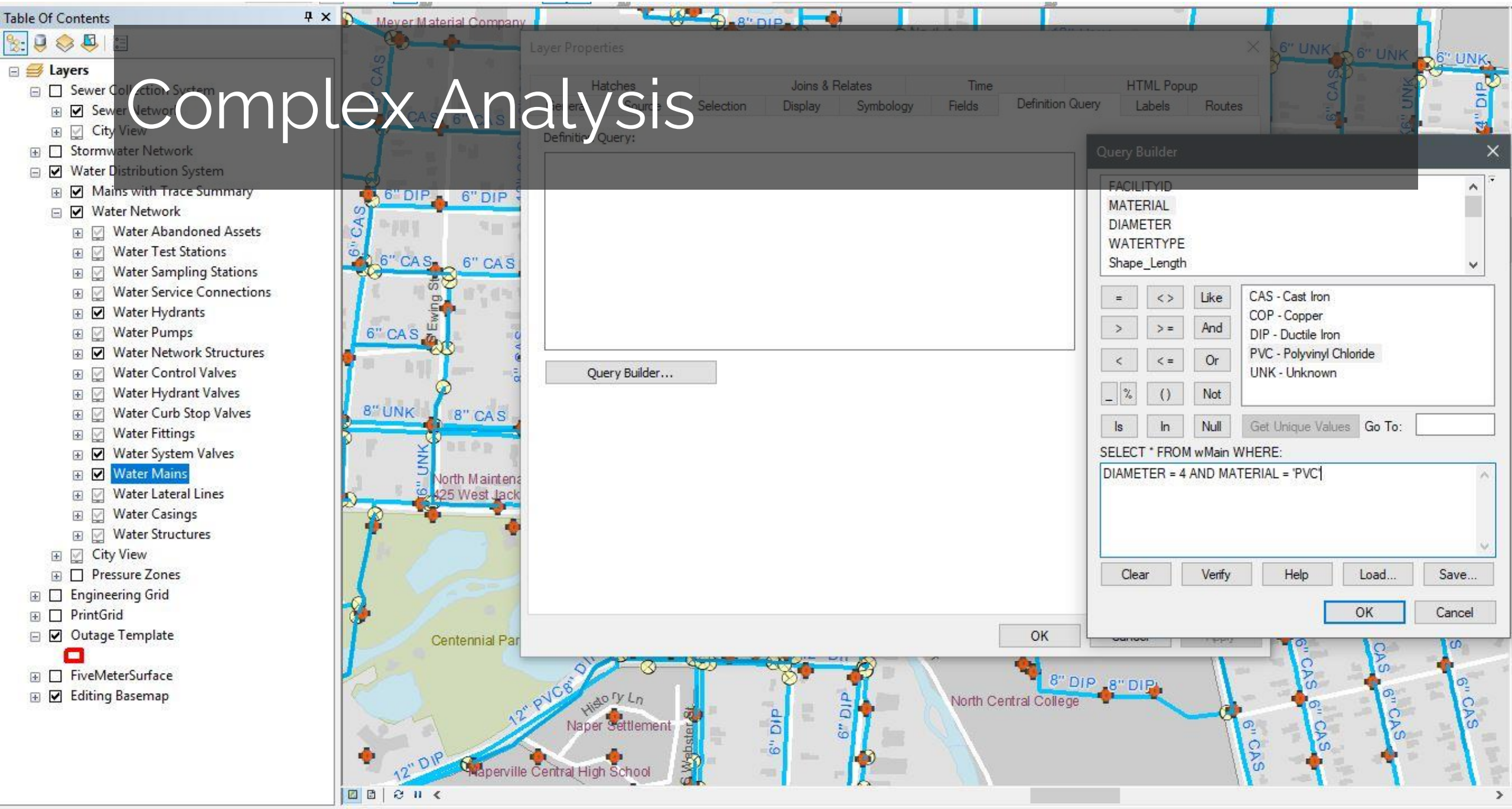

6" CAST IRON
2" CAST IRON
4" PVC
6" PVC
8" CAST IRON
12" PVC
12" STEEL CYLINDER
2" PVC
E Main St
Osage Rd
F8
G8

Field Data Collection

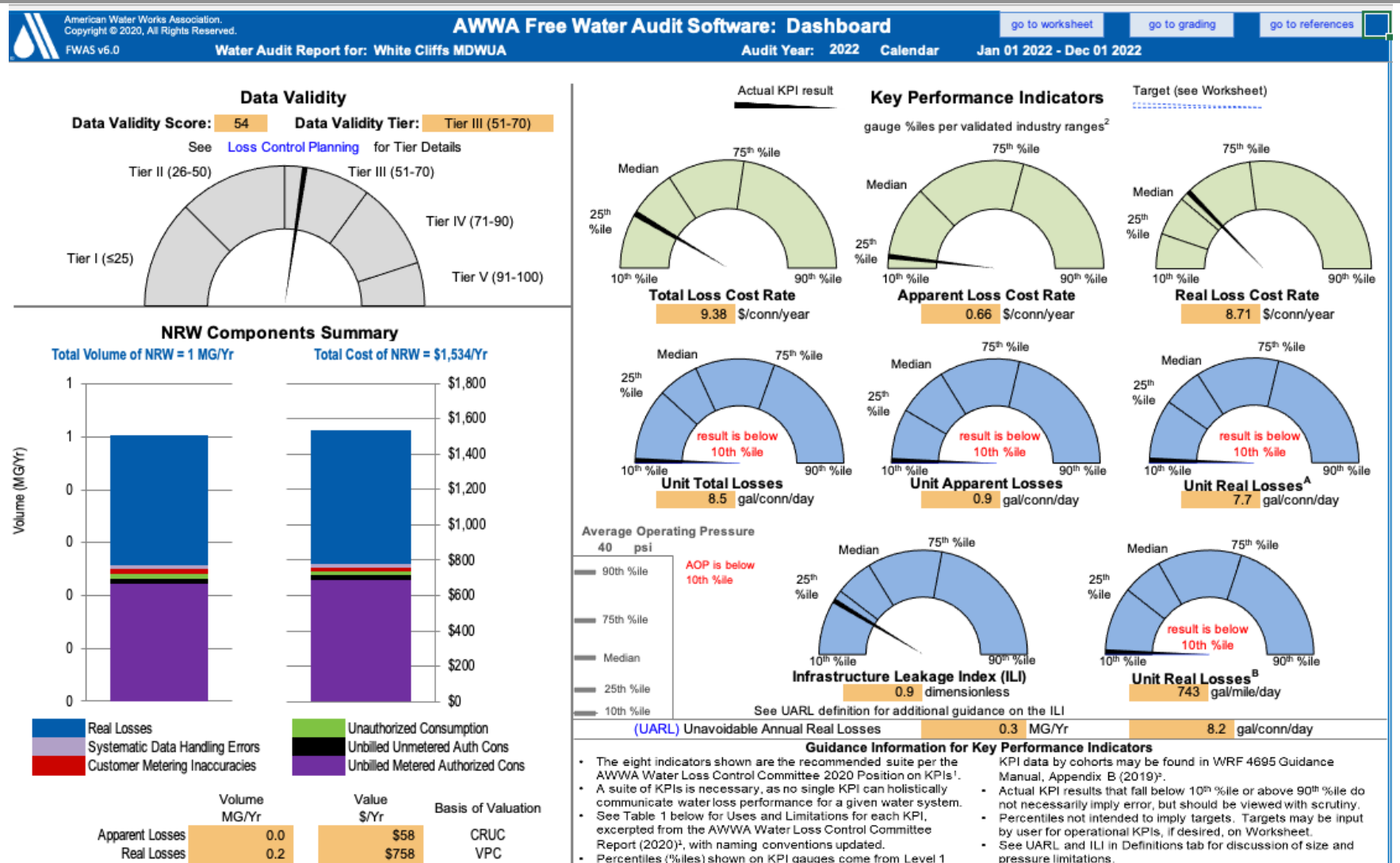


GIS Map Development

Complex Analysis



Water Audits



American Water Works Association.
Copyright © 2020, All Rights Reserved.
FWAS v6.0

AWWA Free Water Audit Software: Dashboard

go to worksheet | go to grading | go to references

Water Audit Report for: White Cliffs MDWUA — **Audit Year: 2022** Calendar — Jan 01 2022 - Dec 01 2022

Data Validity

Data Validity Score: 54 **Data Validity Tier:** Tier III (51-70)

See Loss Control Planning for Tier Details

Tier I (≤25) | Tier II (26-50) | Tier III (51-70) | Tier IV (71-90) | Tier V (91-100)

NRW Components Summary

Total Volume of NRW = 1 MG/Yr — Total Cost of NRW = $1,534/Yr

Volume (MG/Yr): 1, 1, 0, 0, 0, 0, 0

$1,800 | $1,600 | $1,400 | $1,200 | $1,000 | $800 | $600 | $400 | $200 | $0

Real Losses
Systematic Data Handling Errors
Customer Metering Inaccuracies
Unauthorized Consumption
Unbilled Unmetered Auth Cons
Unbilled Metered Authorized Cons

	Volume MG/Yr	Value $/Yr	Basis of Valuation
Apparent Losses	0.0	$58	CRUC
Real Losses	0.2	$758	VPC

Key Performance Indicators

Actual KPI result — Target (see Worksheet)

gauge %iles per validated industry ranges[2]

Total Loss Cost Rate
9.38 $/conn/year

Apparent Loss Cost Rate
0.66 $/conn/year

Real Loss Cost Rate
8.71 $/conn/year

Unit Total Losses
8.5 gal/conn/day

Unit Apparent Losses
0.9 gal/conn/day

Unit Real Losses[A]
7.7 gal/conn/day

Average Operating Pressure
40 psi
AOP is below 10th %ile
90th %ile | 75th %ile | Median | 25th %ile | 10th %ile

Infrastructure Leakage Index (ILI)
0.9 dimensionless

Unit Real Losses[B]
743 gal/mile/day

See UARL definition for additional guidance on the ILI

(UARL) Unavoidable Annual Real Losses: 0.3 MG/Yr | 8.2 gal/conn/day

Guidance Information for Key Performance Indicators

- The eight indicators shown are the recommended suite per the AWWA Water Loss Control Committee 2020 Position on KPIs[1].
- A suite of KPIs is necessary, as no single KPI can holistically communicate water loss performance for a given water system.
- See Table 1 below for Uses and Limitations for each KPI, excerpted from the AWWA Water Loss Control Committee Report (2020)[1], with naming conventions updated.
- Percentiles (%iles) shown on KPI gauges come from Level 1 KPI data by cohorts may be found in WRF 4695 Guidance Manual, Appendix B (2019)[2].
- Actual KPI results that fall below 10th %ile or above 90th %ile do not necessarily imply error, but should be viewed with scrutiny.
- Percentiles not intended to imply targets. Targets may be input by user for operational KPIs, if desired, on Worksheet.
- See UARL and ILI in Definitions tab for discussion of size and pressure limitations.

Pipe Break Analysis

Southwest Environmental Finance Center

Start New Session

Introduction

This Break Rate Analysis Tool was developed by the Southwest Environmental Finance Center (SW EFC) to compare annual main breaks from your system to the US/Canadian average break rates for 7 pipe materials published by Dr. Steven Folkman in **2012 and 2018**. These studies clearly demonstrate that the average failure rates for different pipe materials vary dramatically, from a low of 2.6 failures/100 miles/year for polyvinyl chloride (PVC) to a high of 34.8 failures/100 miles/year for cast iron (CI) in the most recent study.

This tool uses data you provide about the material makeup of your system and the number of breaks by material to calculate a theoretical, weighted-average break rate for your system based on the study averages – in other words, the break rate for your system if all of the pipe materials were breaking at the US/Canadian averages.

Asset Management

SOUTHWEST ENVIRONMENTAL FINANCE CENTER

Southwest EFC Home Resources Switchboards

Asset Management Switchboard

The Southwest Environmental Finance Center has partnered with EPA to create a repository of documentation and tools related to Asset Management.

Whether you are new to the Asset Management process or just need a refresher on a specific topic, the resource you are looking for is probably here. If you're unable to find what you're looking for, reach out and tell us about it.

If you would like to contribute by having a resource added to the repository, please email the Southwest Environmental Finance Center (by clicking on the link below) and tell us about it. We welcome your feedback and strive to serve your utility and water systems at large.

This is a collection of Asset Management Resources from a variety of sources. Some of them are from the SW EFC, many are not.

Email SW EFC

Phone (505) 277-0644

Rate Setting & Affordability

UNC SCHOOL OF GOVERNMENT Environmental Finance Center

Tool developed by the Environmental Finance Center at the University of North Carolina, Chapel Hill

Water & Wastewater Residential Rates Affordability Assessment Tool

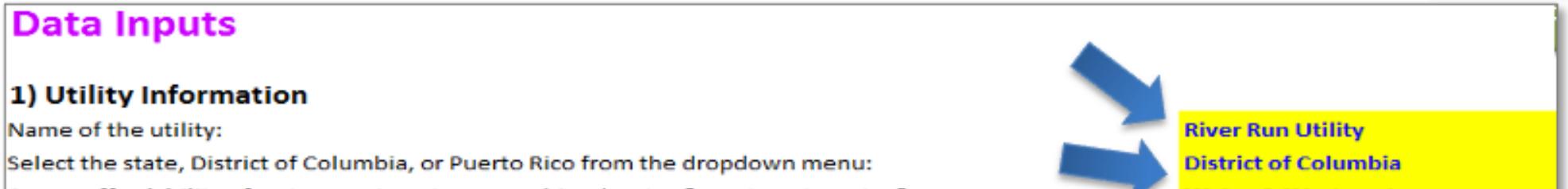
Interactive Spreadsheet Tool

Version 1.9 (June 14th, 2021)

This tool allows users to enter relevant Census data on their service community to help assess the affordability of their water or wastewater rates on their residential customers. The tool also allows for a new rate structure to be entered to see how affordability compares from one rate structure to the next.

In the "Inputs" worksheet, fill in all yellow-colored cells.

Begin data inputs



Commit to the Process & Priorities

Commit Time to Deliverables

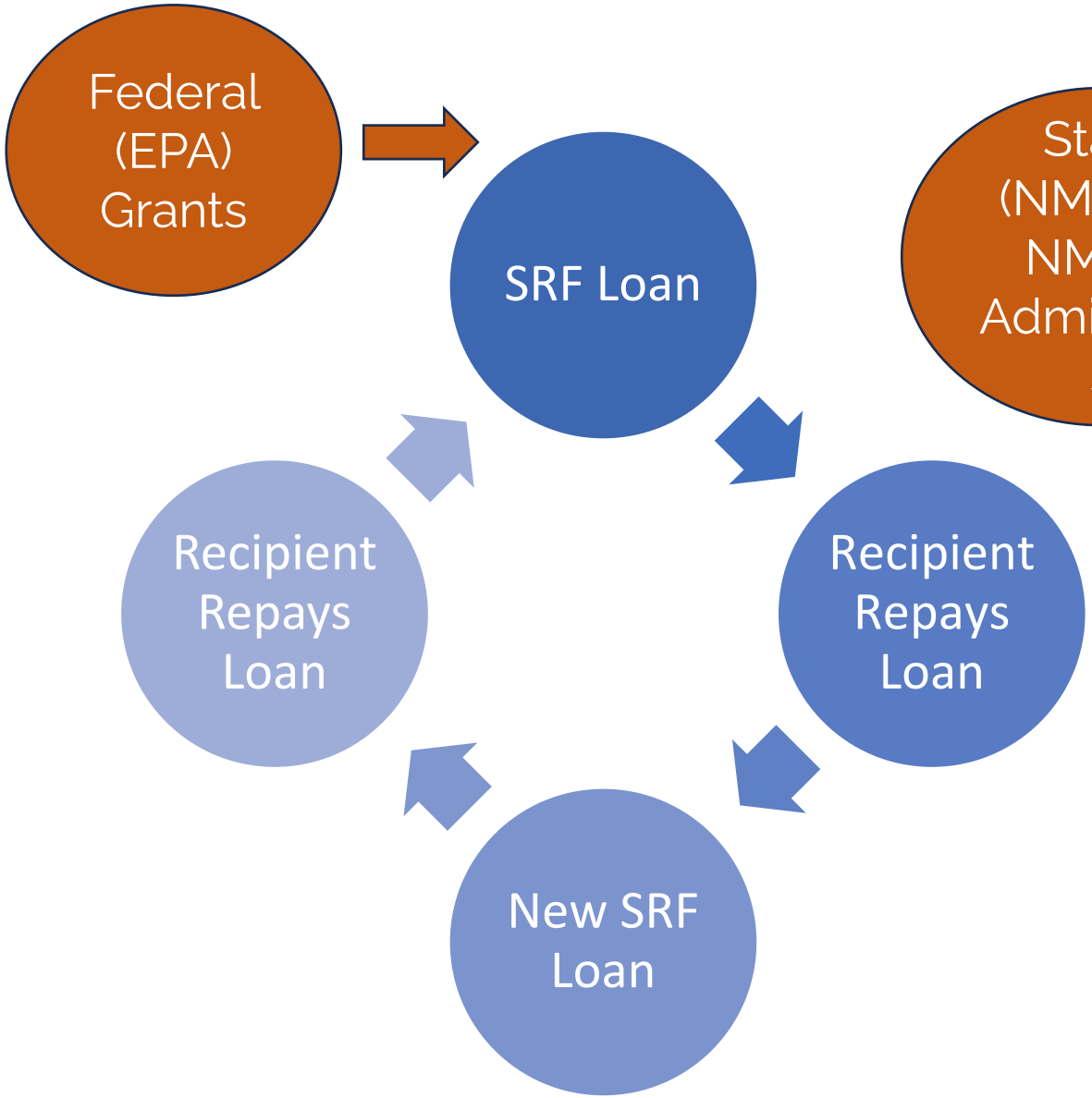
Developing Your Roadmap

Teams, Assessment, Analysis, Prioritization, Deliverables, Timelines, Planning, Commitment

State Revolving Funds

What's the big deal?

The SRF programs are like water infrastructure banks



Money grows in the fund over time

Low interest rates due to grants for each state/territory from the federal government

New Mexico SRF Programs:

Clean Water State Revolving Fund (CWSRF)

- NMED Construction Programs Bureau (CPB) administers
- Funds wastewater, stormwater, and pollution/water quality related projects
- Addresses **water quality**

Drinking Water State Revolving Loan Fund (CWSRLF)

- NMED and NM Finance Authority administer
- Funds drinking water projects
- Addresses **public health**

Bipartisan Infrastructure Law (BIL)

$

SRF programs distribute the money

Makes SRF more accessible to small & disadvantaged systems/communities

Priority to lead service line replacement and "emerging contaminants"

What can you use SRF funds for?

Generally, Construction:
New & Rehabilitated Assets

CWSRF: Non-point source projects

Why should I go for SRF funding?

LOTS of federal $ coming in to NM through SRFs

$ and assistance for small, disadvantaged communities/systems

New $ for LSL & Emerging Contaminants

VERY low interest rates (0-1.0%)

Grants (principal forgiveness) available

TA providers like us are here to help with the whole process

Compliance Issues?

SRFs want to help

GROUNDWATER PERMIT COMPLIANCE **50 POINTS POSSIBLE**

Project addresses on-going violations of a ground water Discharge Permit or the WQCC Regulations for which NMED has issued a:	
• Administrative Compliance Order	50 points
• Notice of Violation	30 points
• Notice of Non-compliance	20 points
• Project is designed to meet permit requirements or project is undertaken voluntarily by entity, but will result in greater ground water protection	15 points
• Project does not address compliance issue	0 points

SURFACE WATER PERMIT COMPLIANCE **50 POINTS POSSIBLE**

Project addresses an enforcement action by a regulatory agency and the facility is currently in significant non-compliance.	50 points
Project addresses a facility's voluntary efforts to resolve a possible violation and will mitigate the issuance of a Consent Order, Notice of Violation, or other enforcement action.	30 points
Project is designed to maintain permit compliance, meet new permit effluent limits, or provide a degree of treatment beyond permit requirements.	15 points
Project does not address compliance issue.	0 points

CWSRF: Do you qualify as disadvantaged?

Affordability Criteria Categories:

- Income
- Population or population trends
- Unemployment

More info on NMED website:

https://www.env.nm.gov/funding-opportunities

DWSRLF: Do you qualify as disadvantaged?

Disadvantaged Criteria:

- Median Household Income

More info on NMFA website, in 2024 Intended Use Plan:

https://www.nmfinance.com/water-project-fund/drinking-water-state-revolving-loan-fund

"Come as you are" but ...

Getting your ducks in a row **before** applying for SRF will get your project prioritized for funding

Technical Assistance

SW EFC & Others

There are MANY sources of help

SOUTHWEST
ENVIRONMENTAL
FINANCE CENTER

RCAC
www.rcac.org

NEW MEXICO
RURAL WATER
ASSOCIATION

NEW MEXICO
FINANCE**AUTHORITY**

Teams work best – but you have to be committed

What do we include in TA?

Training – in person and virtual

Resources – Tools & Guidance

Resources – Multi-Media

Direct In Person Assistance to Water/WW entities

Virtual Assistance to Water/WW entities

CONTACT INFORMATION

SOUTHWEST
ENVIRONMENTAL
FINANCE CENTER

email: swefc@unm.edu

Department of Civil Engineering
1 University of New Mexico
Albuquerque, NM 87131
505-277-0644
http://swefc.unm.edu

NMED PARTNER PRESENTATIONS

1:45PM – 2:30PM

Discharge Permits

Avery Young, Domestic Waste Team
Groundwater Quality Bureau
New Mexico Environment Department

NMED
New Mexico Environment Department

GROUND WATER DISCHARGE PERMITS

8/31/2023

Avery Young
Domestic Waste Team Lead
New Mexico Environment Department

Contact Information

New Mexico Environment Department

Ground Water Quality Bureau

PO Box 5469, Santa Fe, NM 87502

Phone (505) 827-2900

Fax (505) 827-2965

www.env.nm.gov

Jason Herman, Program Manager

Email - Jason.herman@env.nm.gov

Phone - (575) 649-3871

Melanie Sandoval, Industrial Waste Team Lead

Email – melanie.sandoval2@env.nm.gov

Phone – (505) 660-7892

Avery Young, Domestic Waste Team Lead

Email – Avery.Young@env.nm.gov

Phone - (505) 699-8564

Jennifer Fullam, Reuse Team Lead

Email – Jennifer.Fullam@env.nm.gov

Phone - (505) 670-2496

Ground Water Quality Bureau

Mission Statement:

Our mission is to preserve, protect, and improve New Mexico's ground water quality for present and future generations

Presentation Outline

- Regulatory framework
- Regulatory authority
- Legal/institutional basis for discharge permits
- Types of discharge permits
- Permitting process
- Different parts of a permit
- Questions

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
- (OCD for Oil and Gas related Operations)

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:

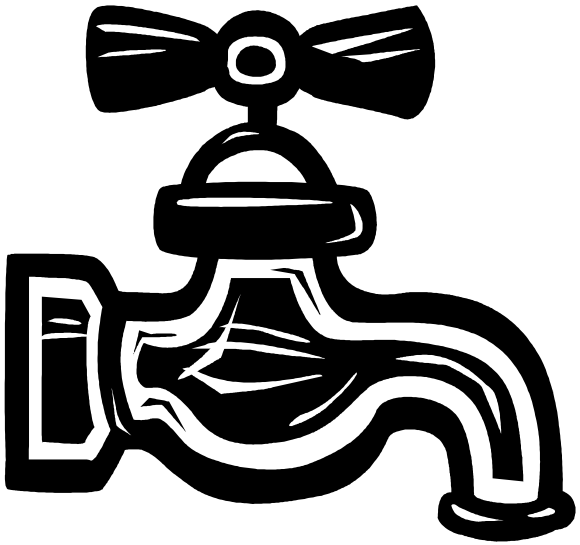
- Require Discharge Permits (DP) for discharges which may impact groundwater quality.
- Ensure compliance with WQCC Regulations and Discharge Permits.
- Require abatement plans in the event of groundwater contamination.

Regulatory Authority

- Ground Water Quality Standards for common contaminants in domestic discharges:
  - Nitrate-Nitrogen (NO_3-N) 10 mg/L
  - Chloride (Cl) 250 mg/L
  - Total Dissolved Solids (TDS) 1,000 mg/L
- Of these contaminants, nitrate is of particular concern because it has the potential to impact human health.
- Other groundwater quality standards can be found in Section 20.6.2.3103 NMAC.

Question #1

Why protect groundwater quality?



Approximately what % of public water supplies and private water systems in New Mexico rely on groundwater?

- ❑ **25%**
- ❑ **50%**
- ✓ **75%**

Question #2

What contaminant most frequently exceeds groundwater standards in New Mexico?

- ❑ TCE
- ✓ Nitrate
- ❑ Radon
- ❑ Perchlorate
- ❑ Benzene

Nitrate

- Nitrate can be converted to nitrite, which replaces oxygen in the bloodstream.
- Methemoglobinemia occurs when the ability of red blood cells to carry oxygen throughout the body is diminished.
- Infants are at greatest risk of developing methemoglobinemia or “blue-baby syndrome” from excessive intake of nitrate.

Which Permit is Which?

Discharge Permit

- Groundwater
- NM Water Quality Act
- GWQB

NPDES Permit

- Surface water
- US Clean Water Act
- EPA & SWQB

You may need both. Many facilities that have a NPDES permit also need DP, and their requirements differ.

Who Needs a Discharge Permit?

Anyone discharging wastewater or other contaminants that could potentially impact groundwater (e.g., land application, impoundments, leachfields, sub-surface irrigation).

- Industrial Permits
- Domestic Permits
- Underground Injection Control General Permits

Industrial Discharge Permits

Any discharge quantity-

- Manufacturing plants
- Power plants
- Hydrocarbon landfarms
- Remediation
- Septage disposal
- Car washes
- Breweries

Domestic Discharge Permits

Greater than 5,000 gpd

- Municipal treatment plants
- Mobile home/RV parks
- Sludge disposal
- Schools
- Campgrounds
- Subdivisions

UIC General Permits

Class V UIC injection wells -

- Hydrocarbon remediation
- In-Situ bioremediation
- Must be overseen by another regulatory agency
- Injection of amendments

Question #3

Discharging to a Leachfield >5,000 gpd?

DP?

✓ **Yes**

Question #4

Discharging Treated Wastewater by Irrigation?

DP?

✓ **Yes**

Question #5

Discharging to an Impoundment?

DP?

✓ **Yes**

Question #6

Discharging Sludge?

DP?

✓ **Maybe**

Question #7

Discharging to a Stream?

DP?

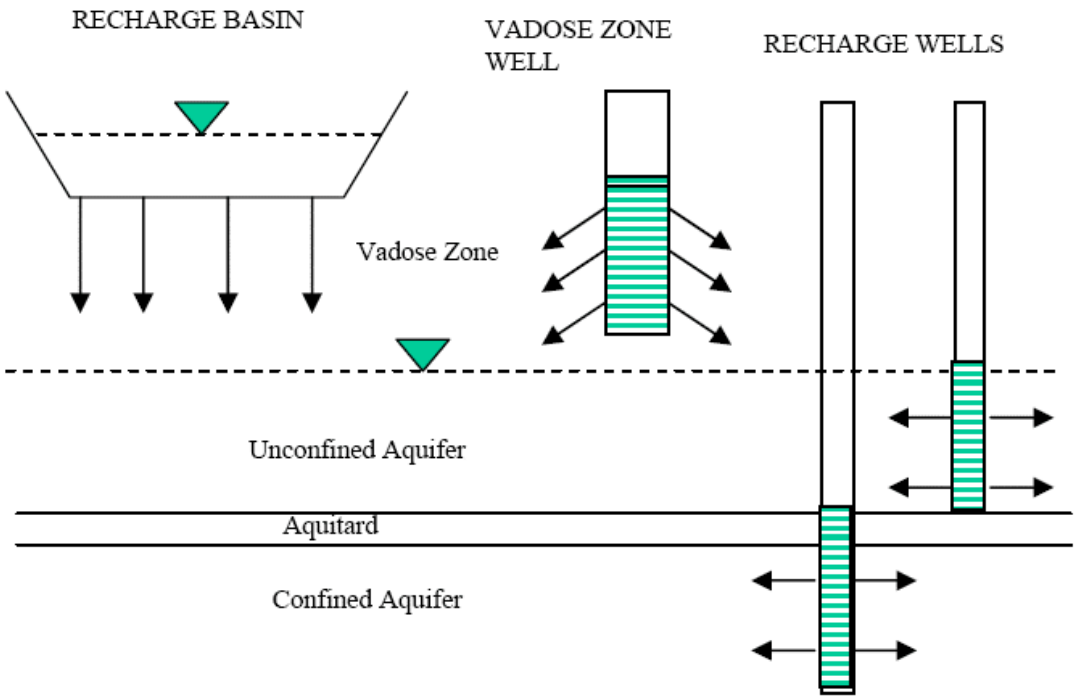
✓ **Maybe**

Question #8

Injecting water into an aquifer for later recovery?

DP?

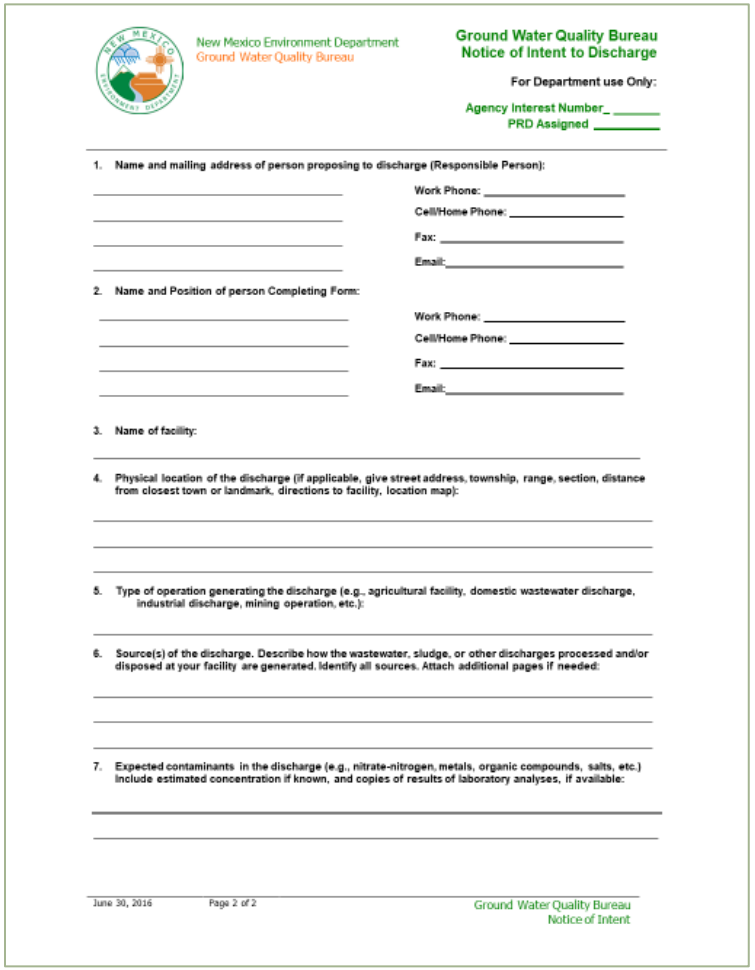
✓ **Yes**



Discharge Permitting Process

Unsure if You Need a Discharge Permit?

Submit a Notice of Intent to Discharge (NOI)



New Mexico Environment Department
Ground Water Quality Bureau

Ground Water Quality Bureau
Notice of Intent to Discharge

For Department use Only:

Agency Interest Number_ _____
PRD Assigned _____

1. Name and mailing address of person proposing to discharge (Responsible Person):

Work Phone: _____
Cell/Home Phone: _____
Fax: _____
Email: _____

2. Name and Position of person Completing Form:

Work Phone: _____
Cell/Home Phone: _____
Fax: _____
Email: _____

3. Name of facility:

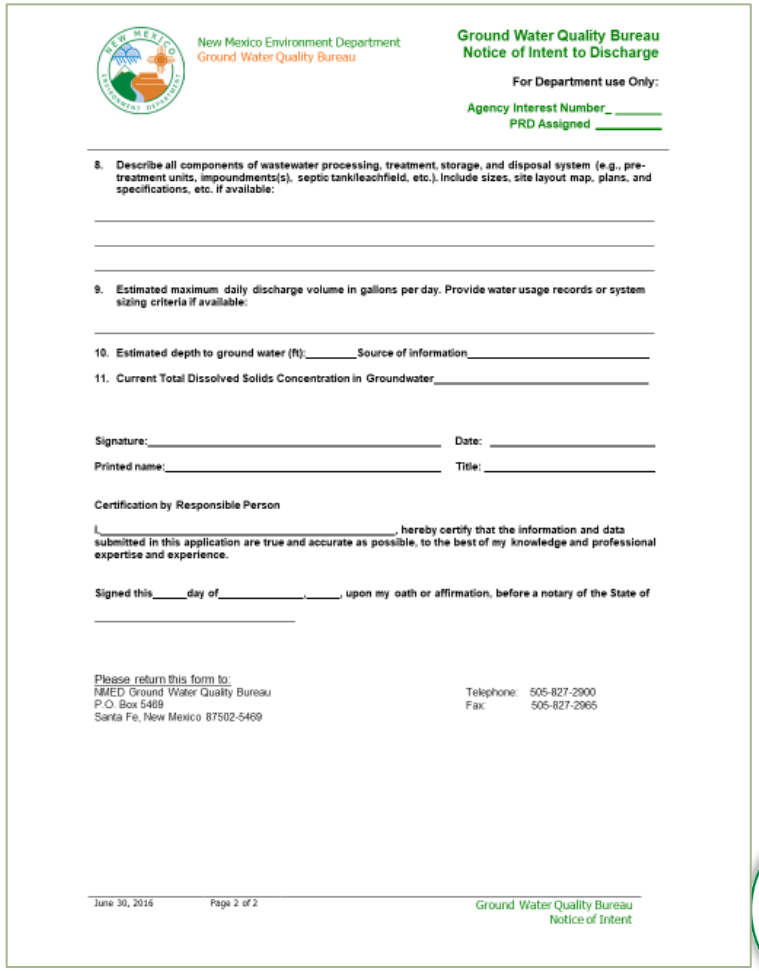
4. Physical location of the discharge (if applicable, give street address, township, range, section, distance from closest town or landmark, directions to facility, location map):

5. Type of operation generating the discharge (e.g., agricultural facility, domestic wastewater discharge, industrial discharge, mining operation, etc.):

6. Source(s) of the discharge. Describe how the wastewater, sludge, or other discharges processed and/or disposed at your facility are generated. Identify all sources. Attach additional pages if needed:

7. Expected contaminants in the discharge (e.g., nitrate-nitrogen, metals, organic compounds, salts, etc.) include estimated concentration if known, and copies of results of laboratory analyses, if available:

June 30, 2016 Page 2 of 2 Ground Water Quality Bureau Notice of Intent



New Mexico Environment Department
Ground Water Quality Bureau

Ground Water Quality Bureau
Notice of Intent to Discharge

For Department use Only:

Agency Interest Number_ _____
PRD Assigned _____

8. Describe all components of wastewater processing, treatment, storage, and disposal system (e.g., pre-treatment units, impoundments(s), septic tank/leachfield, etc.). Include sizes, site layout map, plans, and specifications, etc. if available:

9. Estimated maximum daily discharge volume in gallons per day. Provide water usage records or system sizing criteria if available:

10. Estimated depth to ground water (ft):_____Source of information_____

11. Current Total Dissolved Solids Concentration in Groundwater_____

Signature:_____ Date: _____

Printed name:_____ Title: _____

Certification by Responsible Person

I,_____, hereby certify that the information and data submitted in this application are true and accurate as possible, to the best of my knowledge and professional expertise and experience.

Signed this_____day of_____,_____, upon my oath or affirmation, before a notary of the State of _____

Please return this form to:
NMED Ground Water Quality Bureau
P.O. Box 5469
Santa Fe, New Mexico 87502-5469

Telephone: 505-827-2900
Fax: 505-827-2965

June 30, 2016 Page 2 of 2 Ground Water Quality Bureau Notice of Intent

Discharge Permit Application

NEW MEXICO ENVIRONMENT DEPARTMENT
GROUND WATER QUALITY BUREAU

GROUND WATER DISCHARGE PERMIT APPLICATION

Instructions for completing the application are included in the form itself and in the Supplemental Instructions found at the back of the application. You may fill out the application manually, or a Microsoft Word version may be downloaded from www.env.nm.gov (Ground Water Quality) and filled out electronically. Timely processing of this application is contingent upon the technical completeness of the submission. Failure to provide all of the information pursuant to Section 20.6.2.3106 NMAC, following notice of technical deficiency, may result in denial of the application.

Send two complete paper copies AND one electronic copy of this application, with the filing fee to:
Program Manager
Ground Water Pollution Prevention Section
New Mexico Environment Department
P.O. Box 5469
Santa Fe, NM 87502

Introduction

Facility Name: _____

GWQB – Date of Receipt
(Department use only)

For Existing Discharge Permits:
DP Number: _____
Expiration Date: _____

Type of Discharge (*check one*):
- ☐ Domestic
- ☐ Industrial
- ☐ Agricultural
- ☐ Mining

Type of Application (*check appropriate box*)
- ☐ New – new facility
- ☐ New – existing (unpermitted) facility
- ☐ Renewal only
- ☐ Modification only

"modification" includes a change in the location of a discharge, and/or increase in the quantity of the discharge, and/or a change in the quality of the discharge.

- ☐ Renewal and Modification

If this application is to *modify* or *renew and modify* a Discharge Permit, what is the reason for modification of the Discharge Permit? Describe the proposed changes that would result in modification, meaning a change in the location of a discharge, and/or an increase in the quantity of the discharge, and/or a change in the quality of the discharge.

Fees Included with Application
All applicants are required to submit a **$100 Application Filing Fee**. An additional fee will be assessed prior to permit issuance. Permit fees are listed in section 20.6.2.3114 NMAC. **Make checks payable to: NMED-Ground Water Quality Bureau**

Application Checklist
The following checklist has been provided to assist in ensuring that the application is complete prior to submission (*check all that apply*):

- ☐ Part I. Administrative Completeness
  - ☐ $100 Application Filing Fee
  - ☐ A. General Information
  - ☐ B. Public Notice Information
  - ☐ C. Public Notice Preparation
- ☐ Part II. Technical Completeness
  - ☐ A. Discharge Volume and Description
  - ☐ B. Identification and Physical Description of Facility
  - ☐ C. Flow Metering
  - ☐ D. Ground Water Monitoring
  - ☐ E. Engineering and Surveying (electronic copies)
  - ☐ F. Land Application Area
- ☐ Part III. Site-Specific Proposals
- ☐ Part IV. Electronic (PDF) format of Maps and Logs is required (additional paper copies of maps and logs are optional and may be requested by the Department if required for review)
  - ☐ A. Surface Soil Survey and Vadose Zone Geology
  - ☐ B. Location Map
  - ☐ C. Flood Zone Map

Discharge Permit Application Types

- New
  - No DP associated with the site
- Renewal only
  - Existing DP that will soon expire
  - No changes occurred or planned
- Renewal and Modification
  - Existing DP that will soon expire
  - Changes have occurred or are planned
- Modification only
  - Existing DP
  - Changes have occurred or are planned
- UIC General Permit
  - Underground Injection Control activities only

Modifications

- A modification is a change in quality, quantity, or location of discharge.
- NMED reserves the right to require a permit modification if NMED determines that the requirements of Section 20.6.2 NMAC or the standards of Section 20.6.2.3103 NMAC are being or may be violated.
- A Discharge Permit can be modified during the 5 year term period.
- All applications for modification must go through the entire permitting and public notice processes.
- NMED may require more restrictive conditions than what is proposed in the application.

Public Notice 1 (PN-1)

- New, Renewal/Modification and Modification
  - 2'x3' synopsis sign at discharge location
  - Post flyer at offsite location
  - Mail flyer to property owners within 1/3 mile
  - Mail flyer to discharge site property owner
  - Publish synopsis in local paper
- Renewal only
  - Mail flyer to discharge site property owner
  - Publish synopsis in local paper
- All - PN-1 Affidavit Submission by permittee

Public Notice 2 (PN-2)

- In some cases a Preliminary Draft is provided to the permittee for review and comments
- NMED notifies the public and interested parties of the availability of a Draft Permit
- 30 Day comment period allowing for public comment and request for hearing
- Once completed the permit will either be issued or follow the public hearing process

Discharge Permit Approval

- Discharge Permits are issued for a 5-year term.
- Permit conditions may require installations or submissions be completed by a certain date

Permit Format

- Introduction
- Findings
- Authorization to Discharge
- Conditions
  - Operational Plan
  - Monitoring, Reporting, and Other Requirements
  - Contingency Plan
  - Closure Plan
- General Terms and Conditions

Operational Plan

Operational Plan

Description of how the facility will operate to protect groundwater quality and human health and to prevent contamination; typically includes:

- Wastewater treatment and/or storage.
- Storm water collection and management.
- Land application of wastewater, proper disposal.
- Public access limitations, such as fencing and signs.

Operational Responsibilities

- Locate, read and maintain a copy of the Discharge Permit (DP)
- Learn correct procedures for collecting samples & sample accordingly
- Properly operate your treatment system
- Maintain records
- Submit monitoring reports complete and on time
- Report all spills
- Notify the GWQB of any changes

Operational Responsibilities

Impoundment Maintenance

- Monthly inspections of berms and liner
- Maintain 2 feet of freeboard

Operational Responsibilities

Fencing

Prevents access by children or dogs (e.g., chain link, field/ woven fencing) and maintained throughout the term of the DP

Operational Responsibilities

Post Signs

Signs indicating:

- The type of facility
- The water is not potable
- Emergency contact information

Operational Responsibilities

Solids Management

Examples Include:

- Impoundments – measure sludge depth
- Mechanical plants – process control testing
- Proper disposal

Monitoring and Reporting

And other requirements

Monitoring, Reporting & Other Req.

Describes what the facility will monitor to ensure groundwater quality protection or identify potential threats or contamination. Sampling and analysis activities to ensure that the wastewater practices are achieving expected results, typically include:

- Preparing and submitting monitoring reports on a routine basis.
- Measuring and recording wastewater flows.
- Measuring wastewater applied to land application fields or disposal areas.
- Tracking nitrogen loading for fields or disposal areas.
- Installing and routinely sampling monitoring wells.
- Routine sampling of wastewater.
- Conducting routine inspections of wastewater system components.

Monitoring, Reporting & Other Req.

- Discharge Volumes
- Wastewater Sampling
- Land Application
- Ground Water Sampling
- Record Keeping

Discharge Volumes - Monitoring

Flow Meters

Discharge Volumes - Reporting

New Mexico Environment Department
Ground Water Quality Bureau

A-2
Monthly Discharge Volumes
(Totalizing Flow Meter)

Facility Name: Melanie's Resort and Spa
DP #: 4555
Reporting Period: from 1/1/22 (mo/yr) 6/30/22 (mo/yr)
Permit Requirement: Submit Monthly Discharge Volumes

Flow meter type: _____
Flow meter units: gallons
(e.g., gallons, acre-feet, hundreds of gallons, etc.)

Month	Date	Meter Reading	Monthly Discharge Volumes
January	1/31/08	98,884,113	750,000
February	2/28/08	99,659,113	775,000
March	3/31/08	100,384,113	725,000
April	4/30/08	101,184,113	800,000
May	5/30/08	101,994,113	810,000
June	6/30/08	102,849,113	
July			
August			

Monitoring, Reporting & Other Req.

- Discharge Volumes
- Wastewater Sampling
- Land Application
- Ground Water Sampling
- Record Keeping

Wastewater Sampling - Effluent

What's your effluent limit?

Contaminants of Concern

	Ground Water Standard
Nitrate-N	10 mg/l
TKN	None
TDS	1,000 mg/l
Chloride	250 mg/l

Reuse Sampling

Guidance for Above Ground Use of Reclaimed Domestic Wastewater

- Effective as of August 2003 and updated January 2007
- Reuse Classes based on Quality and Use
- Purpose
  - ✓ Protect public health
  - ✓ Preserve potable water supplies

Reuse Sampling – Reuse Quality

- Total Nitrogen (TKN + NO_3-N)
- BOD_5
- TSS
- Fecal Coliform or E. coli
- TRC/UV transmissivity

Reuse Sampling – Classes by Use

Table 1. Approved Uses for Reclaimed Wastewater by Class

Class of Reclaimed Wastewater	Approved Uses
Class 1A	All Class 1 uses. *No setback limit* to dwelling unit or occupied establishment.
	Backfill around potable water pipes
	Irrigation of food crops[1]
Class 1B	Impoundments (recreational or ornamental)
	Irrigation of parks, school yards, golf courses [2]
	Irrigation of urban landscaping [2]
	Snow making
	Street cleaning
	Toilet flushing
	Backfill around non-potable piping
Class 2	Concrete mixing
	Dust control
	Irrigation of fodder, fiber, and seed crops for milk-producing animals
	Irrigation of roadway median landscapes
	Irrigation of sod farms
	Livestock watering
	Soil compaction
Class 3	Irrigation of fodder, fiber, and seed crops for non-milk-producing animals
	Irrigation of forest trees (silviculture)

Reuse Sampling – Class 1A

Table 2. Wastewater Quality Requirements and Monitoring Frequencies by Class of Reclaimed Wastewater

Class of Reclaimed Wastewater	Wastewater Quality Parameter	Wastewater Quality Requirements		Wastewater Monitoring Requirements	
		30-Day Average	Maximum	Sample Type	Measurement Frequency
Class 1A	BOD_5	10 mg/l	15 mg/l	Minimum of 6-hour composite	3 tests per week for major WWTP[1]; 1 test per 2 weeks for minor WWTP
	Turbidity	3 NTU	5 NTU	Continuous	Continuous
	Fecal Coliform	5 per 100 ml	23 per 100 ml	Grab sample at peak flow	3 tests per week for major WWTP; 1 test per week for minor WWTP
	TRC or UV Transmissivity	Monitor Only	Monitor Only	Grab sample or reading at peak flow	Record values at peak hourly flow when Fecal Coliform samples are collected

Reuse Sampling – Class 1B

Table 2. Wastewater Quality Requirements and Monitoring Frequencies by Class of Reclaimed Wastewater

Class of Reclaimed Wastewater	Wastewater Quality Parameter	Wastewater Quality Requirements		Wastewater Monitoring Requirements	
		30-Day Average	Maximum	Sample Type	Measurement Frequency
Class 1B	BOD_5	30 mg/l	45 mg/l	Minimum of 6-hour composite	3 tests per week for major WWTP[1]; 1 test per 2 weeks for minor WWTP
	TSS	30 mg/l	45 mg/l	Minimum of 6-hour composite	3 tests per week for major WWTP[1]; 1 test per 2 weeks for minor WWTP
	Fecal Coliform	100 organisms per 100 ml	200 organisms per 100 ml	Grab sample at peak flow	3 tests per week for major WWTP; 1 test per week for minor WWTP
	TRC or UV Transmissivity	Monitor Only	Monitor Only	Grab sample or reading at peak flow	Record values at peak hourly flow when Fecal Coliform samples are collected

Reuse Sampling – Class 2

Class of Reclaimed Wastewater	Wastewater Quality Parameter	Wastewater Quality Requirements		Wastewater Monitoring Requirements	
		30-Day Average	Maximum	Sample Type	Measurement Frequency
Class 2	BOD_5	30 mg/l	45 mg/l	Minimum of 6-hour composite for major WWTP; Grab sample for minor WWTP	1 test per week for major WWTP; 1 test per month for minor WWTP
	TSS	30 mg/l	45 mg/l	Minimum of 6-hour composite for major WWTP; Grab sample for minor WWTP	1 test per week for major WWTP; 1 test per month for minor WWTP
	Fecal Coliform	200 organisms per 100 ml	400 organisms per 100 ml	Grab sample at peak hourly flow	1 test per week for major WWTP; 1 test per month for minor WWTP
	TRC or UV Transmissivity	Monitor Only	Monitor Only	Grab sample or reading at peak hourly flow	Record values at peak hourly flow when Fecal Coliform samples are collected

Reuse Sampling – Class 3

Class of Reclaimed Wastewater	Wastewater Quality Parameter	Wastewater Quality Requirements		Wastewater Monitoring Requirements	
		30-Day Average	Maximum	Sample Type	Measurement Frequency
Class 3	BOD_5	30 mg/l	45 mg/l	Minimum of 3-hour composite for major WWTP[5]; Grab sample for minor WWTP	1 test per week for major WWTP; 1 test per month for minor WWTP
	TSS	75 mg/l	90 mg/l	Minimum of 3-hour composite for major WWTP; Grab sample for minor WWTP	1 test per week for major WWTP; 1 test per month for minor WWTP
	Fecal Coliform	1,000 organisms per 100 ml	5,000 organisms per 100 ml	Grab sample at peak hourly flow	1 test per week for major WWTP; 1 test per month for minor WWTP
	TRC or UV Transmissivity	Monitor Only	Monitor Only	Grab sample or reading at peak hourly flow	Record values at peak hourly flow when Fecal Coliform samples are collected

Monitoring, Reporting & Other Req.

- Discharge Volumes
- Wastewater Sampling
- Land Application
- Ground Water Sampling
- Record Keeping

Land Application

- NMED Guidance for the Above Ground Use of Reclaimed Domestic Wastewater
- Nitrogen Loading Restriction:
  - 125% of crop uptake, or
  - 200 lb/ac/12 months
- Land Application Data Sheets
- Fertilizer Logs
- Surface Disposal Data Sheets

Land Application – LADS

What you will need:

Month	Monthly Discharge Volumes
January	750,000
February	775,000
March	725,000
April	800,000
May	810,000
June	855,000

Sampling Point	Sampling Date	TKN mg/l	NO_3-N mg/l
Lagoon	1/15/08	8.5	8.6
Lagoon	1/16/08	6.1	9.2
Lagoon	1/17/08	11.2	10.8

Land Application – LADS

New Mexico Environment Departmen
Ground Water Quality Bureau

Land Application Data Sheet
Last Updated: June 27, 2002

DP#: 5555 FACILITY NAME: Melanie's Resort & Spa

FIELD #: parks ACRES: 35.0 REPORT PERIOD - FROM: 1-Jan-08 (month/day/yr) TO: 30-Jun-08 (month/day/yr)

CROP: turf YIELD: NITROGEN UPTAKE OF CROP(1):

WASTE TYPE	DATE/MONTH OF APPLICATION	A VOLUME OF EFFLUENT APPLIED(2) ac ft	B LAB RESULTS(3) (TKN + NO3) mg/l	C NITROGEN CONCENTRATIO (B x 2.719) lbs/ac ft	D TOTAL NITROGEN (A x C) lbs N	E NITROGEN APPLIED (D/acres) lbs N/acre	APPLICATION METHOD Flood, Sprinkler,
Example (150 acres)	Month	15	350 + 2 = 352	352 x 2.719 = 957	15 x 957 = 14355	14355 / 150 = 96	Center Pivot
Effluent	Jan	2.30					
	Feb						
	Mar						
	Jun						
	Jul						
	Aug						
	ting Period - TOTALS						

750,000 gals/325,850 gal/af

Month	Monthly Discharge Volumes
January	750,000
February	775,000

(1) Contact your local County Extension Agent or Natural Resource Conservation Service

* Use one form per field and/or crop

Land Application – LADS

New Mexico Environment Departmen
Ground Water Quality Bureau

Land Application Data Sheet
Last Updated: June 27, 2002

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Example (150 acres)	Month	15	350 + 2 = 352	352 x 2.719 = 957	15 x 957 = 14355	14355 / 150 = 96	Center Pivot
	Jan	2.30	17.1				Sprinkler
	Feb						
	Mar						
	Aug						
	Sep						
	Oct						
	Nov						
	Reporting Period - TOTALS						

Sampling Point	Sampling Date	TKN mg/l	NO_3-N mg/l
Lagoon	**1/15/08**	**8.5**	**8.6**

(1) Contact your local County Extension Agent or Natural Resource Conservation Service

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Land Application – LADS

New Mexico Environment Departmen
Ground Water Quality Bureau

Land Application Data Sheet
Last Updated: June 27, 2002

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Example (150 acres)	Month	15	350 + 2 = 352	352 x 2.719 = 957	15 x 957 = 14355	14355 / 150 = 96	Center Pivot
Effluent	Jan	2.30	17.1	46.5			Sprinkler
	Feb						
	Mar						
	Apr						
	May						
	Jun						
	Jul						
	Aug						
	Sep						
	Oct						
	Nov						
				Reporting Period - TOTALS			

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Land Application – LADS

New Mexico Environment Departmen
Ground Water Quality Bureau

Land Application Data Sheet
Last Updated: June 27, 2002

DP#: 5555 FACILITY NAME: Melnaie's Hotel & Spa

FIELD #: parks ACRES: 35.0 REPORT PERIOD - FROM: 1-Jan-08 (month/day/yr) TO: 30-Jun-08 (month/day/yr)

CROP: turf YIELD: NITROGEN UPTAKE OF CROP[1]:

WASTE TYPE	DATE/MONTH OF APPLICATION	A VOLUME OF EFFLUENT APPLIED[2] ac ft	B LAB RESULTS[3] (TKN + NO3) mg/l	C NITROGEN CONCENTRATIO (B x 2.719) lbs/ac ft	D TOTAL NITROGEN (A x C) lbs N	E NITROGEN APPLIED (D/acres) lbs N/acre	APPLICATION METHOD Flood, Sprinkler,
Example (150 acres)	Month	15	350 + 2 = 352	352 x 2.719 = 957	15 x 957 = 14355	14355 / 150 = 96	Center Pivot
Effluent	Jan	2.30	17.1	46.5	107		Sprinkler
	Feb						
	Mar						
	Apr						
	May						
	Jun						
	Jul						
	Aug						
	Sep						
	Oct						
	Nov						
				Reporting Period - TOTALS			

(1) Contact your local County Extension Agent or Natural Resource Conservation Service

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Land Application – LADS

New Mexico Environment Departmen
Ground Water Quality Bureau

Land Application Data Sheet
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Example (150 acres)	Month	15	350 + 2 = 352	352 x 2.719 = 957	15 x 957 = 14355	14355 / 150 = 96	Center Pivot
Effluent	Jan	2.30	17.1	46.5	107.0	3.1	Sprinkler
	Feb						
	Mar						
	Apr						
	May						
	Jun						
	Jul						
	Aug						
	Sep						
	Oct						
	Nov						
				Reporting Period - TOTALS	**107**	**3**	

(1) Contact your local County Extension Agent or Natural Resource Conservation Service

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Land Application – LADS

New Mexico Environment Departmen
Ground Water Quality Bureau

Land Application Data Sheet
Last Updated: June 27, 2002

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Example (150 acres)	Month	15	350 + 2 = 352	352 x 2.719 = 957	15 x 957 = 14355	14355 / 150 = 96	Center Pivot
Effluent	Jan	2.3	17.1	46.5	107.0	3.1	Sprinkler
	Feb	**2.4**	**15.3**	**41.6**	**98.9**	**2.8**	
	Mar	2.2	22.0	59.8	133.1	3.8	
	Apr	2.5	12.4	33.7	82.8	2.4	
	May	2.5	18.9	51.4	127.7	3.6	
	Jun	2.6	23.7	64.4	169.1	4.8	
	Jul						
	Aug						
	Sep						
	Oct						
	Nov						
				Reporting Period - TOTALS	**718.7**	**20.5**	

(1) Contact your local County Extension Agent or Natural Resource Conservation Service

* Use one form per field and/or crop

Monitoring, Reporting & Other Req.

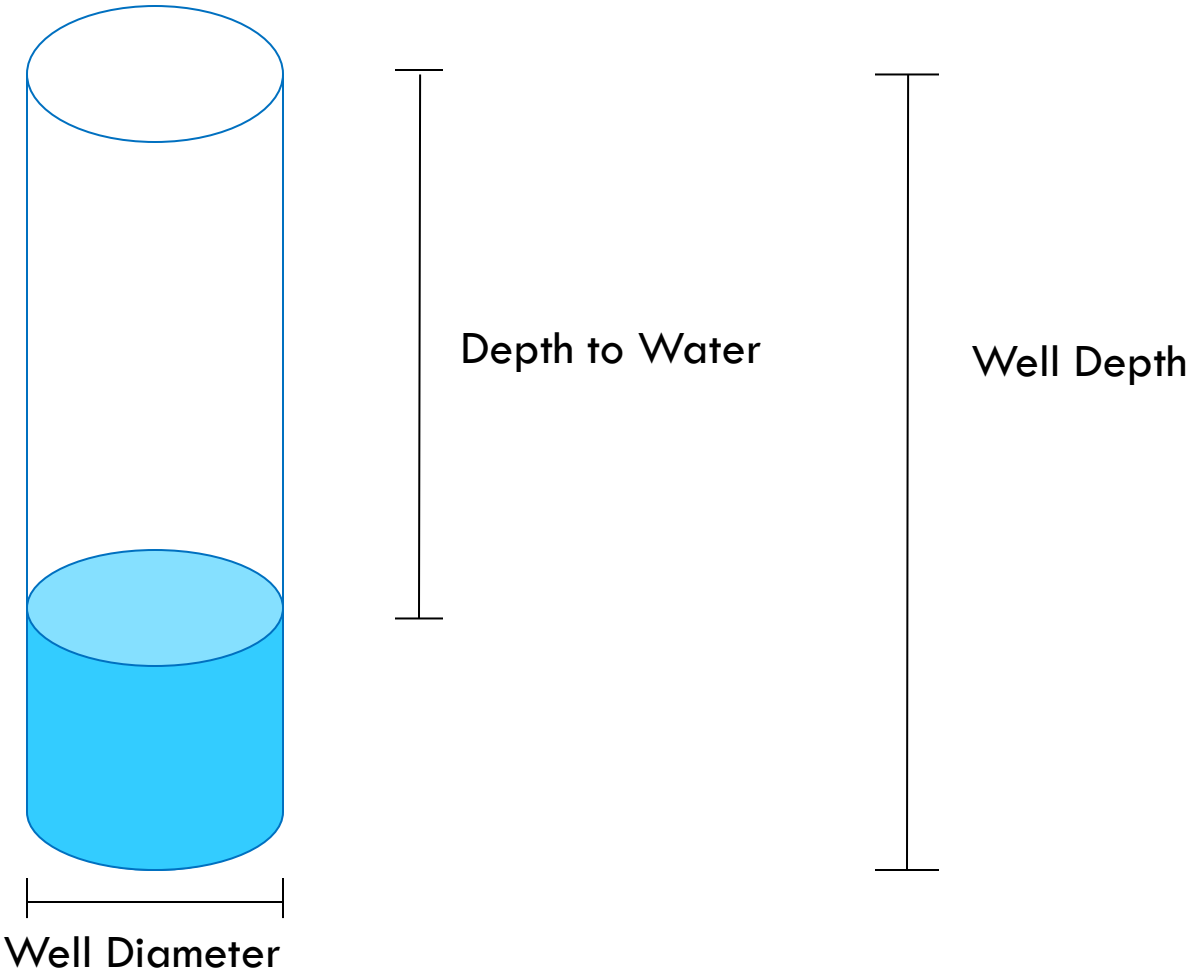
- Discharge Volumes
- Wastewater Sampling
- Land Application
- Ground Water Sampling
- Record Keeping

Groundwater Sampling

- Review permit requirements
- Get equipment ready
- Measure depth to water
- Purge three well volumes
- Sample well
- Preserve samples and send to lab

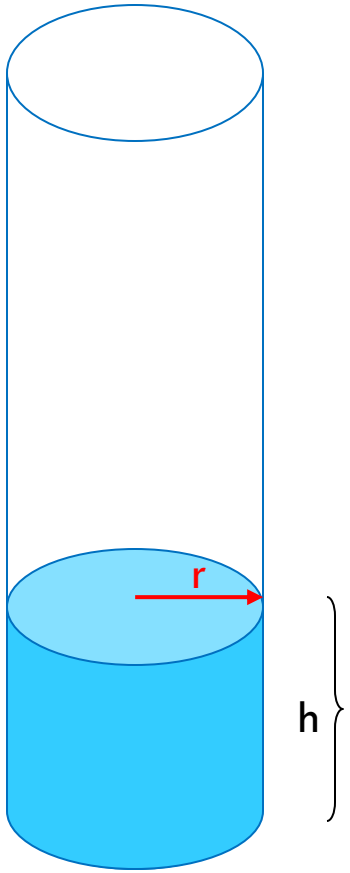
Groundwater Sampling

Calculating Purge Volume



Groundwater Sampling

Calculating Purge Volume



$$A = \pi r^2$$

$$V = \pi r^2 h$$

This volume x 3

Groundwater Monitoring Worksheet and Reference Chart

onitoring well # d location	A Top of well casing (Step 6.c.)	B Water Line (Step 6.d.)	C Depth to water (A - B) (Step 6.e.)	D Total depth of well (Step 1.e.)
MW 1	100.2’	2.2’	98’	118’

E Linear feet of water in well (D - C) (Step 7.b)	F Diameter of well (Step 7.c.)	G Gallons of water per linear foot (Step 7.d.)	H Volume of water in the well (G x E) (Step 7.e.)	I Volume of water to be purged (H x 3) (Step 8.a.)
20’	2”	.16	3.2 gal	9.6 gal

rence Chart

side well eter (inches)	Gallons of water per linear foot
1	.04
2	.16
3	.37
4	.65
6	1.47
8	2.61

Example of Sample Label

Site Name: _____ **DP #** _____

Date of sampling: _____ **Time of sampling:** _____

Location of sampling (e.g. monitoring well ID/location): _____

Constituents sampled for (e.g. TKN, TDS, etc….) _____

Sample taken by: _____

Groundwater Sampling

Calculating Purge Volume – Easy Way

Linear Feet of Water in Well = Well Depth – Depth to Water

Gallons of Water in Well = Linear Feet x Gallons of Water per Linear Foot

Purge Volume = Gallons of Water in Well x 3

Reference Chart

Inside well diameter (inches)	Gallons of water per linear foot
1	.04
2	.16
3	.37
4	.65
6	1.47
8	2.61
10	4.08
12	5.88

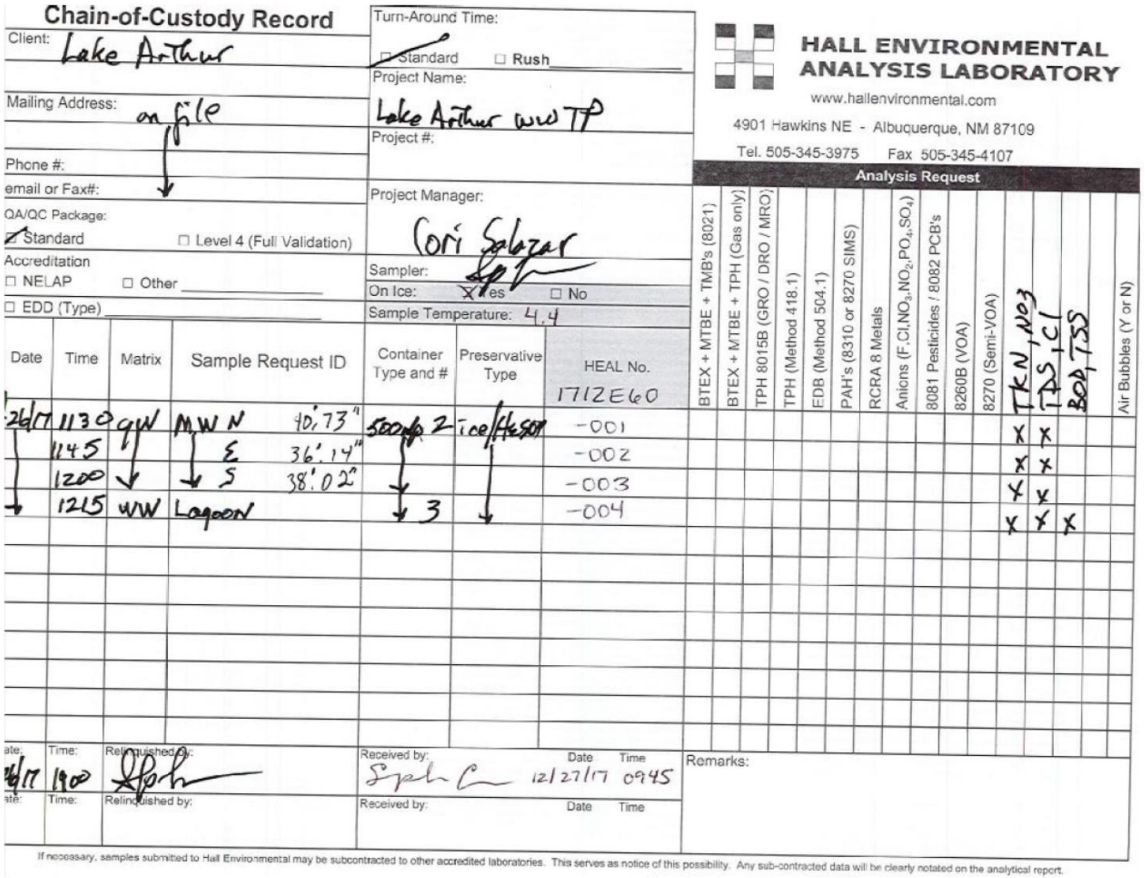
Groundwater Sampling - Reporting

Designation	Date Sampled	Depth to water	TKN (mg/L)	NO_3-N (mg/L)	Cl (mg/L)	TDS (mg/L)

Groundwater Sampling – Reporting

Include copies of:

- Chain of custody
- QC documentation
- Lab Report



Chain-of-Custody Record

Client: Lake Arthur

Mailing Address: on file

Phone #:

email or Fax#:

QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)

Accreditation ☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time: ☐ Standard ☐ Rush

Project Name: Lake Arthur WWTP

Project #:

Project Manager: Cori Salazar

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.4

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.
12/6/17	1130	GW	MW N 40.73"	500mL 2	ice/H2SO4	1712E60 -001
	1145		E 36.14"			-002
	1200		S 38.02"			-003
↓	1215	WW	Lagoon	↓ 3	↓	-004

Relinquished by: Date 12/6/17 Time 1900

Received by: Date 12/27/17 Time 0945

Relinquished by: Date Time

Received by: Date Time

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

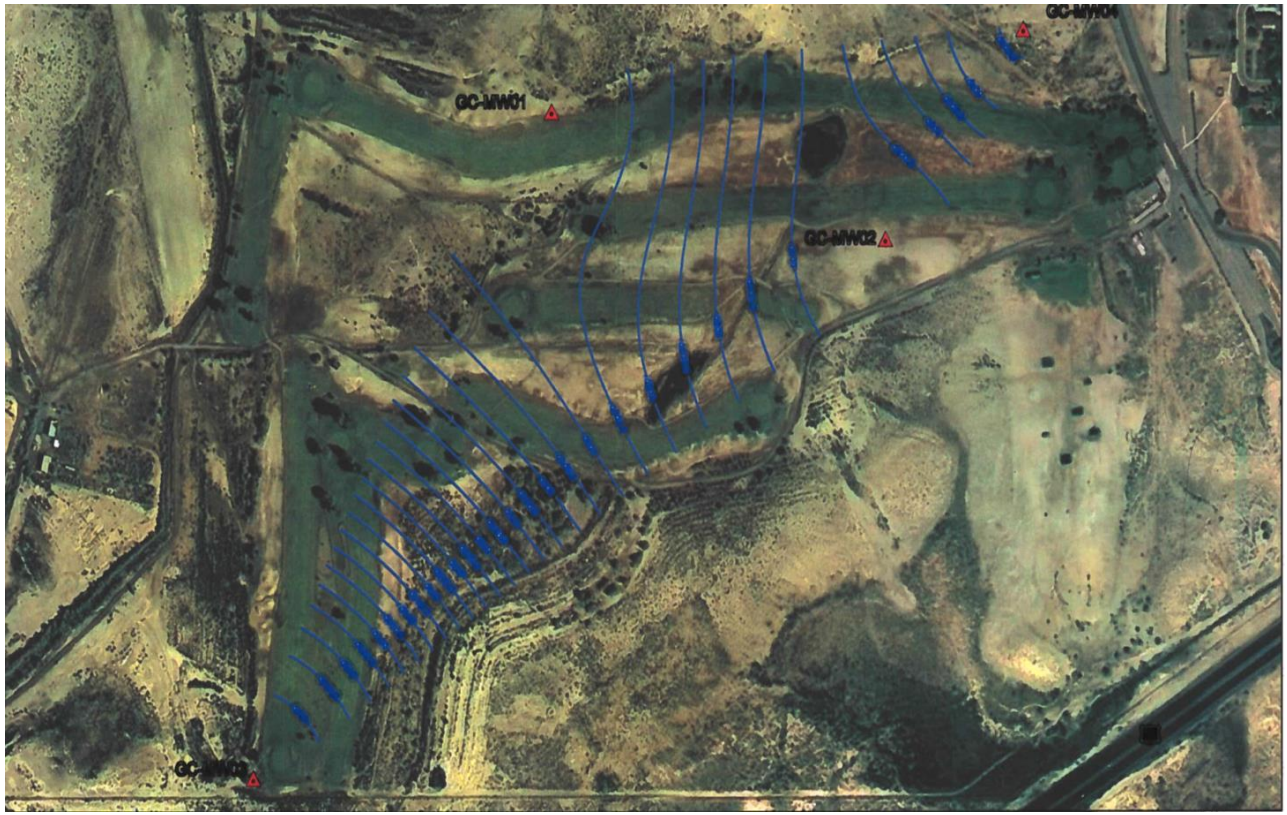
BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	TKN, NO3	TDS, Cl	BOD, TSS	Air Bubbles (Y or N)
											X	X		
											X	X		
											X	X		
											X	X	X	

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

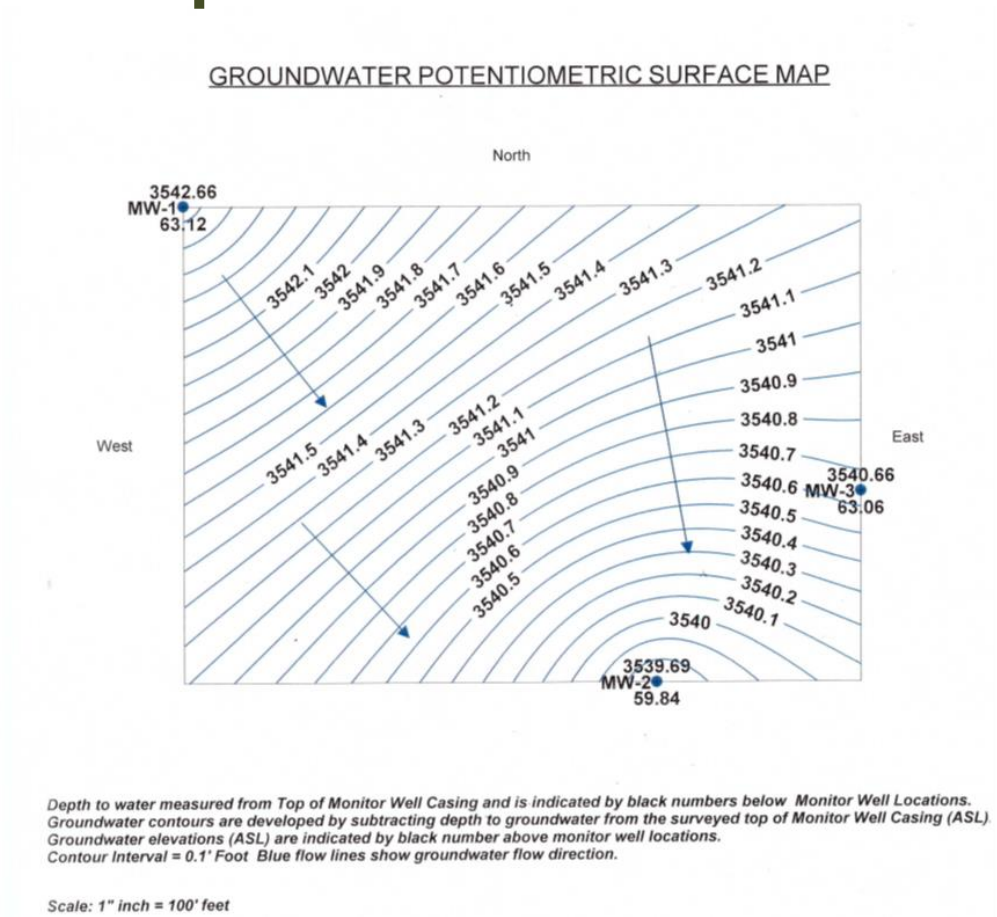
Groundwater Sampling – Flow

Example 1- Contours Overlay



Groundwater Sampling – Flow

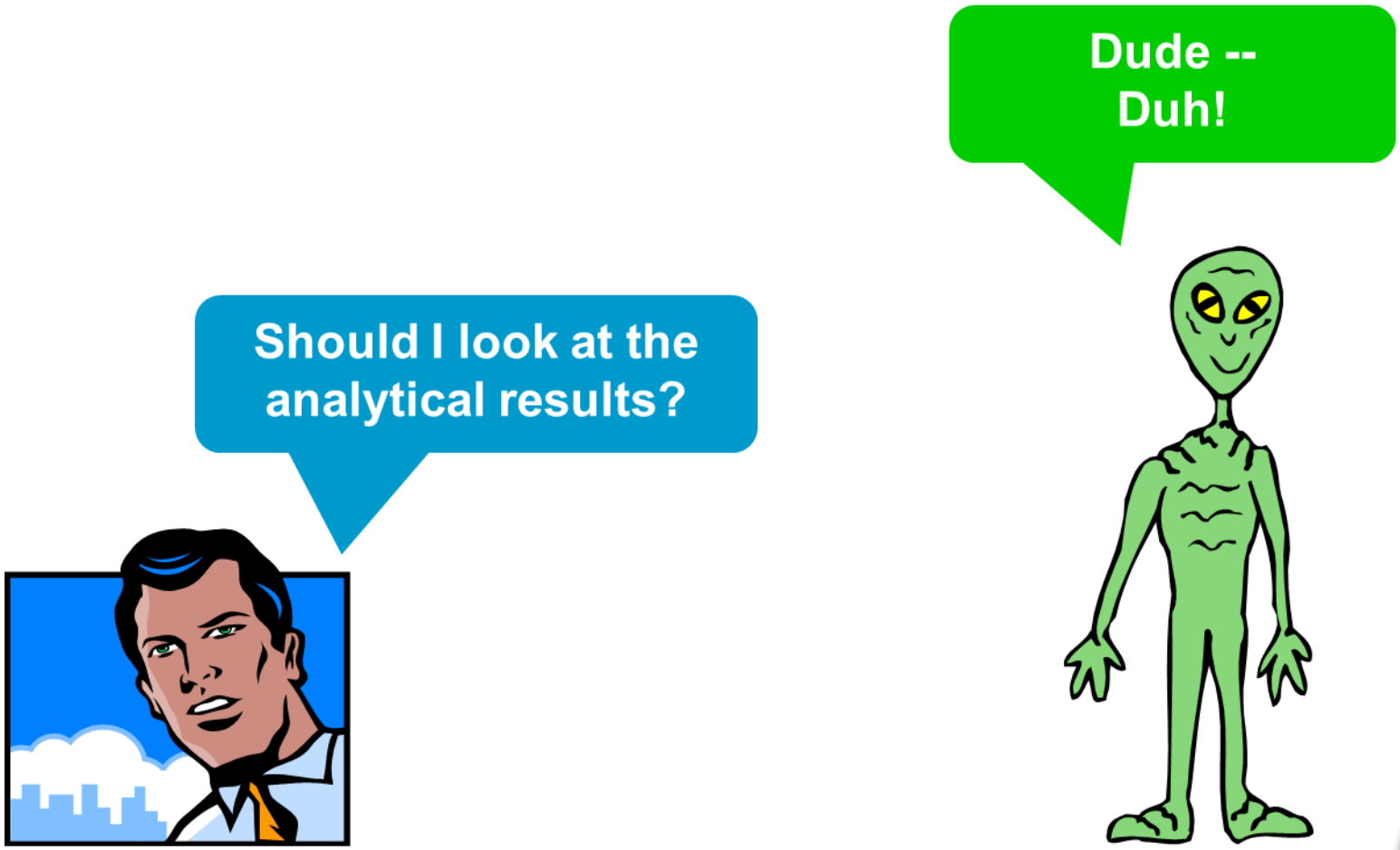
Example 2 – Potentiometric Surface



Groundwater Sampling – Flow

Example 3 – GW Flow Direction

Groundwater Sampling -Lab Results



Sampling – Effluent Lab Results

New Mexico Environment Department — **B**

Ground Water Quality Bureau — **Summary of Analytical Results**

Facility Name: Melanie's Resort & Spa

DP #: 4555

Compile the analytical results received from the laboratory on this summary sheet AND attach copies of the laboratory reports.

Sampling Point	Sampling Date	Depth to Water (ft)	TKN mg/l	NO_3-N mg/l	Cl mg/l	TDS mg/l	Fecal Colifo units:	Other: units:
Lagoon	1/15/08	----	**8.5**	**8.6**	230	435	45	----
Lagoon	2/21/08	----	**6.1**	**9.2**	282	488	32	----
Lagoon	3/17/08	----	**11.2**	**10.8**	221	505	10	----
MW 1	3/17/08	29.95	1	1.4	110	335	----	----
MW 2	3/17/08	32.77	1.4	2.2	115	358	----	----

If any analytical results exceed the limits or standards listed below, please highlight them on the chart at left. Check your discharge permit for re-sampling and corrective action

Effluent Limits

Constituent	Limit	Units
TKN+NO_3-N	**20**	mg/l
Fecal Coliform	100	CFU/100 ml
Other:		

Ground Water Standards

Constituent	Standard	Units
NO_3-N	10	mg/l
Cl	250	mg/l
TDS	1000	mg/l
pH	6 - 9	N/A

Groundwater Sampling -Lab Results

New Mexico Environment Department — **B**

Ground Water Quality Bureau — **Summary of Analytical Results**

Facility Name: Melanie's Resort & Spa

DP #: 4555

Compile the analytical results received from the laboratory on this summary sheet AND attach copies of the laboratory reports.

Sampling Point	Sampling Date	Depth to Water (ft)	TKN mg/l	NO_3-N mg/l	Cl mg/l	TDS mg/l	Fecal Colifo units:	Other: units:
Lagoon	5/1/08	----	8.5	8.6	230	435	45	----
Lagoon	6/6/08	----	6.1	9.2	282	488	32	----
Lagoon	7/5/08	----	11.2	10.8	221	505	10	----
MW 1	7/5/08	29.95	1	**1.4**	**110**	**335**	----	----
MW 2	7/5/08	32.77	1.4	**2.2**	**115**	**358**	----	----

If any analytical results exceed the limits or standards listed below, please highlight them on the chart at left. Check your discharge permit for re-sampling and corrective action

Effluent Limits

Constituent	Limit	Units
TKN+NO_3-N	20	mg/l
Fecal Coliform	100	CFU/100 ml
Other:		

Ground Water Standards

Constituent	Standard	Units
NO_3-N	**10**	mg/l
Cl	**250**	mg/l
TDS	**1000**	mg/l
pH	6 - 9	N/A

Contingency Plan

Contingency Plan

Describes activities to address problems or failure of the system resulting in:

- Unauthorized spill or unpermitted wastewater release.
- Violations of groundwater standards.
- Investigation of contamination sources.
- Failures of the discharge plan or system.

Contingency Plan – Spills

Contingency Plan - Spills

A Spill is:

- Any volume that threatens to impact ground water
- Any amount that poses a health, safety or environmental concern
- Any discharge that you are unsure of

Remember:

- Failure to report spills can lead to significant enforcement action from NMED, including fines up to $15,000 per violation.

Contingency Plan - Spills

Reporting Spills

- Oral notification to NMED within 24 hours of any spill or un-permitted release
  - Date, time, location and duration
  - Source/cause
  - Estimated volume
  - Description of discharge
  - Actions to mitigate
- Send to NMED a written report within 7 days of incident and corrective action report within 15 days.
- Within 30 days of confirmed ground water contamination, a corrective action plan must be submitted to mitigate damage, including source control and a schedule for implementation. If the corrective action plan does not result in compliance with the standard within 180 days then they must submit an abatement plan.

Closure Plan

Closure Plan

Describes activities to occur after discharge has ceased, to ensure that the facility won't cause ground water contamination after abandonment

- Closure of wastewater treatment and/or storage components
- Post-closure ground water monitoring
- Termination of the Discharge Permit

General Terms and Conditions

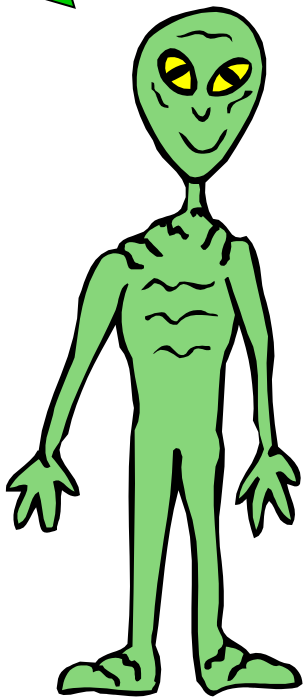
General Terms and Conditions

- Record keeping!
- Provide information
- Allow inspections
- Identifies NMED's enforcement abilities
- Notify NMED of modifications
- Appeal Rights
- Permit Transfers
- Term of the permit
- Permit fee payment

Modifications

When do I need a modification?

Change in quality, quantity or location of discharge



Permit Renewal

Applicant must submit an application for renewal at least 120 days before the expiration date of the Discharge Permit.

REVIEW

Review

Purpose of a discharge permit is to protect:

- ✓ Groundwater
- ✓ Human health

Review

Does my facility have a Discharge Permit?

- Yes
- No
- I need to find out

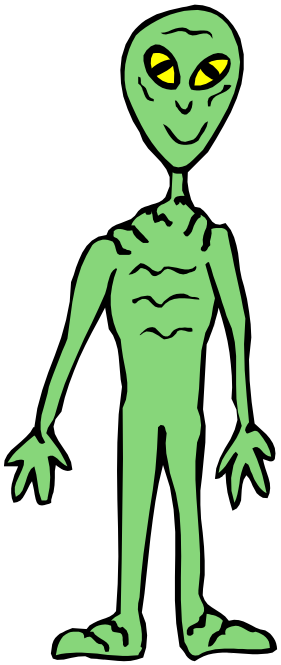
Review

Does my facility need a discharge permit?

- Yes
- No
- I'm fuzzy about this
  - Call NMED to discuss

Review

When is my monitoring report due?



Annually

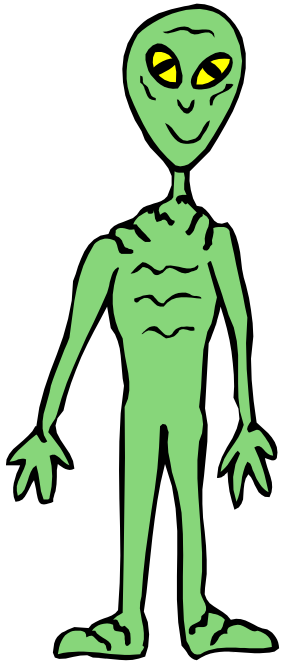
Semi-annually

Quarterly

On-time!

Review

If I send in my DMR, isn't that good enough?



No.

Review

How long do I purge the monitoring well?

- 30 minutes
- ✓ Must do math
- Until clear

Review

What's the ground water standard for nitrate?

- ✓ 10 mg/l
- ❑ 25 mg/l
- ❑ 3 ppb
- ❑ 4,892,333 mg/l

Review

How far in advance should I submit a renewal application?

- 2 days
- 30 days
- ✓ 6 months

Questions???

Thank You!

Ground Water Quality Bureau

Thank you for your interest and attention.

Questions?

Harold Runnels Building
1190 South St. Francis Drive (87505)
P.O. Box 5469
Santa Fe, NM 87502-5469
Phone: (505) 827-2900
www.env.nm.gov

Please feel free to contact the GWQB with further questions.

BREAK

2:30PM – 2:40PM

NMED PARTNER PRESENTATIONS

2:40PM – 3:00PM

Lead Service Line Inventory

Diana Aranda, Lead & Copper Program Administrator
Drinking Water Bureau
New Mexico Environment Department

New Mexico Environment Department

Lead and Copper Rule

Initial Service Line Inventory

Diana Ixchel Aranda (she/her)
Lead and Copper Rule Administrator

on Zuni Pueblo and Navajo traditional homelands

2023 Rural Water Summit
Aug 31, 2023

Photo credit Rhett Zyla #IamNMED

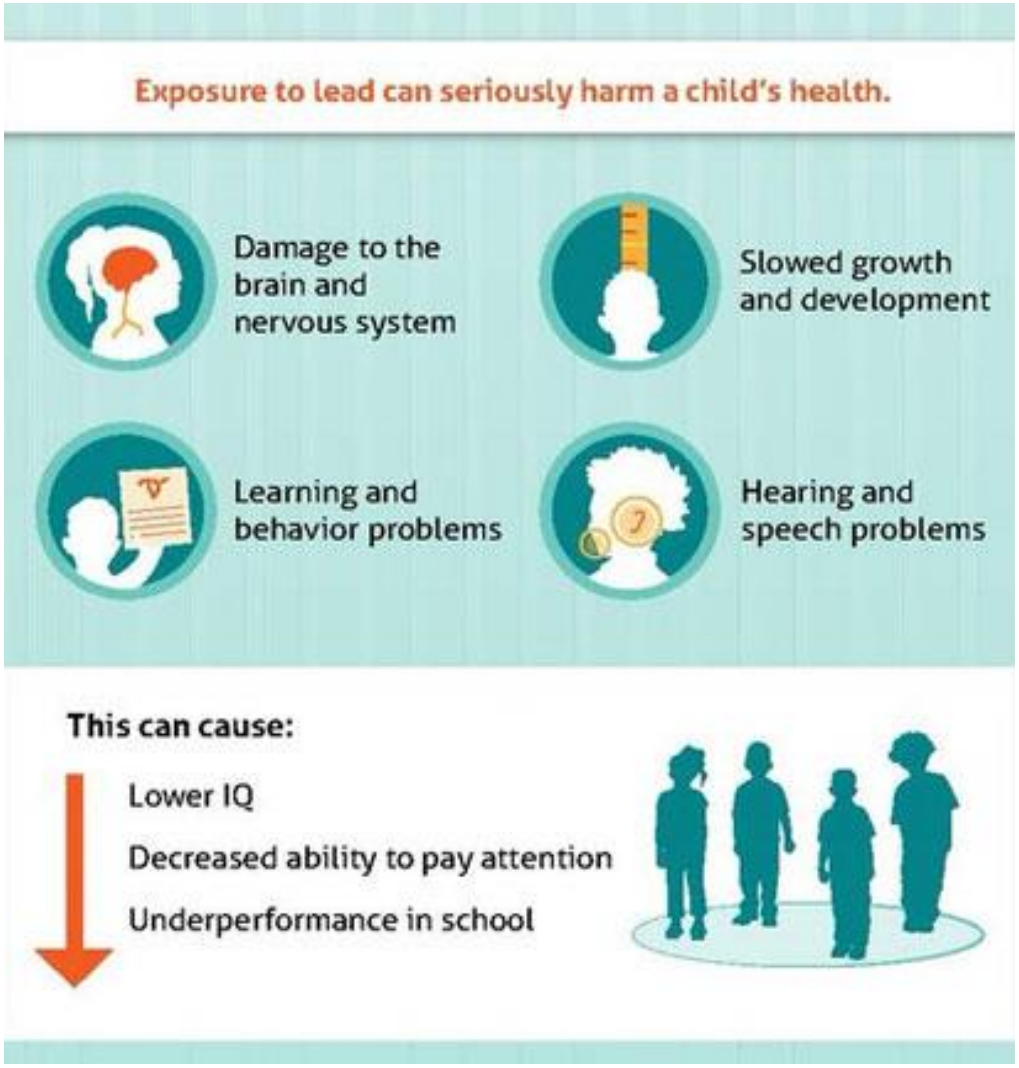
Goals of the Lead and Copper Rule

- Protect **public health** by minimizing lead and copper levels in drinking water.
- Accomplished through:
  - **Removal** of all lead lines.
  - **Reduction** of corrosivity in the water.
    - Corrosive water, if untreated, can dissolve lead and other metals from pipes and other components present in household plumbing.

They are no safe lead levels in drinking water

- The lead standard for lead is zero (0).
- Lead is a highly poisonous metal.
- If exposed, it can affect almost every organ in living things.
- Can cause serious and irreversible health damage.
- Developing children are the most vulnerable population.
- Exposure to Lead can Seriously Harm a Child's Health.

Exposure to Lead can Seriously Harm a Child's Health



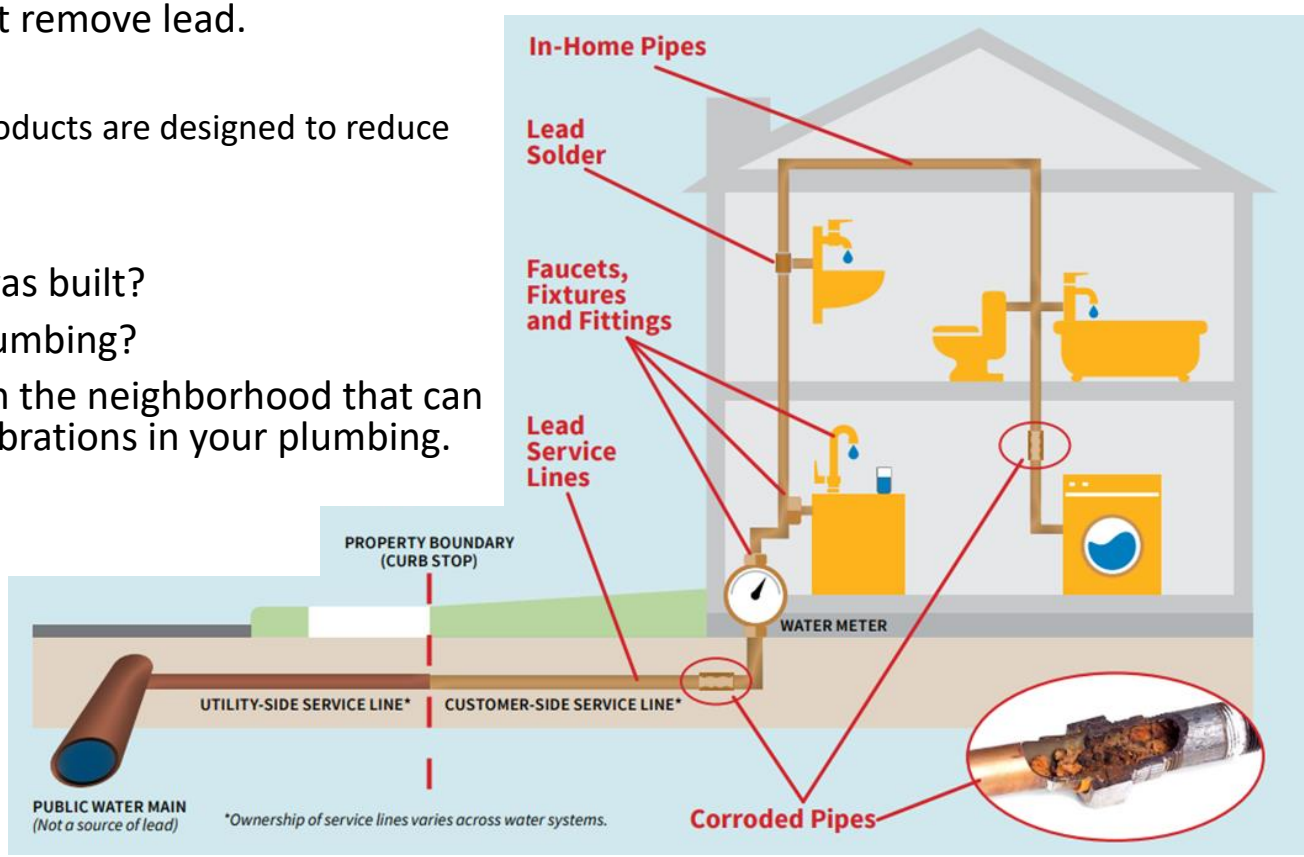
Exposure to Lead can Harm Child's Health Infographic | Lead | CDC

Lead in your drinking water

How can we protect ourselves from lead in drinking water at home or in your place of work?

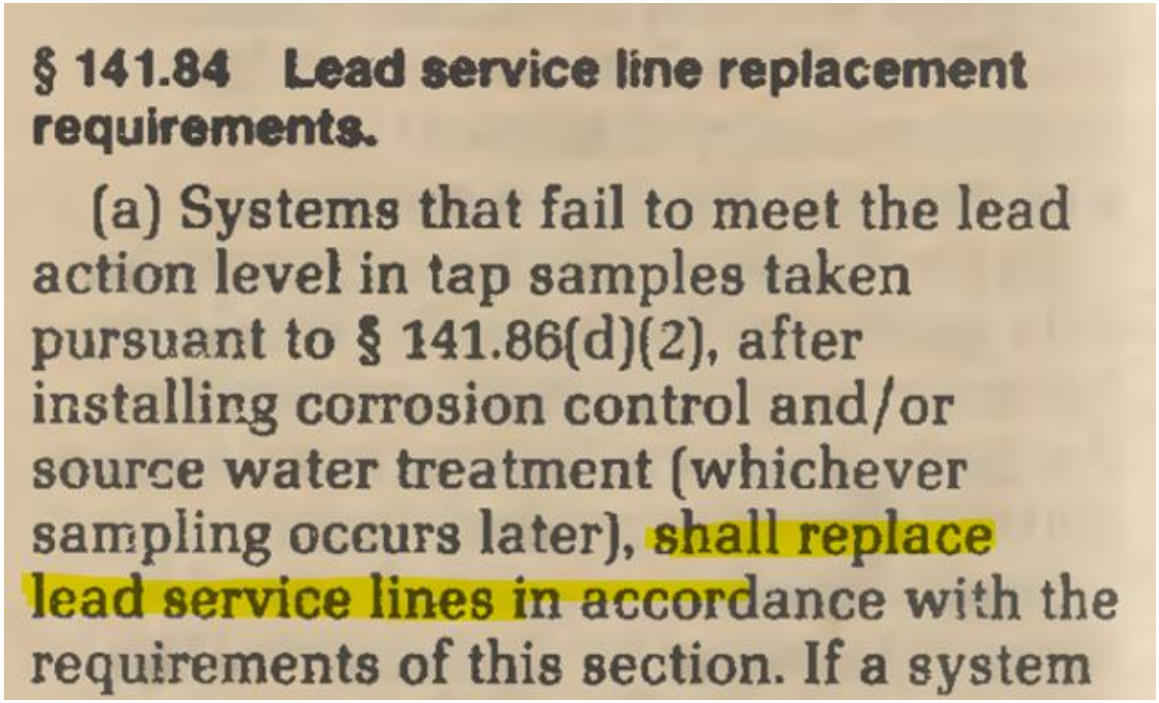
How to protect yourself from lead in drinking water?

- When drinking:
  - Use cold water.
  - Run your water and flush your system before use.
  - Clean your faucet aerator regularly.
  - Boiling water does not remove lead.
  - Use filters properly.
    - Only specific filter products are designed to reduce lead contamination.
- Investigate:
  - When the structure was built?
  - Is there lead in the plumbing?
  - Construction events in the neighborhood that can cause disturbances/vibrations in your plumbing.



Getting lead out in drinking water is not new.

Lead and copper rule of 1991 included service line replacement regulations .



§ 141.84 Lead service line replacement requirements.

(a) Systems that fail to meet the lead action level in tap samples taken pursuant to § 141.86(d)(2), after installing corrosion control and/or source water treatment (whichever sampling occurs later), shall replace lead service lines in accordance with the requirements of this section. If a system

56 FR 26548 :: Document View

How can we achieve our lead-free goals?

- ✓ **Identify the materials within our distribution system.**

Initial service line inventory.

- Create a lead line replacement plan.
- Create a plan to protect children in schools and childcare facilities.
- Replace and eliminate all lead in the plumbing system.

Deadline to achieve a materials baseline

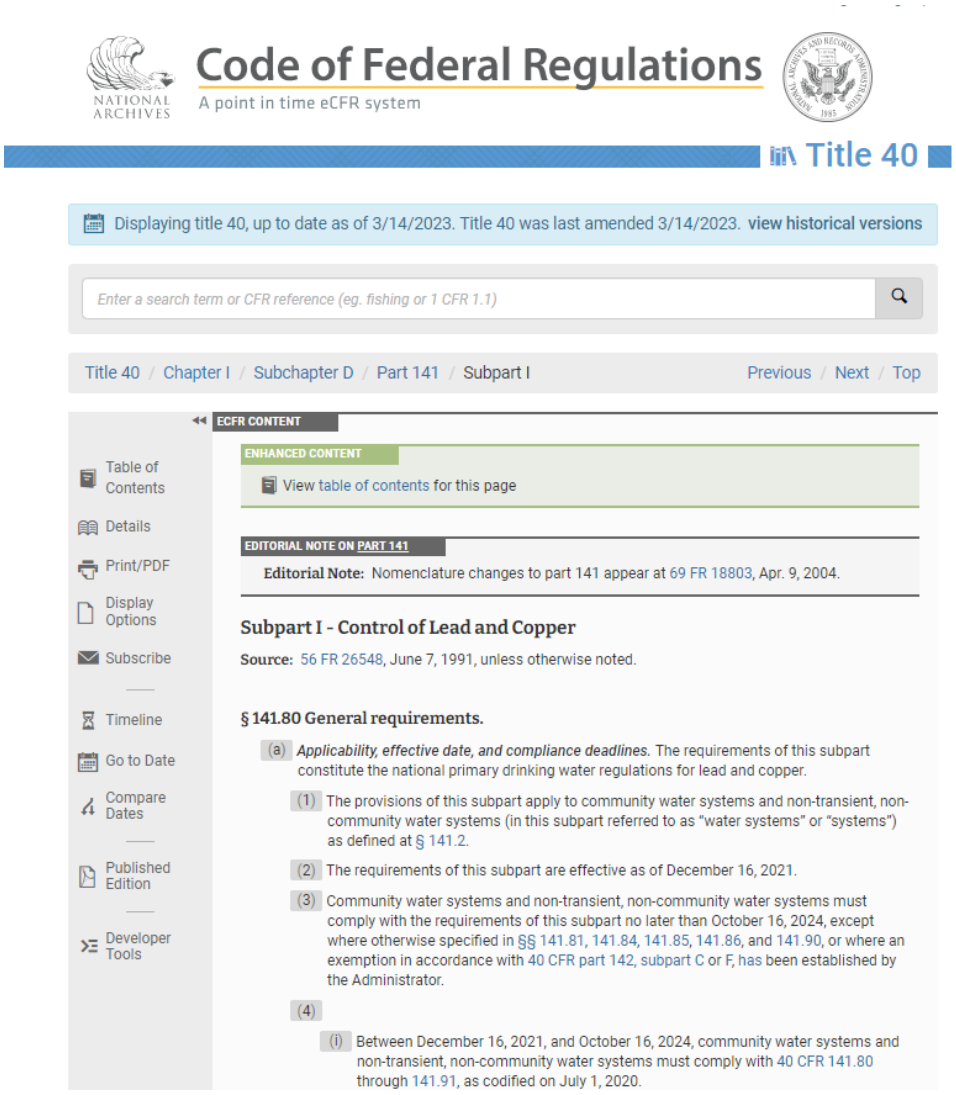
- On **October 16, 2024**,
  - **Community** (C) and **Non-transient-Non-Community** (NTNC) systems
    - submit an excel electronic document to the Drinking Water Bureau (DWB)
    - shall contain the federally required and recommended **service line inventory** elements concerning their public water system.
- **ALL** Community and Non-transient-Non-Community systems, even those systems **without lead lines** in the public side and private side, must submit a service line inventory.

Submitting inventories

- Whom?
  - NMED Drinking Water Bureau→ Lead and Copper Rule Administrator
- Where?
  - The Administrator (Diana) is working on building an online submittal portal for inventory documents.
- When are inventories due?
  - October 16, 2024

Code of Federal Regulations (CFR)

- ✓ [40 CFR Part 141 Subpart I - Control of Lead and Copper]



Code of Federal Regulations
A point in time eCFR system
Title 40
Displaying title 40, up to date as of 3/14/2023. Title 40 was last amended 3/14/2023. view historical versions
Enter a search term or CFR reference (eg. fishing or 1 CFR 1.1)
Title 40 / Chapter I / Subchapter D / Part 141 / Subpart I
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Published Edition
Developer Tools
ENHANCED CONTENT
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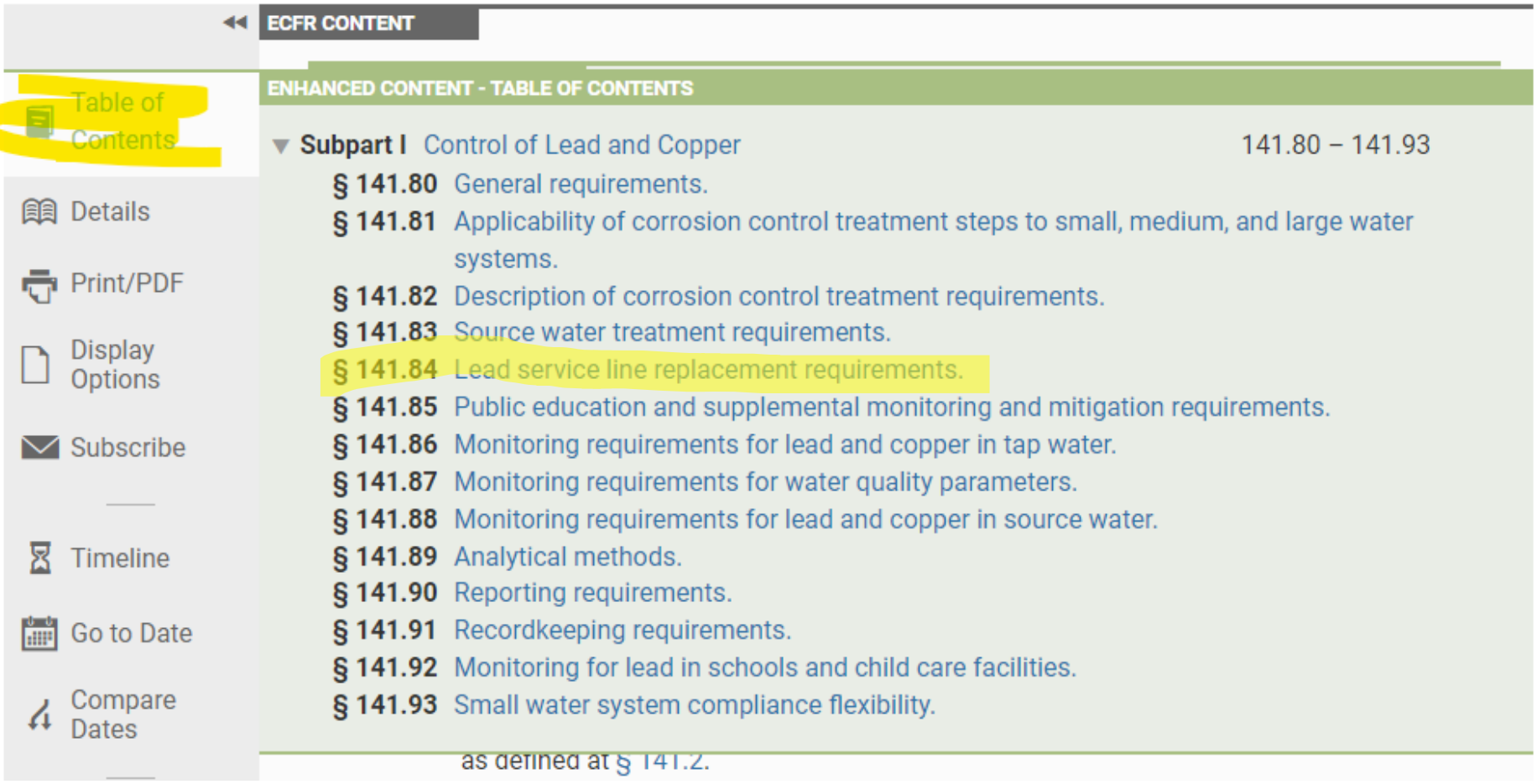
EDITORIAL NOTE ON PART 141
Editorial Note: Nomenclature changes to part 141 appear at 69 FR 18803, Apr. 9, 2004.
Subpart I - Control of Lead and Copper
Source: 56 FR 26548, June 7, 1991, unless otherwise noted.
§ 141.80 General requirements.
(a) Applicability, effective date, and compliance deadlines. The requirements of this subpart constitute the national primary drinking water regulations for lead and copper.
(1) The provisions of this subpart apply to community water systems and non-transient, non-community water systems (in this subpart referred to as "water systems" or "systems") as defined at § 141.2.
(2) The requirements of this subpart are effective as of December 16, 2021.
(3) Community water systems and non-transient, non-community water systems must comply with the requirements of this subpart no later than October 16, 2024, except where otherwise specified in §§ 141.81, 141.84, 141.85, 141.86, and 141.90, or where an exemption in accordance with 40 CFR part 142, subpart C or F, has been established by the Administrator.
(4)
(i) Between December 16, 2021, and October 16, 2024, community water systems and non-transient, non-community water systems must comply with 40 CFR 141.80 through 141.91, as codified on July 1, 2020.

Different sections of the Code of Federal Regulations (CFR)



Lead Service Line requirement subsections

- ✓ **40 CFR 141.84(a) Lead service line inventory.**

40 CFR 141.84(b) Lead service line replacement plan.

40 CFR 141.84(c) Operating procedures for replacing lead goosenecks, pigtails, or connectors.

40 CFR 141.84(d) Requirements for conducting lead service line replacement that may result in partial replacement.

40 CFR 141.84(e) Requirements for conducting full lead service line replacement.

40 CFR 141.84(f) Goal-based full lead service line replacement for water systems whose 90th percentile lead level is above the trigger level but at or below the lead action level.

40 CFR 141.84(g) Mandatory full lead service line replacement for water systems whose 90th percentile lead level exceeds the lead action level.

40 CFR 141.84(h) Reporting to demonstrate compliance to State.

Access to EPA guidance and excel template

- New Mexico Environment Department
- Lead and copper rule DWB page:
  - Lead and Copper Program (nm.gov)

CLOSE

Lead and Copper Program

Drinking Water Bureau Home
Drinking Water Sampling
Lead and Copper Program
Public Drinking Water System Assistance
Water Infrastructure Projects and Funding
Utility Operator Certification Program

Contact Us
Drinking Water Bureau

Ph: 505-476-8620
877-654-8720

Utility Operator Certification:
UOCP.certification@env.nm.gov

E: drinking.water@state.nm.us

Lead and Copper Rule Revisions Service Line Inventory Compliance (Due Date October 16, 2024)

Guidance for Developing and Maintaining a Service Line Inventory (6.79 MB, August 4, 2022, 816-B-22-001)

Lead and Copper Service Line Inventory Template (1.53 MB, August 4, 2022)

On August 4, 2022, EPA released Guidance for Developing and Maintaining a Service Line Inventory to support water systems with their efforts to develop inventories and to provide states with needed information for oversight and reporting to EPA. The guidance provides essential information to help water systems comply with the Lead and Copper Rule Revisions requirement to prepare and maintain an inventory of service line materials by October 16, 2024. Specifically, EPA's Lead Service Line Inventory guidance:

- Provides best practices for inventory development and communicating information to the public.

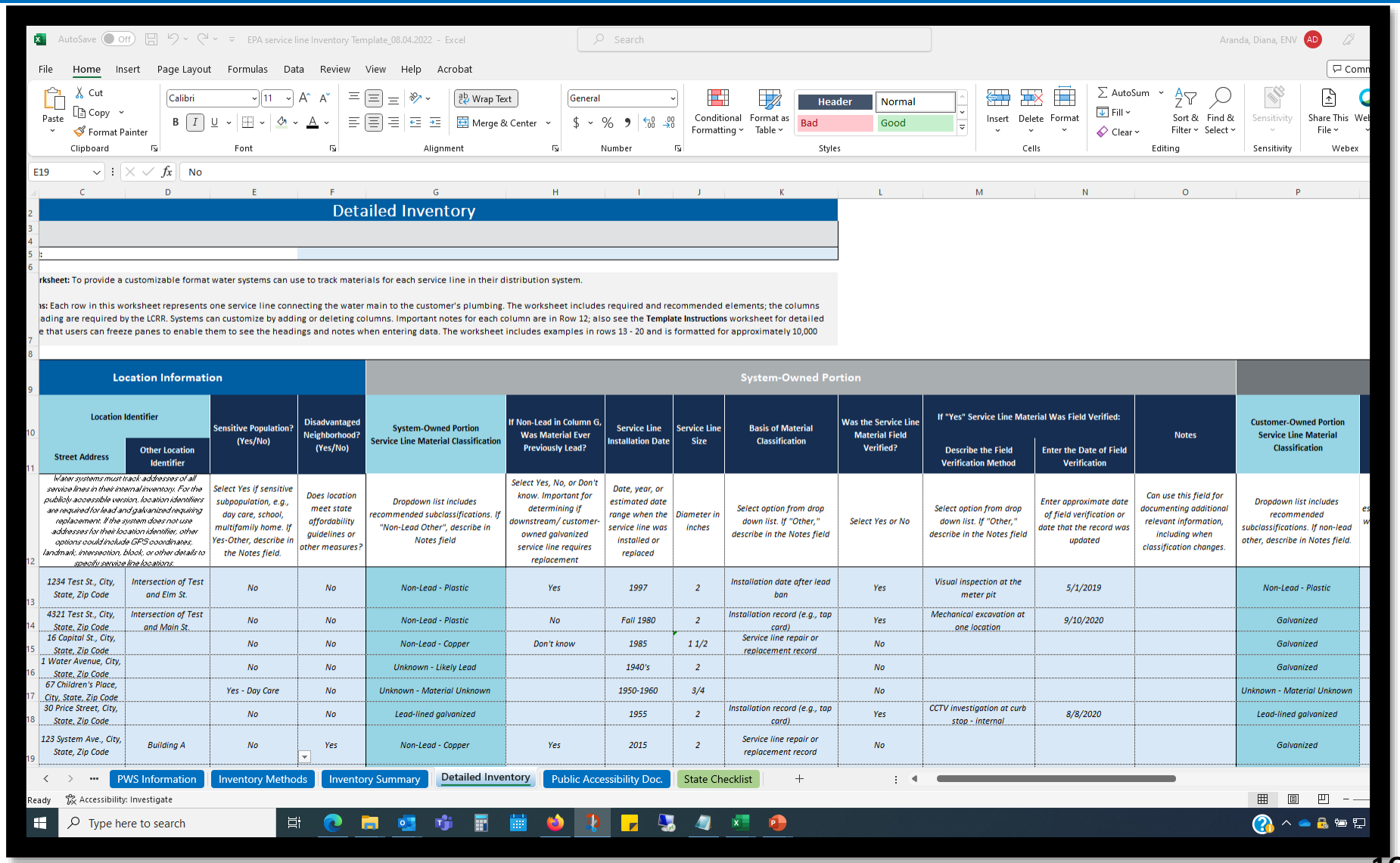
EPA reference document for this presentation:

Guidance for Developing and Maintaining a Service Line Inventory

Office of Water (4606M)
EPA 816-B-22-001
August 2022

Document Display | NEPIS | US EPA

Service line inventory excel sheet



EPA service line Inventory Template_08.04.2022 - Excel

Detailed Inventory

rksheet: To provide a customizable format water systems can use to track materials for each service line in their distribution system.

s: Each row in this worksheet represents one service line connecting the water main to the customer's plumbing. The worksheet includes required and recommended elements; the columns ading are required by the LCRR. Systems can customize by adding or deleting columns. Important notes for each column are in Row 12; also see the **Template Instructions** worksheet for detailed e that users can freeze panes to enable them to see the headings and notes when entering data. The worksheet includes examples in rows 13 - 20 and is formatted for approximately 10,000

Location Information				System-Owned Portion									Customer-Owned Portion
Location Identifier		Sensitive Population? (Yes/No)	Disadvantaged Neighborhood? (Yes/No)	System-Owned Portion Service Line Material Classification	If Non-Lead in Column G, Was Material Ever Previously Lead?	Service Line Installation Date	Service Line Size	Basis of Material Classification	Was the Service Line Material Field Verified?	If "Yes" Service Line Material Was Field Verified:		Notes	Service Line Material Classification
Street Address	Other Location Identifier									Describe the Field Verification Method	Enter the Date of Field Verification		
Water systems must track addresses of all service lines in their internal inventory. For the publicly accessible version, location identifiers are required for lead and galvanized requiring replacement. If the system does not use addresses for their location identifier, other options could include GPS coordinates, landmark, intersection, block, or other details to specify service line locations.		*Select Yes if sensitive subpopulation, e.g., day care, school, multifamily home. If Yes-Other, describe in the Notes field.*	*Does location meet state affordability guidelines or other measures?*	*Dropdown list includes recommended subclassifications. If "Non-Lead Other", describe in Notes field*	*Select Yes, No, or Don't know. Important for determining if downstream/ customer-owned galvanized service line requires replacement*	*Date, year, or estimated date range when the service line was installed or replaced*	*Diameter in inches*	*Select option from drop down list. If "Other," describe in the Notes field*	*Select Yes or No*	*Select option from drop down list. If "Other," describe in the Notes field*	*Enter approximate date of field verification or date that the record was updated*	*Can use this field for documenting additional relevant information, including when classification changes.*	*Dropdown list includes recommended subclassifications. If non-lead other, describe in Notes field.*
1234 Test St., City, State, Zip Code	*Intersection of Test and Elm St.*	*No*	*No*	*Non-Lead - Plastic*	*Yes*	*1997*	*2*	*Installation date after lead ban*	*Yes*	*Visual inspection at the meter pit*	*5/1/2019*		*Non-Lead - Plastic*
4321 Test St., City, State, Zip Code	*Intersection of Test and Main St.*	*No*	*No*	*Non-Lead - Plastic*	*No*	*Fall 1980*	*2*	*Installation record (e.g., tap card)*	*Yes*	*Mechanical excavation at one location*	*9/10/2020*		*Galvanized*
16 Capital St., City, State, Zip Code		*No*	*No*	*Non-Lead - Copper*	*Don't know*	*1985*	*1 1/2*	*Service line repair or replacement record*	*No*				*Galvanized*
1 Water Avenue, City, State, Zip Code		*No*	*No*	*Unknown - Likely Lead*		*1940's*	*2*		*No*				*Galvanized*
67 Children's Place, City, State, Zip Code		*Yes - Day Care*	*No*	*Unknown - Material Unknown*		*1950-1960*	*3/4*		*No*				*Unknown - Material Unknown*
30 Price Street, City, State, Zip Code		*No*	*No*	*Lead-lined galvanized*		*1955*	*2*	*Installation record (e.g., tap card)*	*Yes*	*CCTV investigation at curb stop - internal*	*8/8/2020*		*Lead-lined galvanized*
123 System Ave., City, State, Zip Code	*Building A*	*No*	*Yes*	*Non-Lead - Copper*	*Yes*	*2015*	*2*	*Service line repair or replacement record*	*No*				*Galvanized*

PWS Information | Inventory Methods | Inventory Summary | Detailed Inventory | Public Accessibility Doc. | State Checklist

Federally Required Elements

Tabs from the template excel sheet

Federal Required –detailed inventory elements

- ✓ Location Identifier.
- ✓ **System**-Owned Portion Service Line Material Classification.
- ✓ **Customer**-Owned Portion Service Line Material Classification.
- ✓ Entire Service Line Material Classification.
- ✓ Materials must be classified:
  - Lead
  - Galvanized Requiring Replacement (GRR)
  - Unknown
  - non-lead service lines

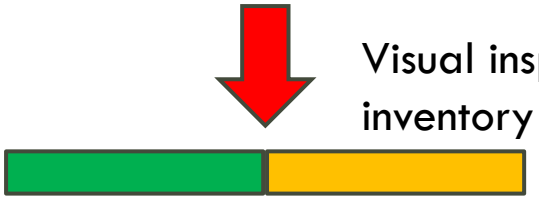
Lead ban in the state of New Mexico

Try to date your private and public distribution lines

The state of New Mexico implemented its lead ban in1987

Ownership

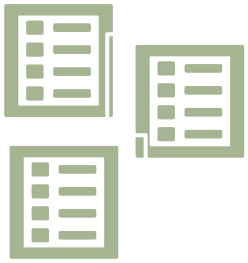
- 40 CFR 141.84(a)(2) : “all service lines connected to the public water distribution system regardless of ownership status”
- Must include **public and customer** lines.
- Up to the building inlet/ structure. (NO INSIDE STRUCTURE PLUMBING)



Tips for moving forward

Read and Review

- The excel template instructions
- EPA and other guidance's



Gather

- Use existing system asset inventory or use this inventory to begin one
- All existing historical documents, review and organize them
- GIS data (local county, source water protection plans, etc.)
  - Example: create a google earth file of your distribution system

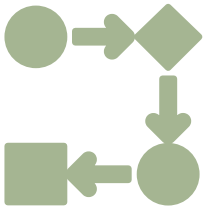
Determine

- The number of public and private lines
- Provide a unique name/identification.
- Example: 100 connections plus 10 main lines = 110 inventory entries/rows

Tips for moving forward

Fill out

- The entire inventory with all the information you do know, based on the information you have gathered.
  - ➢ Keep accurate thorough notes of your methods as you go along.
- If you don't know the material information because you have yet not found historical documents, label as unknown.
- Now you know what you do not know!



Visualize

- New strategies for determining unknowns.
- Example: conduct a visual survey at water meter, where you can observe both the private and the public lines.
  - Document the event with photos of both sides of the meter

Test

- Magnet test (if lead, it will not stick)
- Scratch test (dull and soft = lead)

Tips for moving forward

Update

- Your inventory with every new piece of information or visual inspection that comes in

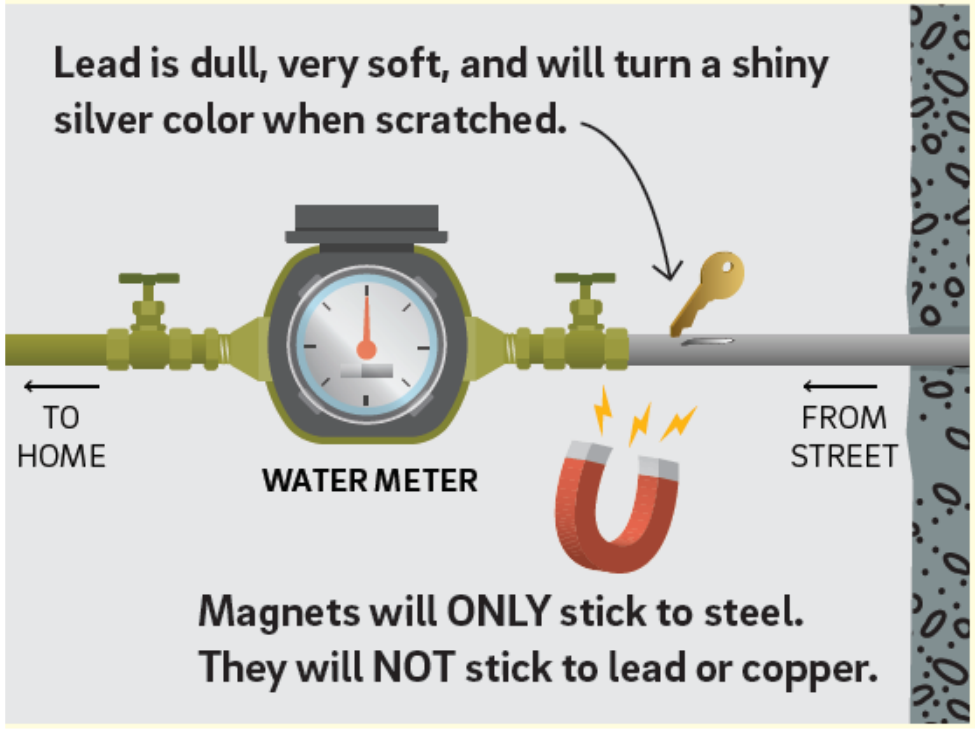
Submit inventory

- Before, Thursday Oct. 16, 2024.
- Details on where and how to submitted are currently being developed

Remember- Even when you are done with the inventory, and confirming all materials, you still need to move forward with a replacement plan if you have lead lines.

Service Line Investigation Methods

- Conduct visual inspections during repairs and site visits.
  - Do the ***scratch and magnet test***.
    - If the pipe is a silver metallic color, the customer can carefully scratch the pipe with a key or coin.
- Enlist the public's help:
  - to identify the material of the customer-owned portion of the service line.
  - Provide them with guidance on typical configurations to find the lines.



Federal **Requirement**- making your inventory public

- All systems shall publicly post and update your inventory.
  - Use street address as the location identifier if possible.
  - Include educational on reducing exposure to lead.
- If you serve more than 50,000 people, you must provide your inventory **online.**
- If you have lead, GRR, or unknown services lines, you must provide notification to persons served by these lines within **30 days after completing the initial** inventory.
- If you are a **Community Water System**, you must also include instructions on how to access the inventory in your Consumer Confidence Report.

Completing your inventory

- Make your inventory as thorough/complete as possible
- ✓ Minimize the unknowns
  - Will help costumers stay safe.
    - Allowing them to take steps to minimize their lead exposure.
    - Giving them the knowledge to replace their LSLs and GRR.
- The more you know the more access to the current **funding available for lead service line replacement** (LSLR) activities, allowing for systems to demonstrate the need and scope of LSLR projects.

Funding

[Water Infrastructure Projects and Funding (nm.gov)]

Contact information

For information regarding all things lead and copper:

Contact the Lead and Copper Administrator:

Diana I. Aranda

Diana.Aranda@env.nm.gov

(505) 372-8166

NMED PARTNER PRESENTATIONS

3:00PM – 3:20PM

Septic Systems Program

Lauren Reichelt, Director
Environmental Health Division
New Mexico Environment Department

Note: Lauren Reichelt was unable to make this presentation, but COG/RWPO will reach out to schedule this presentation during a regular Water Commons meeting.

For more information, go to https://www.nwnmcog.org/water.html

NMED PARTNER PRESENTATIONS

3:20PM – 3:40PM

Drinking Water Bureau Compliance Office

Gordon Miller, Environmental Researcher, Compliance Officer
Drinking Water Bureau
New Mexico Environment Department

New Mexico Environment Department

Drinking Water Compliance

Gordon Miller, Compliance Officer

August 31, 2023

Compliance Resources

- Drinking Water Bureau Website – env.nm.gov/drinking_water/
- Drinking Water Watch – dww.water.net.env.nm.gov/NMDWW/
- Federal Primary Drinking Water Regulations – 40 CFR 141
- New Mexico Drinking Water Regulations – 20.7.10 NMAC
- EPA Standardized Monitoring Framework
- Your Compliance Officer

Compliance Goals

- Work with Public Water Systems to return violations to compliance
- Address outstanding significant deficiencies identified during sanitary surveys
- Identify systems that would benefit from assistance
- Ensure safe drinking water for New Mexicans

Questions?

Gordon Miller, Compliance Officer
Farmington Field Office
Gordon.Miller@env.nm.gov
505-258-3203

FUNDING OPPORTUNITIES

3:40PM – 3:50PM

Angelina Grey, Office Manager
Regional Water Planning Organization
Northwest New Mexico Council of Governments

CLOSING & ADJOURN

3:50PM – 4:00PM

Evan Williams, Executive Director
Northwest New Mexico Council of Governments