



Drinking Water Bureau

Program Overview & Regulatory Framework

Joe Chavez, Rob Pine, Ron Romero, Danny Valenzuela

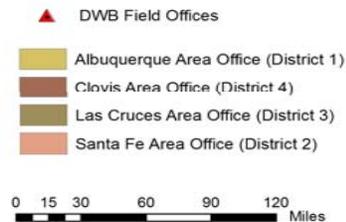
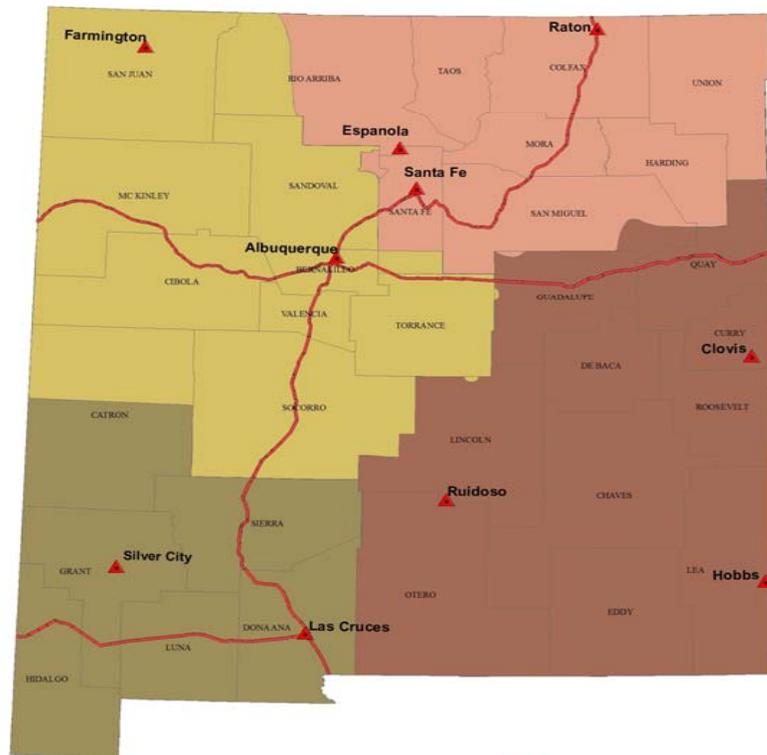


Introduction

- **New Mexico Environment Department (NMED)**
 - NMED is the Primacy agency for administering the Safe Drinking Water Act and the National Regulations
- **Executive Order # 2007-050**
 - Created a new Division in NMED to better coordinate water system infrastructure development
- **Water and Wastewater Infrastructure Development Division (WWIDD)**
 - Develop recommendations and plan for water system infrastructure improvements
 - Develop recommendations for a Uniform Funding Application process for water and wastewater
- **Drinking Water Bureau (DWB)**
 - Responsible for evaluating water system needs and provide assistance to effectuate infrastructure improvements
- **DWB Field Offices**
 - Albuquerque, (Farmington) Santa Fe, (Raton) Las Cruces, (Silver City) Alamogordo, (Clovis,)
- **Future Field Offices – Alamogordo and Los Lunas**



Drinking Water Bureau Field Offices



- Albuquerque District 1
(505) 222-9500
- Santa Fe District 2
1-877-654-8720 toll free
(505) 476-8620
- Las Cruces District 3
(575) 524-6300
- Ruidoso District 4
(575) 258-3272



Why Regulate Water Systems?

- Required by federal and State law
- For the protection of public health
- Acute health risks vs. Chronic health risks
- Contaminants can be introduced into a water system at any stage.
 - Microbiological, organic, inorganic, radiological, disinfectant disinfection byproduct
- Water systems require constant operations and maintenance.
 - Monitoring, repairing, replacements, flushing, security, maintain compliance
- Under managed systems are much more likely to be improperly operated and administered.
 - Line failure, well failures, financial shortcomings, no planning



Reasons for regulating water systems

Waterborne outbreaks in U.S. public water systems between 1991 and 2000

Pathogen	# Outbreaks	# Cases
E. coli O157:H7/C. jejuni	1	781
Giardia	16	2,240
Hepatitis A virus	1	46
Norwalk-like viruses	3	2,400
Cryptosporidium	9	408,220
Salmonellae (nontyphoid)	2	749



Safe Drinking Water Regulatory Framework

Federal

Safe Drinking Water Act Public Law 93-523

National Primary Drinking Water Regulations

40 CFR 141

State

Environmental Improvement Act 74-1-1 NMSA

NMED Drinking Water Regulations 20.7.10 NMAC

Sanitary Projects Act 3-29-1 NMSA

Utility Operator Certification Act 20.7.4 NMAC



Other Government Regulations

Federal Agencies (USDA Rural Development,
IRS, Homeland Security)

Office of the State Engineer

Department of Finance and Administration

Public Regulation Commission

Office of the State Auditor

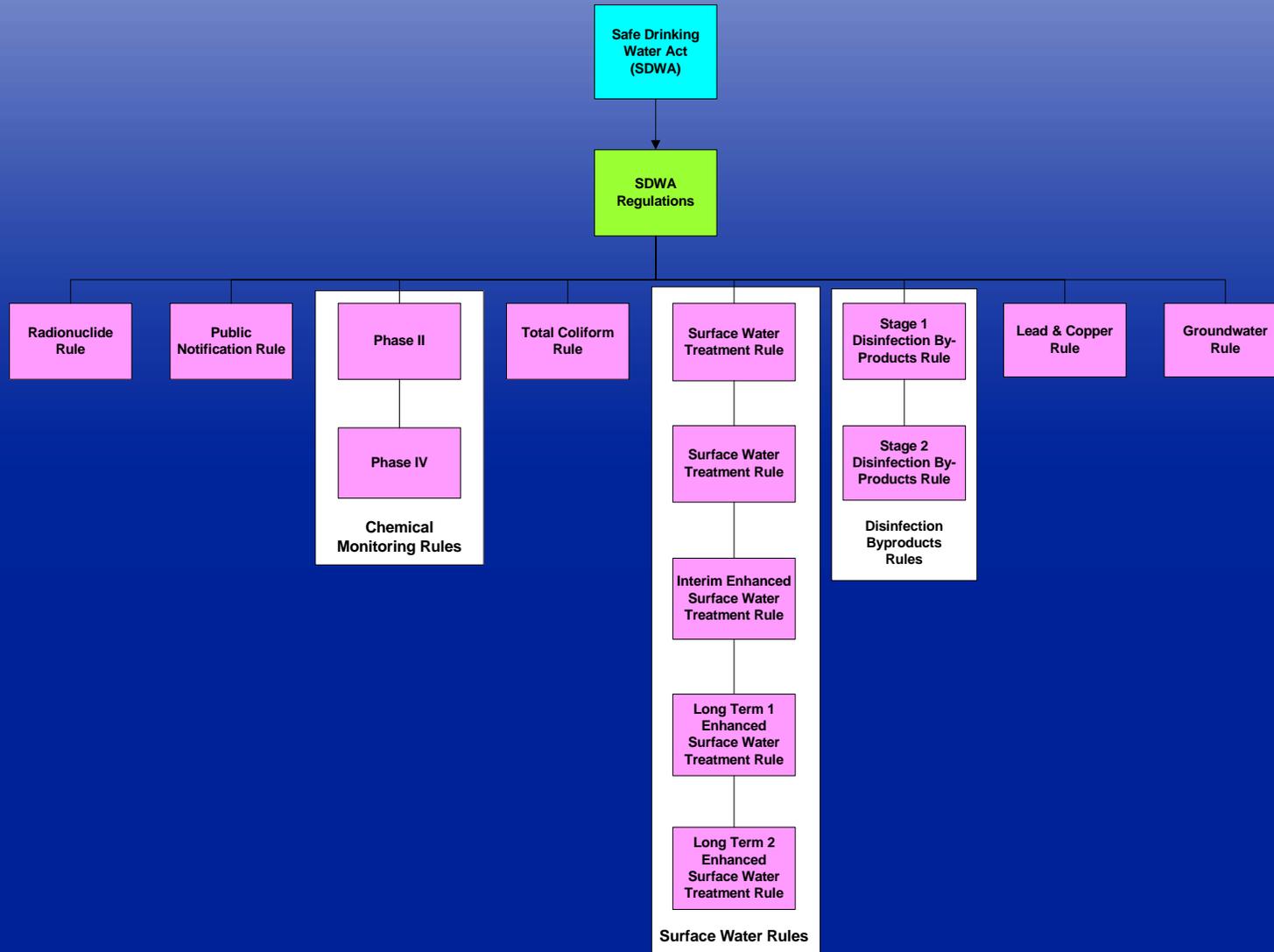
Taxation and Revenue Department

Attorney Generals Office

County Ordinances



SDWA Rules





New Mexico Public Water Systems

- Public Water System (PWS) – “fifteen service connections or regularly serves an average of at least twenty-five individuals at least 60 days out of the year”
- Community Water System (CWS) - A PWS with year-round residents (631)
- Non-Transient Non-Community (NTNC) – A PWS with the same persons over 6 months per year (165)
- Transient Non-Community (NC) - A PWS with 15 connections 25 persons 60 days (464)



Ownership/Management

- Local Government

- City, Town, Village, Water & Sanitation Districts, MDWCA's, County water systems, Jails, Community Centers, Recreation

- Private

- Cooperatives, Associations, Investor Owned Utilities, Mobile Home Parks, Non-incorporated water systems, Private Schools, Industrial, Businesses, Food Establishments, Bars, Lodging, Recreation, Churches

- State Government

- Government Facilities, State Parks, Penal Institutions, Public Schools, Medical Facilities, Highway Rest Areas

- Federal Government

- Military Facilities, National Parks, National Monuments, Medical Facilities



DWB Tasks

- To administer and enforce the federal and state drinking water laws regulations.
- To ensure that anyone served by a public water system is consuming water that is clean and safe.
- To assist public water systems administration to operate and maintain their systems to insure safe drinking water now and into the future.
- To assist systems in identifying present and future needs and how they can meet those needs.



DWB Programs

- Water System Oversight
- Water Quality Sampling, Testing and Laboratory Certification
- Data Management (SDWIS)
- Utility Operator Certification
- Security and Protection
- Capacity Development/Assistance
- Enforcement Compliance/Assistance
- Source Water Protection
- Engineering



Compliance Oversight Staff

- Sanitary Surveys
- Establish sampling schedules
- Monitor sample results
- Monitor general operating requirements
- Assist public water supplies
- Notify water systems in violation
- Assist enforcement staff addressing violations
- Respond to emergencies



Sanitary Surveys

- Sanitary Survey is an onsite evaluation of the water source, treatment, storage, distribution, operations & maintenance, and management and documents the water systems ability to provide safe drinking water
 - Regulatory Deficiencies
 - Sanitary Deficiencies
- Respond to deficiencies identified in sanitary survey
- Frequency of sanitary surveys
 - Community – every 3 years
 - NTNC and NC – every 5 years



Compliance Sampling Staff

- Gathers water samples for quality analysis
- Create compliance records of samples collected
- Arrange timely delivery to laboratories
- Track samples needed to be taken
- Continually work with systems and oversight staff to insure all samples needed are taken
- Respond to water quality emergency sampling



Required Water Sampling

- Community Water Systems (CWS)
- Non-transient non-community Water Systems (NTNC)
- Transient non-community Water Systems (NT)
- Source of water supply:
 - Ground Water
 - Surface Water
 - Ground water under direct influence of surface water (GWUDI)



Compliance Sampling

Compliance sampling analysis must be by a certified laboratory

- Total Coliform Rule
- Phase II Phase IV – Chemical Monitoring Rules
- Surface Water Treatment Rules
- Disinfection By-Product Rule
- Lead and Copper Rule
- Future Rules – Groundwater Rule



Chemical Sampling Requirements

Community water systems

- chemical, radiological

Non-transient non-community water systems

- chemical, radiological

Transient non-community water systems

- nitrates

Additional sampling requirements for new water sources



Microbiological Sampling Requirements

Total Coliform (TC) number of samples is based on population

- CWS: Monthly sampling
- NTNC: Monthly sampling
- NC: Quarterly sampling

Repeat sampling requirements for TC positive sample result



Water Conservation Fee

- Three cents (\$.03) per 1,000 gallons of water produced to the Taxation & Revenue Dept.
- Administered by the New Mexico Environment Dept.
 - Pays for testing of Public Water Supply Systems
 - Analyzing contamination susceptibility
 - Operator Certification implementation
- Who doesn't pay the Water Conservation Fee
 - Purchase Water Systems
 - Federal Water Systems



Data Management

- Manages information on water system compliance
- Tracks reporting and water analysis
- Maintains inventory, contacts, data entry
- Works with laboratory reporting analysis
- Quality Control / Quality Assurance
- Reports compliance to EPA
- Tracks deficiencies and violations



Recordkeeping Requirements

- Microbiological and turbidity analysis – 5 years
- Chemical analysis – 10 years
- Records of actions taken to correct violation – 3 years
- Sanitary Surveys and related documents – 10 years
- Records concerning a variance or exception – 5 years
- Copies of Public Notifications – 3 years
- Consumer Confidence Reports – 3 years



Consumer Confidence Report

- Consumers right to know what is found in their drinking water
- Consumer Confidence Reports are due to the State and to customers by July 1 each year
- All Community Water Systems are required to:
 - List of all detected contaminants and their health effects
 - Prepare and distribute
 - Certify information is correct and has been distributed
 - Must keep copies for 3 years



Utility Operator Certification

- New certified sampling requirement for operators
- Responsible for operations and maintenance of a water system to providing an adequate and safe supply of drinking water.
- Keep all system components functioning efficiently and effectively.
- Understand and comply with all relevant regulations to protect public health of your customers.
- Communicate with management regarding water system needs for maintaining quality water.
- Protect the system from contamination, natural disasters and vandalism.
- Operators are professionals!!!



Water System Security and Protection

- Homeland Security – Title IV Drinking Water Security and Safety
- Emergency Response Plan required for systems serving greater than 3,300 persons
- Essential for the protection of public health
- Adequate security to prevent loss of service
- Vulnerability Self Assessment and Emergency Response Plan recommended for all systems
 - Terrorist acts, acts of vandalism, pranks



Public and State Notification

- Provides a means for sharing information with your customers on the quality of water they are consuming.
 - Tier 1: Significant health risk, notice provided within 24 hours
 - Tier 2: Moderate health risk, notice provided within 30 days
 - Tier 3: Low health risk, notice within 365 days
- Radio, TV, hand delivery, posting, newspaper, consumer confidence report



Capacity Development Direct Assistance

Capacity is the Technical, Managerial, Financial conditions of a water system

- **Development:** Training, workshops, funding, Direct Assistance to meet compliance
- **Direct Assistance: Technical**
 - DWB, CPB, NMRWA, EPA
- **Direct Assistance: Managerial and Financial**
 - CPB, DWB, Rural Community Assistance Corp., NMRWA, EPA



Enforcement/Compliance

- Administrative actions by NMED for water quality MCL's, monitoring & reporting, survey deficiencies, lack of a certified operator, Sanitary Projects Act violations
 - Informal Notice of Violation
 - Formal Notice of Violation
 - Administrative Compliance Order w/o Penalty
 - Administrative Compliance Order with Penalty
 - Civil Court Action
 - Criminal Court Action
 - Administrative Order on Consent
- EPA Federal Enforcement Actions
- EPA/NMED Formal Enforcement Actions



NMED Enforcement Actions

In 2007 NMED took the following actions:

- 20 Notice of Violations (NOV'S)
 - 15 Have returned to compliance or in the process of returning to compliance
 - 5 NOV'S escalated into Administrative Compliance Orders
- 24 Administrative Compliance Orders w/o Penalty (A/O'S)
 - 10 Have returned to compliance - 14 in the process of returning to compliance

Technical Assistance is provided if needed



Source Water Protection

- A plan or set of strategies for water systems to eliminate and prevent adverse health effects by managing and protecting their ground water sources.
- **NMED Source Water Assessment Report**
 - Identify potential pollution sources
 - Susceptibility analysis and vulnerability determination
- For planning and developing a water source protection plan to limit future pollution sources



Funding

- NMED/NMFA – Drinking Water State Revolving Loan Fund
- NMED CPB – Rural Infrastructure Program
- New Mexico DFA – CDBG Program
- NMFA – PPRF
- New Mexico Legislature
- USDA – Rural Development
- Private infrastructure financing companies

- Future Funding Trends
 - Uniform Funding Application
 - Less and less grant monies
 - Loans with conditions
 - Rates for self sufficiency



Regionalization

- Identify region - who needs to be involved
 - What information is needed to begin regionalization
 - Benefits, Obstacles, Risks
- Evaluate needs with regional partners
 - Operational needs, Structural needs, Administrative needs
- Establish steering committee
 - Study how regionalization will work, performing actions developing plan
- Enter into agreement
 - Memorandum of Understanding, Joint Powers Agreement, Merger Plan