

Ground Water Rule Overview

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Overview

- Purpose
- Components
- Process

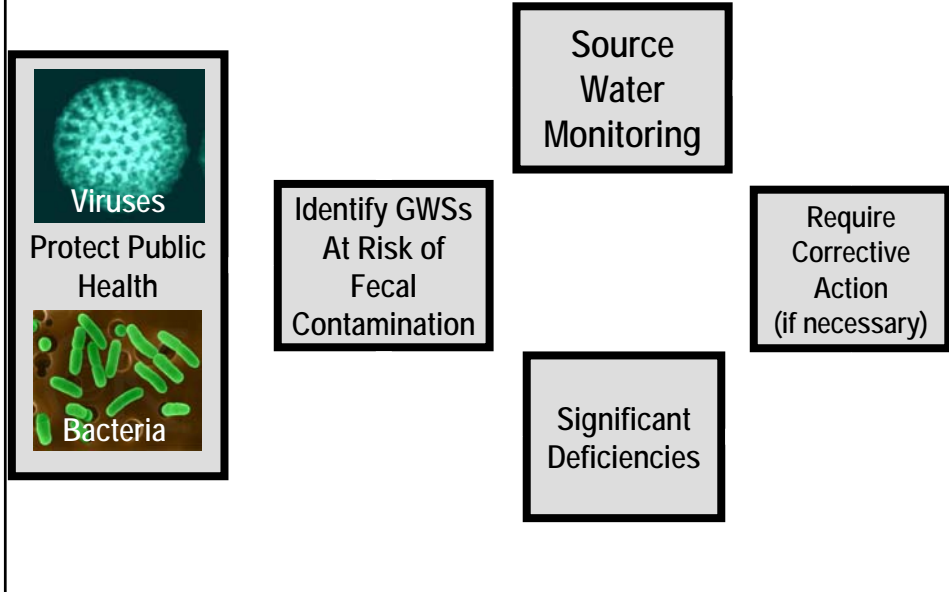
Purpose of the Ground Water Rule (GWR)

Provides increased protection against microbial pathogens in public water systems that use ground water sources.

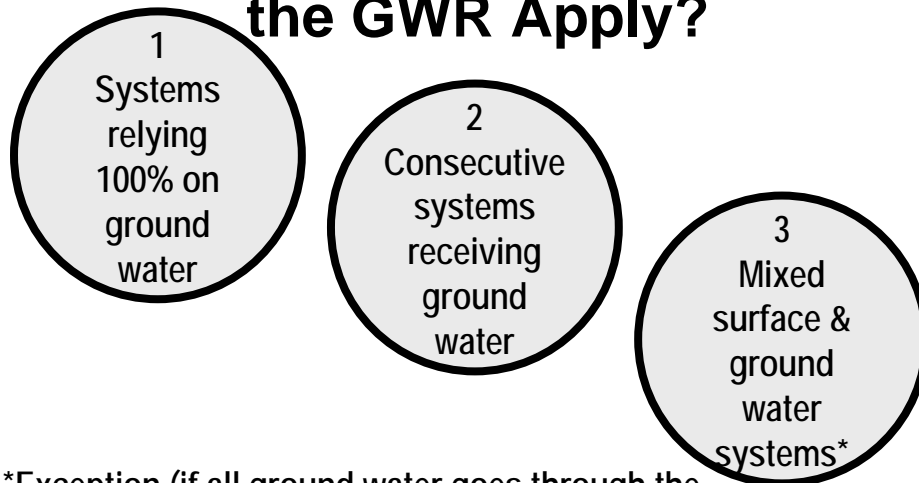
GWR Regulation

- Applies to all PWS using ground water
- Texas: **5,637** GW systems and **381** PWS purchasing water from a GW source
- PWS in Texas use **13,406** GW sources
- Compliance date = December 1, 2009

Primary Purpose of the GWR



To Whom Does the GWR Apply?



*Exception (if all ground water goes through the treatment process of surface water)

Key Provisions of the GWR

Sanitary
Surveys of all
GWSs

Source Water
Monitoring

Corrective
Actions for
Significant
Deficiencies &
Fecal
Contamination

Compliance
Monitoring

Periodic Sanitary Surveys

- For CWS every 3 years, unless they meet the performance criteria, then every 5 years
 - Provides 4-log treatment of viruses
 - Outstanding performance record
- For NCWS every 5 years

Source Water Monitoring Scenarios

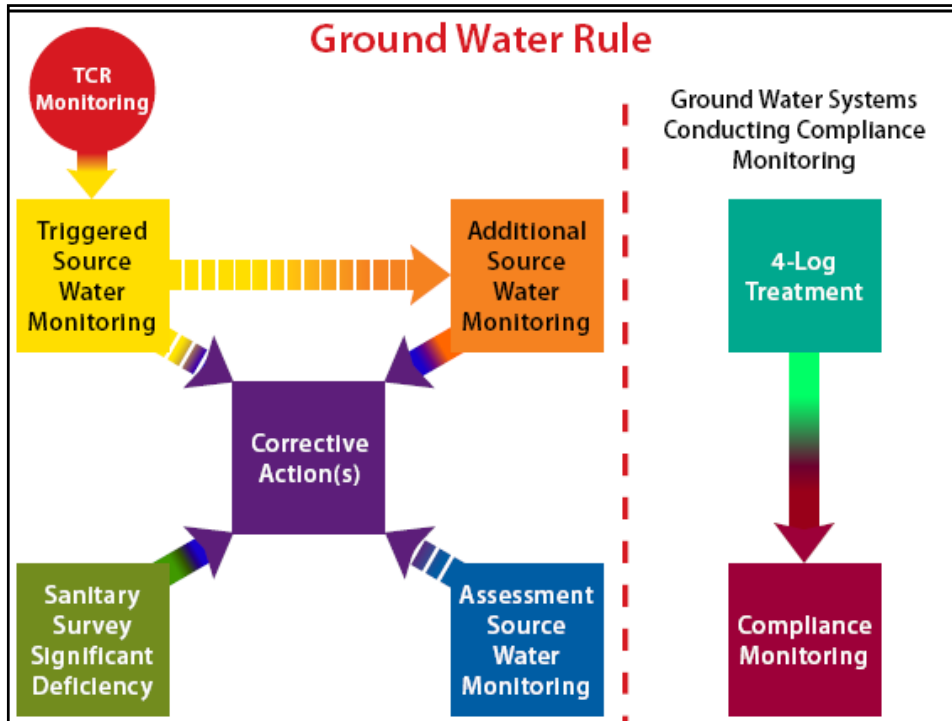
- Two possibilities:

**Assessment Source Water
Monitoring**

**Triggered Source Water
Monitoring**

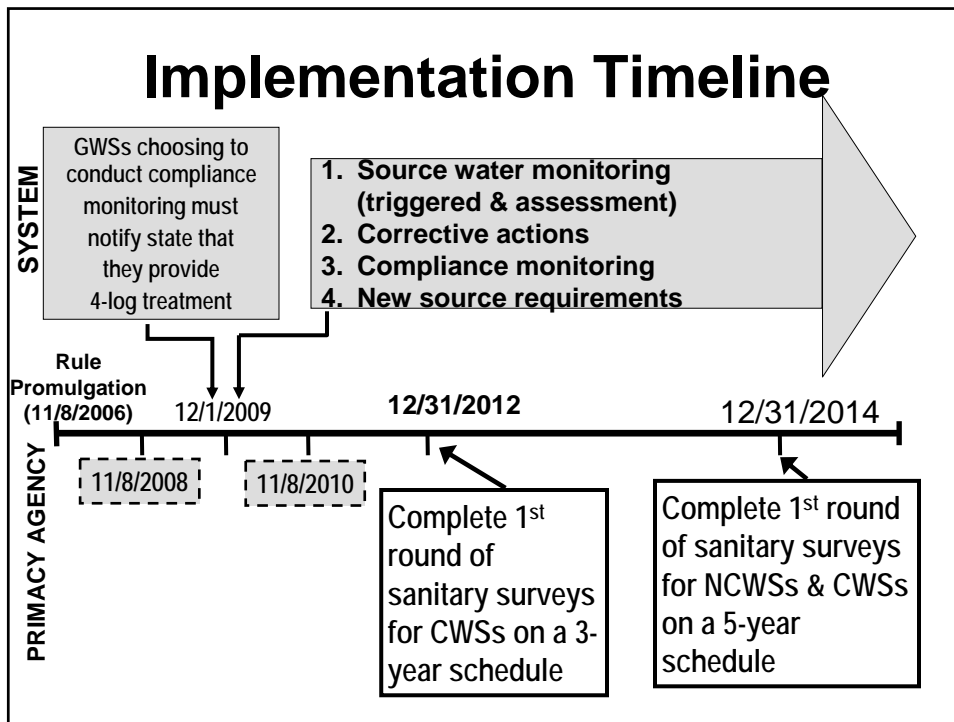
Compliance Monitoring

- GWSs that:
 - Provide 4-log treatment of viruses at or before the first customer using:
 - Inactivation
 - Removal
 - State-approved combination of 4-log inactivation & removal
 - Notify the state in writing of existing treatment or provide 4-log treatment as a corrective action
 - Begin compliance monitoring



Triggered Source Water Monitoring

- GWSs must conduct triggered source water monitoring if they:
 - Are notified of a TC-positive TCR routine sample, and
 - Are NOT conducting GWR compliance monitoring for their 4-log treatment



Relationship with the TCR

- TCR and GWR work together
- Samples in distribution system may indicate a problem in source
- Total coliform-positive sample under the TCR will trigger source water monitoring

Acronyms

CT	The residual concentration of disinfectant (mg/L) multiplied by the contact time (minutes)
Consecutive System	PWS that receives some or all of its finished water from a wholesale system(s)
TCR	Total Coliform Rule
GWR	Ground Water Rule
GWS	Ground Water System
CWS	Community Water System
NCWS	Noncommunity Water System
DBPR	Disinfectants and Disinfection Byproducts Rule
SWTR	Surface Water Treatment Rule
LCR	Lead and Copper Rule
Wholesale System	PWS that sells finished water to one or more consecutive systems

GWR Compliance Dates?

PWS Requirements	Required By:
Notification of 4-log treatment of viruses	December 1, 2009
Required Beginning:	
Triggered source water monitoring	December 1, 2009
Corrective actions	
Compliance monitoring	
New sources placed in service must meet triggered source water monitoring requirements or conduct compliance monitoring for 4-log treatment of water	
States can require GWSs to conduct assessment source water monitoring	
State Requirements	Required By:
Complete sanitary surveys for most CWSs	December 31, 2012 (& every 3 years after)
Complete sanitary surveys for NCWSs & remaining CWSs	December 31, 2014 (& every 5 years after)