

# OVERVIEW OF THE GWPC STATE CLASS II UIC PEER REVIEW PROGRAM

Mike Nickolaus, P.G.  
GWPC

## State of Ohio Class II UIC Program Peer Review

January 2017



Conducted by the  
**GROUNDWATER**  
PROTECTION COUNCIL

# ACKNOWLEDGEMENTS

A special thanks to review team members and the management and staff of the state Class II UIC programs reviewed for their time and energy, and especially for their dedication to protecting the environment

**Purpose and history of GWPC Class II  
UIC Peer Reviews**

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graph TD; A[Purpose and history of GWPC Class II UIC Peer Reviews] --> B[Differences between EPA Oversight Reviews and GWPC Peer Reviews]; B --> C[Peer Review Process]; C --> D[General Findings and Program Features]; D --> E[Program Highlights and Overarching Conclusions];
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**Differences between EPA Oversight  
Reviews and GWPC Peer Reviews**


**Peer Review Process**

**General Findings and Program  
Features**

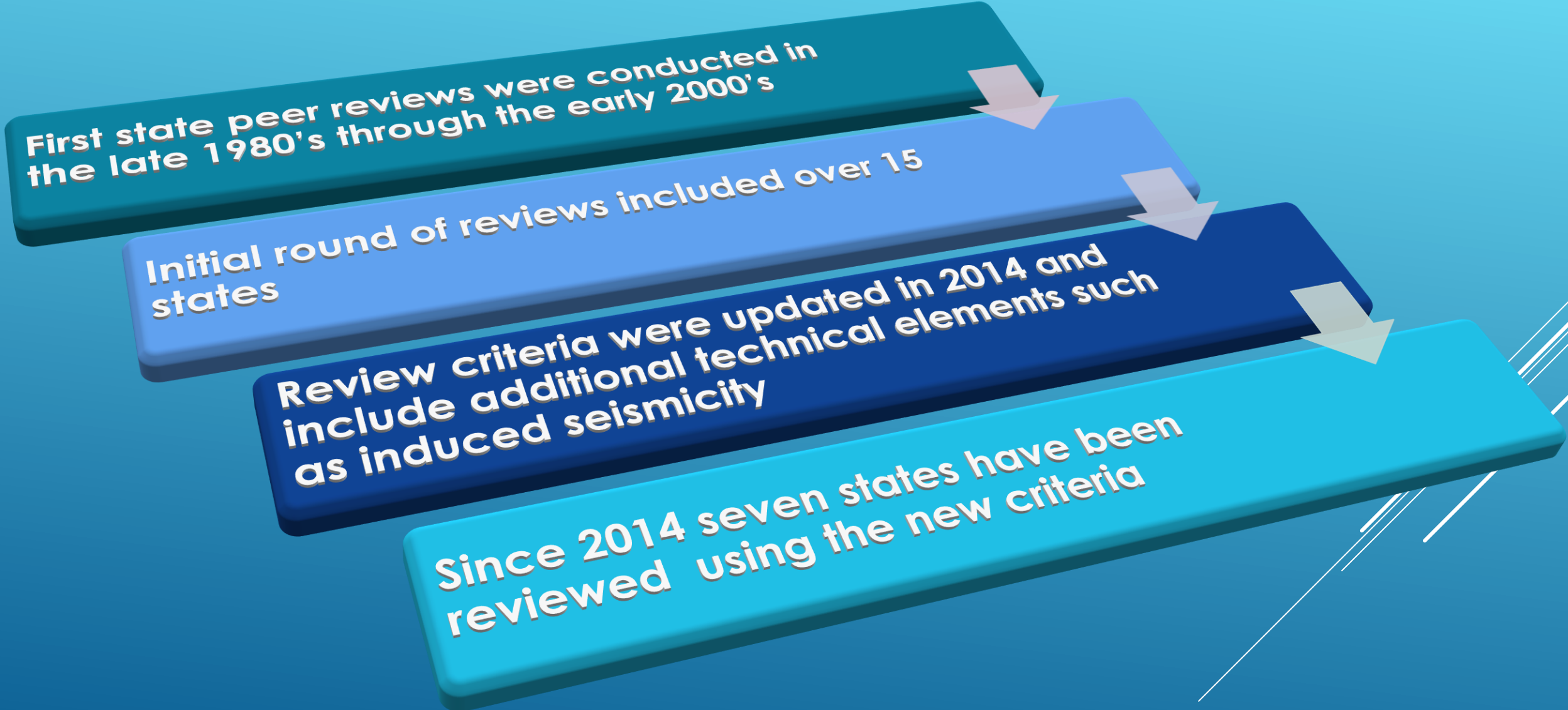
**Program Highlights and Overarching  
Conclusions**

# PURPOSE OF GWPC CLASS II PEER REVIEWS

To review the effectiveness of state Class II UIC programs, cite program strengths and offer suggestions for possible improvements

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# PEER REVIEW HISTORY



# REVIEWS PUBLISHED 2015-2020

2015-2016

2017-2018

2018-2020

Utah-  
November  
2015

Ohio  
January  
2017

New Mexico  
January  
2020

Nebraska  
April 2016

West  
Virginia  
November  
2017

California  
April 2020

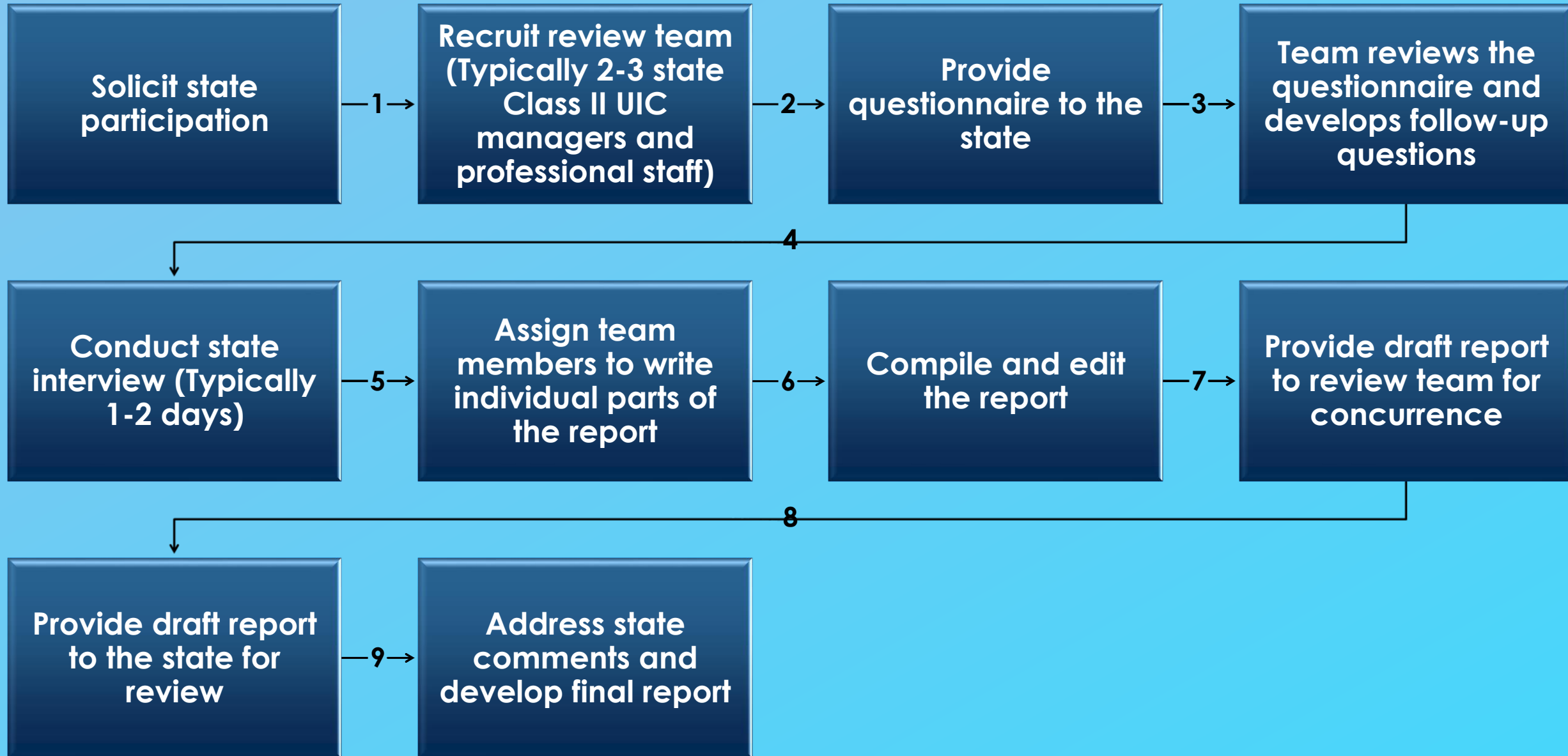
Kansas  
September  
2020



## How do these review processes differ?

- ▶ EPA Reviews measure a program against specific metrics
- ▶ Peer reviews measure a program based on overall effectiveness
- ▶ EPA Reviews include analyses of individual permits, field inspections and enforcement actions
- ▶ Peer reviews focus on an overview of the permitting, field operations and enforcement processes

# PEER REVIEW PROCESS





# GENERAL FINDINGS

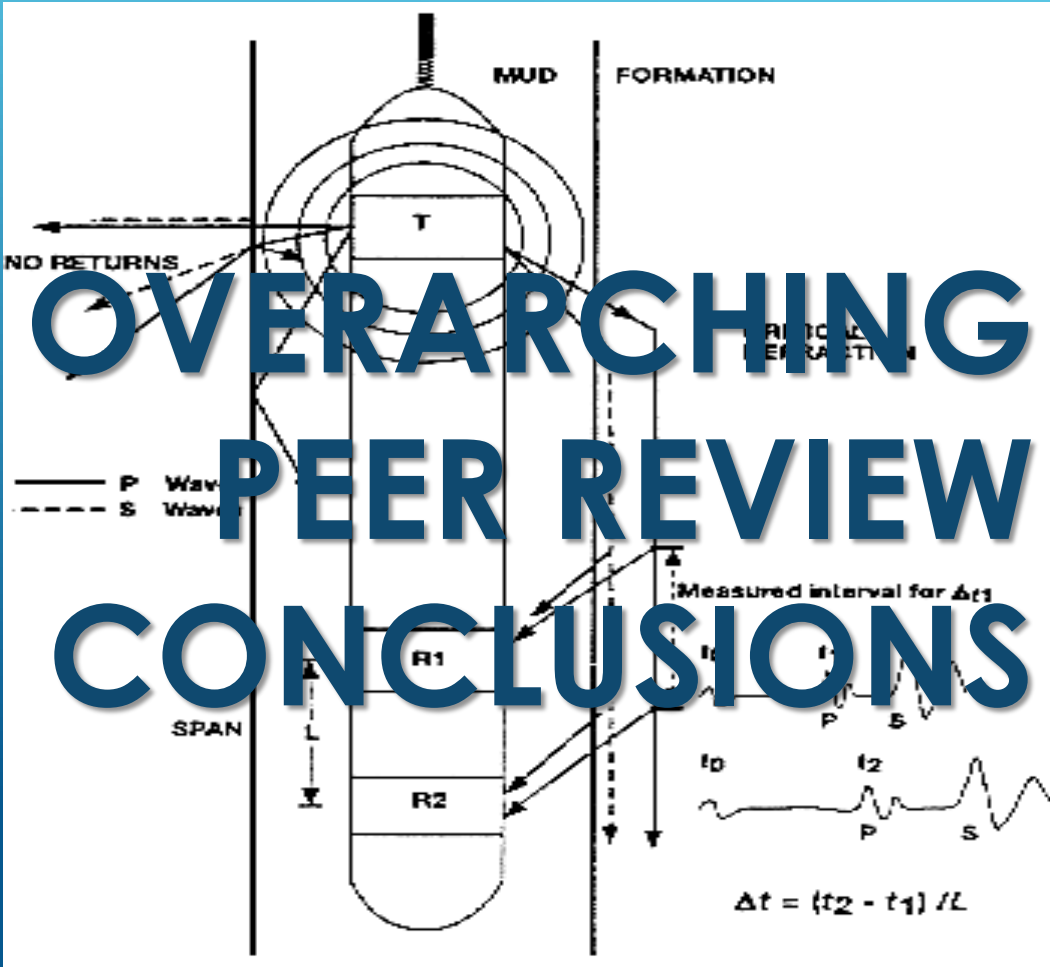
- ▶ The most often cited program highlight was the dedication and professionalism of state staff
- ▶ Upgrading financial assurance was the single most often cited suggestion
- ▶ The next most often cited program highlight was that states focused their field efforts on the most important elements such as witnessing of MIT's and casing and cementing
- ▶ The need for additional staff and resources was the second most often cited suggestion.
- ▶ All states reviewed required surface casing set and cemented below the deepest USDW or other protected groundwater source.
- ▶ While not always attainable most states have a goal of witnessing 100% of MIT's
- ▶ The majority of UIC permits issued are for conversions of oil and gas wells to Class II wells
- ▶ Most of the states reviewed do not distinguish between commercial and non-commercial wells

# UNIQUE PROGRAM FEATURES

- ▶ **California:** Has a two-tiered permitting system and requires concurrence on project permits from the State Water Board
- ▶ **West Virginia:** Requires pre permitting groundwater sampling, manages both the Class II and Class III programs, and requires permit reapplication every five years
- ▶ **Ohio:** Requires liability insurance and well bonding and inspects all Class II wells at least once each quarter
- ▶ **Utah:** Inspects wells in “Indian Country” for EPA and requires a CBL for all new Class II wells
- ▶ **Nebraska:** Requires annual MIT’s on commercial wells
- ▶ **Kansas:** Uses two different data management systems and flex time for witnessing field operations
- ▶ **New Mexico:** Requires cement circulation to surface on all casing strings and a one-mile AOR for large capacity wells

# COMMON PROGRAM FEATURES

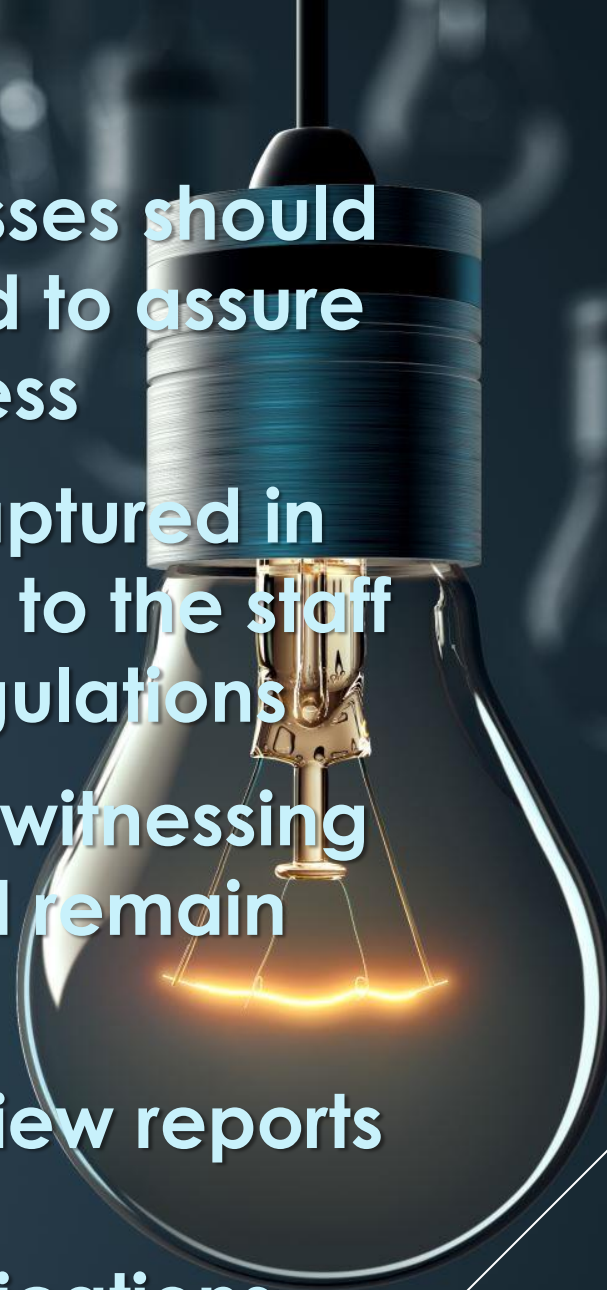
- ▶ Five of the seven states have civil penalty authority
- ▶ Three utilize a 1/2 mile Area of Review (AOR)
- ▶ All states have a goal of witnessing 100% of MIT's (SAPT's)
- ▶ All states require setting and cementing of surface casing below the deepest protected groundwater
- ▶ All states either currently utilize or are planning to utilize a variant of the Risk Based Data Management System (RBDMS)
- ▶ Although official requirements differ all reviewed states had a policy of responding to complaints with 24 hours



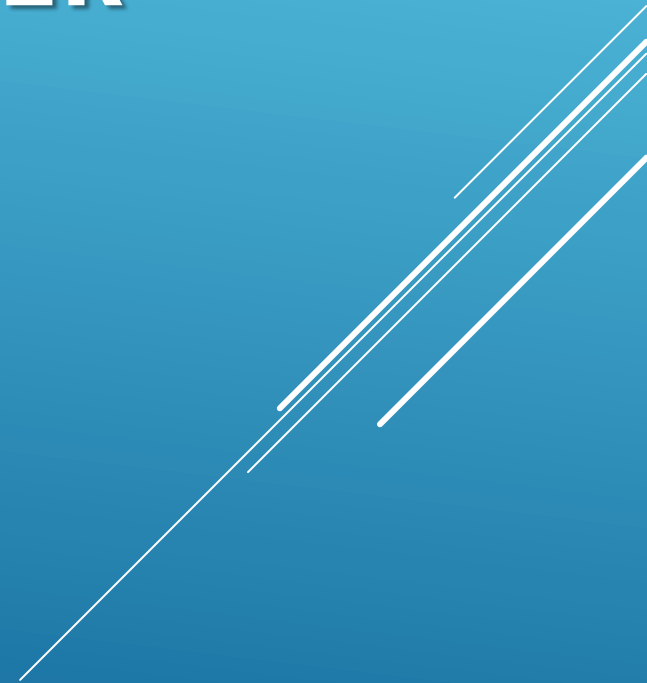
- ▶ State Class II programs are effectively protecting USDW's.
- ▶ Financial assurance is an area where program improvements should be considered in several states.
- ▶ There is a wide range of staff availability among states.
- ▶ Agencies with more limited staff resources tended to focus on witnessing the most critical field operations such as casing cementing and MIT's.
- ▶ In nearly all agencies reviewed there was typically one person who had the broadest and most extensive knowledge about the UIC program and provided the most in-depth information.

# FINALS THOUGHTS

- ▶ Staff training and replacement processes should be reviewed and updated as needed to assure staff succession is smooth and seamless
- ▶ Procedures and policies should be captured in writing, kept updated, and distributed to the staff to assure consistent application of regulations
- ▶ Closure of annular disposal wells and witnessing of casing-cementing and MIT's should remain priorities
- ▶ You can find the Class II UIC Peer Review reports online at <http://www.gwpc.org/resources/publications>



# WHAT'S NEXT FOR THE PEER REVIEW PROCESS?



**Demonstrates managements confidence in the program and staff**



**Provides useful suggestions and critical backup for needed changes**



**Creates recognition of the program's capabilities to outside entities**



**Instills a sense of pride and accomplishment among the staff**



**Gives confidence to department leadership, state legislators, and governors that the program is being operated and managed effectively**



# Questions

Contact [mnickolaus@gwpc.org](mailto:mnickolaus@gwpc.org)

