PrivateWellClass.org and Resources for Working with Private Well Owners

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The Private Well Class is Sponsored, Funded, & Supported By
The Rural Community Assistance Partnership & USEPA

RCAP’s Private Well Program

- A national outreach and well owner education program.
- Being implemented through the Rural Community Assistance Partnership (RCAP) and it’s 6 regional affiliates to support private well owners.
- RCAP Partners include www.PrivateWellClass.org at the University of Illinois, NEHA, NGWA, and the WSC and 5 state well education programs (coop extension).

About The Private Well Class

- A series of 10 lessons sent to participants via email over 10 weeks. Self-paced.
- Webinars that will provide specific information supporting the 10 lessons, giving participants a chance to ask questions. (6 topic centered)
- A website, www.PrivateWellClass.org, that will serve as a resource to private well owners.
- Multimedia lessons (videos, podcasts, webinars)
Goal

- Give well owners direct targeted information and advice:
  1. why their well is important,
  2. why they should understand how it works,
  3. how to help protect themselves from risk.
It’s All About Being Aware

- Understand your well log and where your water is coming from (depth, pump setting, screen).
- Know if there are naturally occurring contaminants or water quality issues associated with your water source.
- Learn to ask the right questions, contact local sources of information.
- Sample your well.

Surveys Well Outreach Programs

- Evaluate well owner education and outreach programs from around the country. (Why don’t well owners test?)
- Surveyed 93 programs to gather information on implementation, methods, results and logistics.
- Qualitative look at challenges, experiences, lessons learned and suggested best practices.

Challenges

- Lack of funding for private well programs.
- Differences in Construction Codes/Rules:
  - What is a private well.
  - Permitting and well log submittal.
  - New Jersey vs Pennsylvania.
  - Especially in enforcing what rules they have.
- Not a lot of training available for County/Local Health Departments on private well issues.
- Has led to mostly local approaches to support well owners in many parts of the country.

A Lot Is Going On Nationally

- We learned about programs that are active at the state and local level, some unique with great ideas.
- Also learned about the challenges everyone is facing.
- We realized that sharing solutions and ideas would be a powerful way to support each other.
- We were in a unique position of gathering information about programs nationally that could help inform.
- We decided a workshop to bring everyone together to share challenges, ideas, successes, and develop partnerships was needed.

A Great Workshop Model

14th Annual EPA Drinking Water Workshop
Small Systems Challenges and Solutions
August 22-24, 2017 - Hilton Netherland Plaza - Cincinnati, Ohio

Sponsored by the U.S. Environmental Protection Agency (EPA) in partnership with the Association of State Drinking Water Administrators (ASDWA)

Agenda

Tuesday, August 22, 2017

7:45 am Registration (Resources Area Available)
8:30 am Opening Remarks and Keynotes
  SESSION 1: WELCOME AND KEYOTES
  Moderator: Theresa Sharp, EPA’s Office of Research and Development (ORD)
  9:30 am: Agenda Review and Logistics
  Thomas Spark, Michelle Lutes, Davann Cade, and Thomas Song (Workshop Organizers); EPA-ORD Your In Review and Look Ahead
  Corbey Smith-Miller, Director of EPA-ORD, National Risk Management Research Laboratory
  11:30 am: Agency Priorities and Introduction of Opposite Sponsor
  12:30 pm: Keynote Address
  Cong Bates, Ohio EPA Director and The Environmental Council of States (ECOS) Committee Chair for Water and Region 5 Representative

10:00 am Break
Why EPA Workshop Has Been So Successful

- They pick the topics and invite the speakers they want
- They pay for each state to send 1-2 people who are working with small systems.
- Mostly a single track, with some breakouts, panels, and time to learn from experts.
- Have expanded breaks and activities to encourage interaction.
- Let anyone come for free and provide conference materials.

What We Wanted To Happen

- Expand the national dialogue we were creating with the RCAP private well program.
- Provide an opportunity for practitioners, those working with well owners directly, to share their experience, and develop relationships with like-minded professionals.
- Decided that if we brought 20-30 experienced professionals in to speak, even if no one came, we would have a great workshop, so we paid their travel expenses.
- Wanted it to be free to attend to attract those w/o a travel budget. (had a number from IL and IN who drove in.)
- Start new collaborations, opportunities to learn from each other, leave wanting more and excited to get to it.
Role As Facilitator

- We know there is a lot of great work going on around the country. We wanted to bring those folks with a passion of supporting private well owners together.
- Help develop non-traditional partnerships (we are convinced drilling/GW professionals and sanitarians need each other to create highly successful efforts.)
- Introduce private well practitioners to RCAP and their efforts around the country.
- Elevate common goals we have related to educating private well owners. (raise the bar on expectations nationally)

Audience and Focus

- Sanitarians, groundwater professionals, extension, drillers, regulators, labs, educators, researchers (all were there)
- Set up conference to step through what we have learned from the Private Well Class Program.
  - **Challenges and Opportunities** – about wells and well owners, the same/similar issues in many areas.
  - **Perspectives** – meaning view of well owner, vs regulator, vs educator, vs driller, why each is important for the other to understand.
  - **Innovations** – what are some of the cool ideas and things some have learned and others need to know
  - **Partnerships** – a full day on how we can go farther together and the role each of us can play.

Challenge – Lead, Arsenic

- Many older homes with lead premise plumbing
  - Complicated, education is difficult
  - Treatment can affect corrosivity
  - Galvanized drop pipe and premise plumbing
  - Corrosivity of natural groundwater
- Arsenic is well known and understood problem, yet
  - Many well owners don't seem that concerned
  - Sometimes have no choice.

Challenge – Well Owners

Barb Liukkonen – Minnesota Extension
- Surveyed 1700 well owners in 3 states
- 87% not or only slightly worried about well water
- Many have never tested
- 8% said “don’t want to know.”
- 53% said “We've been drinking it for years.”

Minnesota Department of Health
- Surveyed 795 well owners with high arsenic test result
- 35% took no action
- 83% still drank untreated water
Challenge – Well Construction

Tom Christopherson – Nebraska DHHS
- Nebraska Grout study
- One grout does not fit all
- Bentonite chips make the best seal
- Sometimes grout regs don’t fit

What Makes a Good Seal?
- Match the grout material with the borehole material properties.
- Avoid bridging the grout material by using the right technique for placement.
- Grout column must be less permeable than surrounding material in order to divert to natural filtrations.
- Grout should be flexible, dynamic, and compatible with casing materials.

Perspectives – Drillers Panel

Mark Layten – Kickapoo Drilling - Coliform Testing
- Why there are so many bad tests today
- The fact that drillers are doing so much more than drilling (sampling, treatment, etc.)
- Explained procedure

Corwin Gingerich – Gingerich Well Drilling
- Talked about relationships, and why good drillers are good colleagues with public health and regulators.
- Family business, believes in community.
- Volunteers, and willing to share resources.

Perspectives – Drillers Panel

David Henrich – Bergerson-Carwell & NGWA
- Discussed his public service, NGWA, relationship with state.
- Drillers are affected by so many rules.
- Future GW issues.
- How to elevate the industry, knowledge, and well owner engagement by working together.

Drillers Panel

- Point was to provide the industry an opportunity to engage participants who are regulators and public health practitioners.
- Not only to share their perspective, but to help them understand how valuable drillers can be in their program.
- Also a chance for the audience to ask questions.
  - Discussed what is guaranteed (products & workmanship), learned that quality of the driller certainly matters
  - Shock chlorination
    - Level of chlorine
    - What procedure to use
  - Regulations that don’t make sense or too difficult
    - Sometimes hurt the “good guys”, others ignore
    - Those that don’t follow the rules give all a bad name
  - Educating well owners, drillers role
**Perspectives – Labs**

Sarah Wright - APHL
- Did a survey of their members to present at this conference.
- Labs value partners and are eager to do so.
- Lack of regulations makes supporting well owners a bigger challenge.

**Lessons Learned – Penn State Ext.**

Susan Boser – Penn State Extension
- Education works, well owners can be taught.
- A variety of approaches needed to reach well owners
- Master Well Owner Network – trained to help

**Innovation – Be Well Informed Tool**

Pierce Rigrod – NH DES
- Provides well owner with evaluation of water sample.
- Recommends treatment based on results.
- Provides guidance
- Offered code, since conference 6 states have asked for it and are developing similar sites.

**Innovation Partnerships – Lane Co.**

Sarah Puls – Lane County Oregon
- Wrote grant to get testing equipment.
- Provided to 2 high schools in county.
- Do testing, send out kits, send out letters.
- Learning experience for science students.

**Lightning Talks**

4.1.12 has 15+ minutes of questions to speakers.
Some Topics Covered:
- Poor construction
- Flooding
- Well maintenance
- Well assessments
- Water quality

**Takeaways**

- Well owners aren’t looking to well drillers for information on safety and quality of well water (labs, internet, and govt ahead of drillers)
- The biggest two issues in protecting the health of private well owners:
  - Old/Poor Construction
  - Well Owner Knowledge and Education
- Private well owner issues are a growing concern and more communication is leading to:
  - Better understanding of the issues nationally
  - Better collaboration among stakeholders
  - A growing group of stakeholders who are passionate about private well issues and public health.
Partnerships

- So many wells, well issues, and uninformed well owners.
- Programs that are successful are built on partnerships with many players. They:
  - Share costs.
  - Share effort.
  - Spread the word.
  - Provide local buy-in.

- Public Health Labs are eager to be partners in many states
  - Contact your state lab or a nearby lab and find out what they offer.
  - Provide sampling information to every customer.

Components of a Successful Campaign

Program Partners

- Government
- Schools
- Universities
- Environmental
- Agricultural
- Business
- Other
- Civic

Successes

- Evaluations were phenomenal
  - Best conference I have EVER been to.
  - Every presentation was relevant to what I do.
  - I learned so much, and made excellent contacts.
  - Can’t wait for the next one.

- Lots of relationships and partnerships started.
  - VT met FL and TX folks at conference
  - 1100 samples in TX
  - 600 samples in FL
  - We were called to facilitate with state agency

- Most attendees said that they had no idea so much was going on around the country.

Get Involved

- What you can do
  - Contact local extension or health department and offer to present at public meetings for well owners.
  - Be a resource to answer well owner questions.
  - Pass out materials (see me for info)

- We all have to be engaged in providing solutions to raise public awareness of private well issues. It will:
  - Elevate your business
  - Earn you respect locally
  - Help educate regulators and educators
  - Provide advertising for your business.

- So be an active partner in supporting well owners you serve.
  - We can help you get started, contact us.

Basic Steps - Partnerships

- Understand the audience
- Appropriate media channel
- Appropriate type of message

- Identify Barriers
- Isolate the most significant barriers to behavior change (see Figure 1)

- Select Motivations
- Strategies should directly reduce the most significant barriers to change.

- Build Partnerships
- With other organizations
- With the audience

- Earn a trusting relationship
- Be credible and trustworthy

Figure 2: Basic steps for creating an effective outreach program.
Questions

Thanks for attending!