

Water Supply Advisory Committee

April 15, 2008

Clarion Hotel – SeaTac Airport
3000 S. 176th Street
Seattle, Washington 98188

Meeting Notes

Welcome and Introductions – Rich Hoey (Chair)

1. Exempt Wells (*Brian Walsh*)

The Ground Water Code (RCW 90.44.050) provides an exemption from groundwater permits for single and group domestic uses not exceeding 5,000 gallons per day (gpd).

Groundwater Permit Exemption:

<u>Uses</u>	<u>Quantity Limit</u>	<u>Acreage Limit</u>
Stock-watering	None*	None
Lawn-watering/non-commercial garden	None	½ acre
Domestic	5,000 gpd	None
Industrial (includes commercial agriculture)	5,000 gpd	None

*Not tested in court, but based upon Attorney General Office formal opinion.

In *Ecology v. Campbell & Gwinn* (2002), the Washington Supreme Court determined that a group of lots under common ownership for which the developer proposed individual wells would be one group domestic use and thereby limited to a total of 5,000 gpd under the exemption.

It is unclear how to determine whether a single lot is part of a “group domestic use” under the exemption and *Campbell & Gwinn* decision.

Why 5,000 gpd per 40 acres?

1. It provides some level of protection to aquifers and streams that would be appropriate for most areas in the state.
2. Forty acres is a common size for a subdivision contemplating water supply needs.
3. It is consistent with the density used in the Whitman County pilot project statute, which uses a minimum of 10-acre lot size with 1,250 gpd per lot.

Benefits of the “40-Acre Rule”

1. The formula is easy for owners, planners, and health departments to apply – only need to know the lot size and whether it is part of a subdivision within the past 15 years.
2. It doesn’t matter if the use is a “group” or a “single” exemption; the same formula applies to both.

Why 15 Years?

1. Linkage to due diligence is logical.
2. Same time used by Legislature for determined future developments – RCW 90.14.140(2)(c).
3. Same time used by the Supreme Court for riparian users to become appropriators – *Department of Ecology v. Abbott*.

Working Group Products:

- The Exempt Well working group applied the concepts for clarifying group domestic use and developed two flow charts for applying the exemption (subdivision stage and building permit stage).
- The working group also discussed the need/value for a Memorandum of Understanding for Ecology assistance to local governments and a commitment of the Attorney General's Office support defending the guidance.

For more information about exempt wells, contact:

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WA State Department of Ecology
Water Resources Program
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2. Group B (*David Christensen*)

Group B Funding and Challenges

- No guarantees that the current level of state funding will continue (approx. \$550,000/year).
- Can't use federal funds.
- No dedicated funding and increasing demands for existing Department of Health funding.
- New mandates (*e.g.*, Municipal Water Law, Groundwater Rule)
- Roughly 13,000 systems serving just 110,000 people.
- Regulatory mosaic.

Group B Project Goals

- Develop three program levels: low, medium, and high.
- Create a medium Group B program that is “doable” (protects public health, cost-effective with limited resources, and balances regulation and education).
- Cannot undercut existing local health Group B programs.

Group B Subcommittee Activities

- Six meetings, including representatives from Office of Drinking Water regions and headquarters, and representatives from the following counties: Lewis, NE Tri-County, Tacoma-Pierce, Seattle-King, Skagit, and Yakima.
- Three meetings were held with county environmental health directors.
- Outcome of meetings: General agreement around the framework of a medium-level Group B program.

Medium-Level Group B Program

Four important Group B program functions: project review, water quality monitoring, address known high public health risks, and training and outreach.

Project Overview

- Retain same basic state/local health relationship.
- No approval of new Group B systems with high-risk sources.
- Update Group B workbook and design standards.

Water Quality Monitoring

- Ongoing oversight through “postcard” mailouts and tracking through Sentry database.
- Focus compliance away from formal actions, such as penalties and bilateral compliance agreements.
- Simplify Water Facility Inventory update through online “portal.”

Compliance Strategies

- Use more cost-effective alternatives to formal enforcement approaches.
- Look at local health jurisdiction (LHJ) models for compliance.
- Examples might include: Public notification to system users; use Sentry Internet to educate the public about systems not complying.

Focus on High Public Health Risks

- Fund LHJs to investigate and provide technical assistance.
- Focus compliance efforts on unresolved high public health risks.

Training and Outreach

- Office of Drinking Water (ODW) would: Provide instructional materials to LHJs, teach LHJs to present training, and fund LHJs to conduct training.
- Training would include single-family well owners and Group B water systems.

Miscellaneous Proposed Changes

- Combine planning requirements into initial project approval.
- Set arsenic MCL to 10 ppb (consistent with federal rule).
- Continue to evaluate option to eliminate ongoing water quality requirements for smallest Group Bs.
- May simplify coliform monitoring follow-up requirements.

Estimating Costs

- ODW built a cost model:
- Cost = S x N x L
Services provided (S)
Number of systems regulated (N)
Cost of Labor (L)
- Allows “what-if” scenarios to be considered.

Short-term Schedule

April 15, 2008	WSAC presentation
April – May 2008	DOH business planning
June 2008	Brief State Board of Health (SBOH) EH Subcommittee Begin stakeholder outreach

Long-term Schedule

June 2008-2009	Stakeholder outreach
August 2008	SBOH briefing/direction
September 2008	DOH budget to Governor
April 2009	State budget adopted
July 2009	Announce public hearing
October 2009	SBOH public hearing
November 2009	Rule effective

Program Levels Revisited

- To date, focus has been on “medium-level” program.
- DOH will estimate costs and rule language for “low-level” program.
- Funding level to be proposed in the Governor’s 2009-2011 biennial budget is unknown.

General comments from WSAC:

1. If taking away penalties, how are you going to enforce things?
2. Look at which Group B systems that are not high risk to public (two components: risk and size of system).
3. Is the program looking at economics?
4. Look at additional vs. dedicated funding.
5. If no funding for Group Bs, state the consequences.

3. ODW Business Planning (*Peggy Johnson, Kristin Bettridge*)

Peggy and Kristin mentioned there are at least 91 activities distributed among ODW’s strategic directions. Core program activities, fully capable program activities, and unfunded new or expanded program activities were also discussed, as well as a draft summary of funding options.

General comments from WSAC about overall program activities:

1. Identify the different stakeholder groups ODW needs to work with, especially for Group B program.
2. If no funding for Group B activities, we will lose the honor of Washington State being the model for Group B program.
3. ODW will need to continue conversations with WSAC about some of the activities ODW may not be doing anymore if funding is not available. If not getting the needed funding, what are the shifts?
4. How do you rank one activity over another?
5. Do we look at programs for the next Legislative session?
6. There may be another funding option that can be proposed by others.
7. External interest may not want pay higher fees, but Legislature might see it as useful. Avoided cost may need to be calculated.
8. We may end up in a “Band-aid” approach.
9. Identify the value to the state and regulated community. Put something out there that time has come (convenient crisis approach). Get alliance from other stakeholders. Keep engaging stakeholders in the process.
10. Need to have assistance with regulated community.
11. Gain public confidence.
12. Water system will be good allies for supporting ODW programs.
13. Get outside input – can reinforce value.
14. Team up with Ecology.
15. It’s easier to work on fixing than preventing.

Elements of a successful drinking water program for Washington State were distributed to WSAC for review and ranking according to level of importance. Elements (in bold) include:

1. *Data* – **gather and share data** (ensure important data about drinking water quality and operations is accurate and easily accessible).
2. *Emergencies* – **act quickly and decisively in emergencies** (be able to respond to, and handle, public health emergencies and actual or potential threats to drinking water).
3. *Enforcement* – **take action against violators** (use compliance tools to address violations; make sure there are serious consequences for operating fraudulently or falsifying records).
4. *Future* – **help plan for the future of water** (participate with others in creating long-term strategies to ensure future generations have safe and reliable drinking water).
5. *Guidance* – **help water systems succeed** (make it clear to those who run water systems what their responsibilities are, and help them successfully meet those responsibilities).
6. *Planning* – **help water systems with future planning** (assist water systems as they prepare to manage development, climate change, new regulations, etc.).
7. *Water delivery* – **understand how water is delivered** (have a thorough understanding of drinking water sources and supply throughout Washington so we can influence better policy decisions).
8. *Water quality* – **understand water quality** (know the quality of water being delivered by all regulated systems, so we can prevent or fix problems).

4. **Groundwater Rule** (*Mike Means*)

Resource Analysis

- Completed January 2008; presented to the ODW Executive Management Team (EMT) on February 19, 2008.
- Includes options allowed by the federal rule in the form of discretionary items.
- Requires 6.9 to 8.4 full-time staff (technical, administrative, management).

Rule Adoption Schedule

- ODW will request the rule adoption extension from EPA.
- EMT will decide in May 2008 whether to adopt the rule prior to December 1, 2009 (GWR compliance date) or January 2011 (fully using the extension's two-year timeline).

Mike discussed the Groundwater Rule discretionary items and asked for comments from WSAC. There are 24 items listed in order of occurrence in federal rule; some are repeat items and will determine how ODW will implement the Groundwater Rule.

Categories in the discretionary items include:

- Consumer Confidence Report
- Public Notification
- Hydrogeological Sensitivity Assessments
- Source Monitoring (triggered source monitoring, assessment source monitoring, analytical methods, sampling location, new sources [assessment source monitoring], monitoring violations)
- Treatment Technique Requirements
- Special Primacy Requirements (public notification, sanitary surveys, source monitoring)

Mike also discussed the sanitary survey significant deficiencies. There are eight elements (only one definition per element – federal rule minimum):

Proposed Definitions:

- | | |
|---|---|
| 1. Source | Improperly constructed wellhead or spring box. |
| 2. Treatment | Failure to properly operate disinfection system, when required. |
| 3. Distribution system | Observed unprotected high-hazard cross connection. |
| 4. Finished water storage | Storage tank roofs or covers need repair (such as holes or improperly constructed hatch). |
| 5. Pumps, pump facilities, and controls | Inadequate or inoperative pump control systems that could lead to pump failure and system depressurization. |
| 6. Monitoring, reporting, and data verification | Fraudulent reporting or recordkeeping. |
| 7. System management and operation | Inadequate follow-up to deficiencies noted in previous sanitary survey. |
| 8. Operator compliance with State requirements | Fraudulent reporting or recordkeeping by the certified operator. |

Significant deficiencies include, but are not limited to, defects in design, operation, or maintenance, or a failure or malfunction of the sources, treatment, storage, or distribution system that the State determines to be causing, or have potential for causing, the introduction of contamination into the water delivered to consumers.

Office of Drinking Water contacts for Groundwater Rule:

Theresa Phillips, Rule Adoption Coordinator

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(360) 236-3147

Mike Means (for rule technical assistance)

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(360) 236-3178

5. Working Lunch Updates

(Margo Partridge, Carolyn Cox, Leslie Gates, and Kristin Bettridge)

EPA Update – Margo Partridge

Priority issues for EPA:

- Climate change.
- Sustainable infrastructure (focus on Four Pillars of Sustainability: better utility management, full-cost pricing, watershed-based approaches, and water efficiency).
- Water security.

Other updates:

- Carbon sequestration.
- Total Coliform Rule – revisions are in the process. Look for changes in early summer or fall 2008.
- EPA is inundated with inquiries about pharmaceuticals and personal care products in drinking water. EPA is studying it; Washington State is doing a lot on this issue.
- No new contaminant regulations to report this time.

Pharmaceuticals in Drinking Water – Carolyn Cox

Department of Ecology (Ecology) has a larger role on the issue of pharmaceuticals and personal care products in drinking water. Office of Drinking Water is working closely with Ecology. Our focus is to reassure the public that we believe there is no immediate threat to their health from trace amounts of these chemicals, but we're also compelled to say we really don't know what the long-term effects may be. We're calling for more study about potential long-term effects and options for removing these chemicals from drinking water.

We also have strong messages about safe disposal of unwanted medicines because the best policy is to keep these chemicals out of the water in the first place. A pilot program where people can take unused drugs for safe disposal is operating in several communities.

Information about Washington's drug take-back program is available at:

www.medicinereturn.com

If there is not a drug take-back program available in your area, here are guidelines for safe disposal:

1. **Keep** the medication **in its original container**.
2. **Modify** the medications to discourage consumption. Add a small amount of water to pills or capsules to dissolve them. Add something unappealing, such as kitty litter or sawdust.
3. **Seal and conceal**. Tape the container lid shut, place in a sealable bag, and then place in a non-transparent container to ensure that the contents cannot be seen.
4. **Discard**. Discard the container into the garbage away from kids or pets. Do not place in the recycling bin.

The Department of Ecology is planning to issue a news release soon about the agency's efforts to help health-care facilities safely dispose pharmaceutical waste to keep it from entering the environment.

We expect this issue will be with us for a long time. We will continue to evolve public health messages to provide the most up-to-date information for water system customers.

General comments from WSAC:

1. Pharmaceutical industry needs to step up to do educational outreach.
2. Look beyond drinking water industry. Agricultural industry could also be affected.
3. Figure out what is coming out of the source.

Lab Reporting Rule – Leslie Gates

Last spring, the Department of Health's Office of Drinking Water prepared a draft rule for reporting laboratory data for public drinking water system monitoring compliance analyses. A revised version of this rule has been prepared based on comments received from labs and public water systems over the past year. The revised rule proposal is now under review by the labs. Labs have until May 23, 2008 to provide comments. The changes were made in response to concerns expressed by the regulated lab community and many public water systems. One of the most substantial changes was for how compliance data would be reported to water utilities and the state.

The use of a designated "state reporting level" was to be dropped (the SRL was first established in early 1990s to meet certain data entry and processing concerns for the new organics monitoring requirements).

Several members of the Water Supply Advisory Committee (WSAC), Washington Water Utility Council (WWUC), and other water system managers were concerned that proposed changes to data reporting could create undue issues with customer interpretations of the Consumer Confidence Report, or with the need to increase sampling frequency. They were especially concerned that some of the proposed data reporting levels were in a range that was well below established standards for public health protection. As such, these levels might create unwarranted problems for some water system.

Encouraged by the WSAC and the WWUC, the reporting requirement was adjusted so that it would be similar to what exists currently with use of the SRLs. It further incorporates an element of flexibility allowing labs to participate in deciding, within a defined range of values, the most appropriate reporting level for them.

April 2008 Proposed Reporting Requirement:

Two new terms defined:

Laboratory Reporting Level (LRL) means the concentration of an analyte in a given sample at which a laboratory has 99 percent or greater confidence that it can be repetitively quantified, within an accepted range of precision and accuracy, when using the same analytical method. This level lies at or above the lab's Maximum Reporting Level (MRL), and ranges up to the level (an EPA-required level or an EPA-accepted Practical Quantitation Level [PQL]) that is used by the state's laboratory certification program to determine a lab's minimum capability for analyzing regulatory drinking water samples.

Measurable Detection means the term used to describe the level of a contaminant in any given sample that can be analytically determined to be reproducible within defined limits of precision and accuracy by a laboratory following routine procedures. It is also used to demark the laboratory-specific LRL. *Data below this level may be reported as less than the LRL, or as not measurably detectable.*

New Proposal for Reporting Data:

- “Non-detectable” or “ND” if the analytical result is less than the established Minimum Detection Limit (MDL) for the contaminant, or
- “Less than the LRL” or as “not measurably detected” (“NMD”) if the analytical result is below the lab's reporting level, or
- “As measured” if the analytical result is equal to, or greater than, the LRL.

This approach compares well to what we have done historically with the SRL. If we were to continue to use SRLs, they, unless otherwise mandated by EPA, would lie mostly at or between the MRL and PQL.

Considerations for the revised approach:

- Data found below the LRL will not be given a value. They will only be noted as something less than what the lab has confidence in reproducibly measuring. We will not know what the “estimated” level might be. We will only know the result is “not measurably detected.”
- EPA and the state would accept that any level at or in the “MRL to PQL range” would be reproducible and measurable.
- All labs would need to meet the same criteria used by Ecology for certification determinations, including meeting EPA-accepted PQLs, or EPA-required levels as a minimum. All labs would thus, even though they might have varying MRLs, have the same upper limit for use in deciding their LRL.

Legislative Wrap up – Kristin Bettridge

The Office of Drinking Water reviewed 140 bills.

Senate Bill 6874 – passed (Creating the Columbia River water delivery account).

Senate Bill 6204 – passed (Dividing water resource inventory area 14 into WRIA 14a and WRIA 14b).

Senate Bill 6580 – passed (Addressing the impacts of climate change through the growth management act).

Senate Bill 6340 – passed (Providing for a water system acquisition and rehabilitation program).

House Bill 2575 – passed (Forming a technical advisory group on fire sprinkler systems in private residences).

House Bill 2765 – passed (Making 2008 supplemental appropriations).

Bills of interest that did not pass:

1. House Bill 2477 (Providing for groundwater monitoring and assessments).
2. House Bill 2584 (Regarding rainwater collection facilities).
3. Senate Bill 6868 (Protecting sole source aquifers by providing sewer utility service to mobile home parks).
4. Senate Bill 6708 (Eliminating the partial relinquishment of water rights).
5. Senate Bill 6348 (Protecting rural communities from the harmful impacts of interwatershed water right transfers).
6. Senate Bill 6308 (Preparing for and adapting to climate change).

6. Water Use Efficiency Rule Change & Water Use Efficiency Program Plan (Mike Dixel)

Water Use Efficiency Rule Change

The Department of Health is proposing changes to the Group A Public Water Supplies Rule (chapter 246-290 WAC), Water Use Efficiency Rule – Goal Setting. The rule, as currently written, gives two options for setting an efficiency goal:

- A goal for the water system, such as reducing leaks, or
- A goal for customers, such as reducing the average single-family consumption.

However, the law requires that the goal be designed to enhance efficient use of water by the *customers*. The rule is being changed to make sure it meets the intent of the law.

What is the difference between setting goals and meeting the leakage standard?

It is a requirement to meet a leakage standard, aimed at reducing leaks within the distribution system to no more than 10 percent for most water systems. The goal should be designed to help the customers understand how to use water more efficiently.

How much time does a water system have to set a customer goal?

Water systems serving 1,000 or more connections will have one year from the effective date of this rule change. Water systems serving fewer than 1,000 customers will have two years from the effective date of this rule change.

The Department of Health is holding an informational session to answer questions about the proposed rule (May 6, 2008), followed by a public hearing to take formal comments on the proposed rule.

To get more information about the rules process, contact:

Theresa Phillips, Lead Rules Coordinator
Theresa.Phillips@doh.wa.gov
(360) 236-3147

For technical assistance or concerns about these rule changes, contact:

Mike Dixel, Water Resources Policy Lead
Michael.Dixel@doh.wa.gov
(360) 236-3154

For more information about setting goals to use water efficiently, refer to the Office of Drinking Water's publication's Web site at: www.doh.wa.gov/ehp/dw. Look for DOH Publication #331-402.

Water Use Efficiency (WUE) Program Plan

Implementation of the WUE program involves leadership and direction by the program coordinator, regional field office implementation primarily by the regional planners, development and management of a database, technical support, training and guidance, and ensuring compliance with the WUE requirements.

Future funding for the WUE program is uncertain. Without the additional funding, the technical review of the WUE annual performance report and subsequent compliance actions will be limited.

WUE Program Plan Summary:

- One new FTE proposed.
- Develop new WUE database.
- Intense training and guidance development for the first five years.
- Graduated compliance strategy.

Proposed Resource Impacts:

Low (status quo – Mike Dixel and regional planners, assistant attorney general, and database cost.

Medium (recommended minimum level of effort required to implement this program plan).

High Level of Funding (perfect world of water efficiency).

Medium Level of Funding:

- One new full-time employee.
- Technical assistant to planners and Mike Dixel.
- Job Duties:
 - Review content within annual performance reports.
 - Provide technical assistance.
 - Develop training and manage contracts.
 - Write guidance documents.
 - Target enforcement actions.

“The Essential” WUE Database:

- Use external contractor to develop and manage.
- Fixed annual cost.
- Must communicate with Sentry database – tracks the water systems considered “municipal suppliers.”

Overall Implementation Strategy:

- Occurs over three phases:
 1. Develop guidance, training, database, and establish staff resources (through 2009).
 2. Create/update publications and guidance, offering technical assistance, training, and passive compliance (through 2014).
 3. Formal compliance, evaluate performance measures (2014 beyond).

WUE Compliance Strategy:

- HQ handles compliance (except for planning).
- Balance between technical assistance, guidance, passive compliance, and formal enforcement.
- First five years: Use passive compliance.
- Begin enforcement in 2013-2014.
 - Targeted graduated compliance.
 - Prioritized to target egregious violators based on system size, water supply characteristics, and severity of violation.

Most Important WUE Violations?

- Planning (WUE Program).
- Annual Performance Reports (best way of tracking WUE requirements).
- Meters (10 years to install).
- Leakage (Water Loss Control Action Plan).
- Goal setting (customer goal and stated correctly).

Complying with WUE Report:

- Prior to formal enforcement.
- Years 1-5: Passive compliance.
 - Review content for accuracy (non-submittals prioritized over content).
 - Follow up with technical assistance.
 - Publish “good players” to recognize their efforts to comply.

Other Ways to Achieve Compliance:

- Use sanitary surveys to ask small systems about their WUE program.
- Use Water Tap to notify municipal water suppliers where “common mistakes” are being made.
- Ineligibility of SRF funding if meters are not installed, Water System Plan or Small Water System Management Program has not been submitted and approved by ODW.

Communication and Training:

- Update publications/Web site.
- Promote WaterSense (www.epa.gov/WaterSense) to municipal water suppliers.
- Annual training through 2014.
- Focus on small systems, elected governing boards, owners.
- Use contractors to provide training.
- Postcard reminders.

ODW Performance Measures:

- Through 2017, monitor:
 - Submittal rate: Annual reports.
 - Achieved leakage standard.
 - Reduced volume of leakage.
 - Installed meters.

General Comments from WSAC:

1. With water system's specific good performance, focus on success stories to get people to understand ways of improving.
2. Graduated compliance – need enforcement to go with it, too.
3. For compliance and performance measure, let them show you their plan of action.
4. Define gradual vs. graduated compliance.
5. Look at more opportunities for incentive to achieve compliance.
6. Create a track record of performance and remind people.

Next WSAC meeting is July 30, 2008.

Suggested agenda topic(s):

1. ODW Business Planning
2. Infrastructure study