Residents of Thurston County benefit from the information and assistance provided to approximately 700 Group B Public Water Systems by Environmental Health Division Drinking Water Program. The benefit is safe, clean drinking water. Group B Public Water Systems serve 3-14 residences and less than 25 people per day (such as a workplace) or serve 25 or more people per day for fewer than 60 days per year (such as a summer camp). One well serving two residences is considered a Group B Public Water System, but is placed in a separate classification as it has a different set of regulations than those with 3 or more residences.

For Group B Water Systems the Drinking Water Program:

- **Provides information and assistance**
  - Email and telephone help-line, website, written materials, and face-to-face consultation
- **Responds to emergencies**
  - Help when water systems become contaminated or are threatened
  - Assist owners and operators select proper methods to disinfect contaminated water systems
- **Assists with water system management**
  - Help develop preventative operations and maintenance programs
- ** Conducts periodic sanitary surveys of the water system**
  - Comprehensive inspections of water systems to determine if there are any water supply, water quality or management problems that may exist
- **Provides technical review and regulatory assistance**
  - Group B public water system design review
  - Well siting

Since 2004 we:

- Responded to approximately 4000 telephone calls and email requests from the public, water system owners and operators and building officials.
- Conducted approximately 225 sanitary surveys.
- Surveyed approximately 80 water systems in response to building permit application reviews or water quality exceedence problems.
- Issued several water quality exceedence alerts and assisted the operator with public notification procedures, to determine the cause of the exceedence and suggest possible solutions.
- Responded to inquiries regarding drinking water wells located in areas flooded in 2007 and 2009, including two weeks of 24-hour on-call emergency response and several weeks of recovery response. The floods generated approximately 100 telephone inquiries, 40 investigative site visits, resulting in over 800 free sample bottles given out for analysis (600 in 2007 and 200 in 2009) with over 310 returned to check the well’s water quality.
- Conducted approximately 1,120 well sealing, tagging, and decommissioning inspections.
- Offered four workshops to water system operators on general maintenance, management, and compliance with water quality monitoring requirements.
- Sent annual postcard reminders to water system operators of their requirement to test for coliform bacteria and nitrate.
- Developed a newsletter as an additional format to help keep water system operators informed on how to operate safe and reliable water systems and maintain compliance with regulatory requirements.
- Set up and maintain a web site to provide technical information to the public.
- Provided maps with well locations and known groundwater contamination areas to the public at the Permit Assistance Counter.
**Water System Site Visits**

Sanitary surveys and investigative site visits are instrumental in helping to identify public health risks associated with the operation of a water system. The site visits are also an opportunity to educate the water system operator about regulatory requirements and to offer technical assistance.

Our site visits found that most systems had one or more deficiencies that pose a risk to public health. The following top six deficiencies were observed during the site visits:

1. **Lack of properly constructed and screened well vents (53%)**
   Proper venting is key to preventing contamination being drawn into the well.

2. **Unprotected openings and lack of watertight seals on well caps (21%)**
   A well cap with unprotected openings and lack of a watertight seal means the groundwater source is vulnerable to contaminates entering through the top of the wellhead and contaminating the drinking water.

3. **Inadequate water quality monitoring (45%)**
   Monitoring is necessary to assure that safe, high quality water is provided to water system customers.

4. **Biological or chemical contaminates within 100 feet of the wellhead (31%)**
   Potential sources of contamination within 100 feet of a wellhead pose significant health risk to consumers through contaminates entering the groundwater and polluting drinking water. Frequently observed contaminant sources include: manure piles; livestock enclosures; septic tank and drainfields; sewer lines; underground gasoline, propane or fuel oil storage tanks; and hazardous chemicals such as herbicides, pesticides, automotive oil, and paints.

5. **Lack of sampling taps at the wellhead (30%)**
   A sampling tap at the wellhead is needed to sample water directly from the source so one can determine the cause of and isolate water quality problems.

6. **Unprotected openings on the storage reservoirs (49%)**
   Openings in storage reservoirs can be ready points of entry for contaminants (such as birds, bats, rodents, and insects) into the water system with known cases of waterborne illness traced back to openings in the storage reservoir.

**Funding for the Drinking Water Program**

- Annual Public Water System Permit Fees
- Grants as available

**Annual Public Water System Permit**

Beginning July 2009, state funding for the Thurston County Drinking Water Program will be eliminated. The Board of Health has proposed to implement an annual permit fee of $95 so that Thurston County can continue to provide important program services to small public water systems. The permit will be used as a tool to help the Thurston County Health Department ensure that Group B Public Water Systems operate safely and meet regulatory requirements.

For questions about the information provided, please contact Sara Brallier in the Drinking Water Program at 360-867-2629. For general drinking water or permit questions, call 360-867-2673.