Whatcom County
Pollution Identification and Correction

State of the Bay
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Fecal coliform is a species of bacteria found in animal and human feces.

Presence of fecal coliform bacteria indicates fecal material is present.

Fecal materials can carry other harmful bacteria and pathogens that make people and animals sick.

Exposure occurs through direct water contact.
What are we seeing?

- About 90 routine freshwater sampling sites
- Less than 20% meet standards
- Shellfish harvesting and beach closures
Whatcom Clean Water Program

Washington Shellfish Initiative

- Partnership of Federal, Tribal, State, and Local Agencies
  - Whatcom County - Planning & Development Services, Public Works, Health Departments
  - Whatcom Conservation District
  - Washington Department of Ecology
  - Washington Department of Health
  - Washington Department of Agriculture
  - Lummi Nation
  - Nooksack Indian Tribe
  - U.S. Environmental Protection Agency
  - Natural Resources Conservation Service

- State and Local Focus Areas

http://www.ecy.wa.gov/water/whatcomcleanwater/
Pollution       Identification     Correction
Program focuses on human-impacted sources that we can address

- **Human Sewage**
  - Municipal Sewage Systems
  - On-Site Sewage Systems
- **Animal Waste**
  - Livestock
  - Domestic Pets
  - Urban Wildlife
Pollution Identification

- Water Quality Monitoring
  - Routine
  - Focus Areas
  - Bracketing
- Focus Area Identification
- Drainage Characterization
- Windshield Surveys
Pollution Correction

- Community Outreach & Engagement
- Technical and Financial Assistance
- Regulatory Backstop
Community Solutions for Clean Water
Human Sewage

Problems

Solutions
Community Solutions for Clean Water Farms

Problems

Solutions
Community Solutions for Clean Water Farms

Problems

Solutions
Community Solutions for Clean Water

Domestic Pets

Problems

Scoop Pet Poop

Puget Sound is in trouble and you can help fix it. Rain washes bacteria from pet waste into storm drains, streams, and ultimately into Puget Sound. Use a bag to pick up dog poop and put it in the trash. Learn other ways you can protect water quality.

Solutions

I POOP.

You pick it up. Any questions?
Community Solutions for Clean Water

Urban Wildlife

Problems

Solutions
Community Outreach

Lower Dakota Creek

Please share your thoughts about water in your neighborhood by participating in this brief survey. Your answers are anonymous and will be used to help develop community tools to ensure clean, healthy water for generations to come.

Which water uses are important to you? (check mark your top four)
- Drinking water
- Water for livestock or crops
- Swimming/boating/wading/camping/creek, lakes, and ponds
- Water for garden/irrigation

Water for gardening/lawn

Fishing

Shallow/farmed

Upper/lower/menacing

What key features or changes have you observed about your neighborhood creek?

- Recent

- Historic

Do you have concerns with water usage around your property?

- Drainage issues (e.g., flooding, ponding, muddy areas, runoff)

- Quality of drinking water

- Health of local animals (e.g., muddy areas, parasite re-infestation, access to/ providing water)

- Quality of storm water

- Habitats for fish

- Physical access to the creek

- Other

Stop, Stoop, and Scoop!

The Cottonwood Neighborhood drainage has some of the highest fecal coliform bacteria levels measured in Whitcos County. The Birch Bay Watershed and Aquatic Resources Management (BWAMRM) District, Whitcos County Public Works Natural Resources, and the Marine Resources Committee are working together to monitor and reduce bacteria levels in creek water. We need your help eliminating possible sources of bacteria in your neighborhood.

Pet waste is raw sewage and one of the possible sources of bacteria in your creek. When not picked up, harmful pathogens in pet waste get washed to the nearest ditch or stream and end up in Birch Bay.

So you have a pet, please scoop the poop, bag it, and place it in the trash.

Possible Sources of Bacteria

Possible sources of bacteria in your neighborhood can be: urban wildlife, pet waste, livestock green connection, lack of proper waste connection and illegal dumping.

Protecting Our Water & Wildlife

Your Cottonwood Neighborhood creek is a nesting, foraging, and resting place for hundreds of species of birds. A conservation of resources and real alternatives will help to reduce bacteria levels. Wildlife can be protected by eliminating the use of harmful pesticides. We need your help in protecting our water and wildlife.

Why Are Raccoons A Problem?

- They are often a carrier of disease and parasites that can be transmitted to humans. Rabies, distemper, and other diseases can be carried by raccoons. If you come in contact with raccoon feces, do not touch it.

- Raccoons can be vectors for diseases such as rabies. Remove raccoon feces from your property.

- Raccoons are the main predators of small pets and may be aggressive around people.

Living with Wildlife

- Do not feed wildlife on purpose or by accident. Do not leave pet food outside—removes the lure for raccoons.

- Secure your garbage in secure containers and raise garbage cans off the ground to reduce the draw for raccoons.

- Remove bird feeders from your property in the fall to reduce the draw for raccoons.

- Raccoons may be attracted to areas of high bird activity, so keeping these birds away will help to keep raccoons out of your property.

- Raccoons are a valuable part of the ecosystem and should be removed only as a last resort.
Technical and Financial Assistance

Whatcom Conservation District

- Offer Technical Assistance
  - Whole Farm Inventory
  - Identify Potential Improved Practices
  - Set Implementation Dates for Agreed upon Practices
- Immediate Fixes
- Connect Landowner with Financial Assistance Programs
Discharges or Violations

- Landowner or operator does not participate in incentive-based program
- Referrals to PDS and DOE
Non-point Source Pollution

- Finding Sources
- Private Property Issues
- Weather Patterns
- Public Resistance
- Trans-border sources
Research Needs

- Determining Sources
- Effectiveness of BMPs
- Pollution Transport