

PARSONS CREEK

Remediating an important impaired water resource

The New Hampshire Department of Environmental Services (DES) lists Parsons Creek as impaired for recreational use due to elevated levels of fecal indicator bacteria (FIB).

Pathogens associated with elevated levels of FIB are a threat to water quality, public health, and local economies that rely on safe, clean beaches for recreation. Harmful pathogens ingested directly via water or shellfish or indirectly via skin contact can cause illness in humans, especially at-risk populations like children, pregnant women, and the elderly.

Fecal matter can come from diffuse sources such as pets, humans, and wildlife. While wildlife waste can contribute fecal matter to coastal marsh-river systems, monitoring of

Parsons Creek has also shown the presence of pet and human fecal DNA markers.

Pet waste left on lawns, streets, or beaches or thrown in storm drains can be washed directly to the Creek and beaches. Human waste may also flush to surface waters from low-lying leachfields near the marsh fringe during high tides and storms.

Identifying and remediating fecal contamination from manageable sources (e.g., humans and pets) is a long, difficult process requiring coordination and cooperation among municipal staff, local businesses, and residents.

The Town of Rye is working to track and remediate fecal contamination to Parsons Creek. The following lists

specific actions taken to address this issue:

- Conducted baseline monitoring, source tracking, and watershed investigations since 2004 to identify “hotspot” contamination areas.
- Developed a watershed plan in 2011 that identified stormwater runoff and faulty septic systems as sources of contamination.
- Implemented stormwater treatment measures to minimize pollutant runoff.
- Developed a septic system database and ordinance to require regular maintenance and evaluation.
- Enhanced public outreach

You can also make a difference in improving the waters of Parsons Creek – see tips on the next page!



Tips for Watershed Residents & Visitors

MAINTAIN SEPTIC SYSTEMS

- Pump your system every 2-3 years (or as required by town ordinance)
- Evaluate systems older than 20 years, located within 50 feet of a waterbody or wetland, underlain by sandy soils, and/or in areas with a shallow seasonal high water table
- Upgrade to an alternative system to treat effluent at unsuitable sites
- Use non-toxic cleaners (e.g., bleach kills microbes necessary for waste decomposition)

REDUCE STORMWATER RUNOFF

- Vegetate bare soil and plant buffers near water
- Set lawn mower to 3 inches; leave grass clippings to recycle nutrients
- Divert roof runoff to vegetation for water infiltration

MINIMIZE HOUSEHOLD POLLUTION

- Reduce or eliminate use of fertilizers, herbicides, and pesticides
- Recycle, especially hazardous waste products
- Compost yard waste
- Be aware of oil/gas drips, detergents, and winter sand/salt washing off your property

PROPERLY DISPOSE OF PET WASTE

- Pick up pet waste and throw bagged waste in trash or flush unbagged waste down the toilet
- Failure to pick up and dispose of waste properly is subject to \$62-\$1,000 fine in public areas

Additional Resources

See the Town of Rye Parsons Creek webpage for more resident and visitor information and related town ordinances:

<https://www.town.rye.nh.us/parsons-creek-watershed-environment>

Next Steps

- Revise septic system ordinances based on HydroAnalysis report recommendations
- Identify and remediate septic system failures and other sources of fecal matter
- Continue baseline FIB monitoring to track changes in water quality over time as remediation strategies are implemented



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