

'Masked Bandits' Make Problems for Shellfish

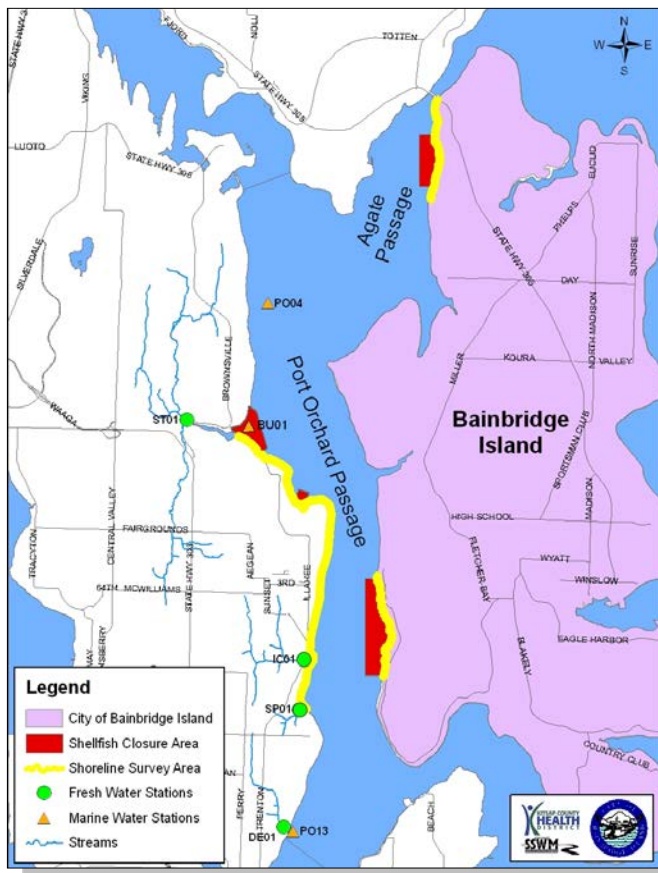
The connection between raccoons and shellfish beds

Introduction

What is the connection between raccoons and shellfish? The answer is fecal coliform bacteria (bacteria). One Kitsap Health inspector tells Ecology how he discovered it and why the Kitsap Public Health District thinks this is a much larger issue that needs to be addressed.

Problem

In 2009, the state Department of Health (DOH) closed several shellfish growing areas in Port Orchard Passage after finding high levels of bacteria. DOH was concerned that the levels of bacteria found in the area could make the shellfish unsafe for people to eat.



Port Orchard Passage restoration project area.
Red areas are closed (no harvesting) of all species of clams, oysters, and mussels.

Project events

Following the closure of the shellfish beds in Port Orchard Passage, the Kitsap Public Health District (District) and partner agencies began working to restore and protect the shellfish growing areas. The District applied its pollution identification and correction (PIC) process to locate and correct sources of bacteria, including failing onsite sewage systems, pet waste, and people feeding wildlife.

Milestones and outcomes

The first step of a PIC project is to conduct intensive monitoring of surface waters in the project area to identify “hot-spots.” For Port Orchard Passage, this involved collecting samples from all of the outfalls and seeps along the shoreline. When the District confirmed a hotspot, they prioritized and inspected the properties around it. When they identified sources of bacteria, they used a combination of education and enforcement to correct them. They also provided educational materials and advice to property owners in the area on reducing new pollutant sources.



Project highlights

An inspector with the District's PIC program was looking for access points to the shoreline near Agate Pass to collect samples. One forested corridor had several small drainage channels and he wanted to get permission from the owner to access the shoreline through their property.

As the inspector approached the house, he noticed an increasing number of raccoons. He estimated he could see 25 (or more) climbing and moving in the trees, climbing on the house, and walking around the yard and landscaping. The inspector said his first concern was for his own safety because it is unusual to see so many raccoons walking around in broad daylight, and some of the raccoons were very large and a bit threatening. As he got closer to the front door, he was also wondering what he was going to say to the homeowner.



The homeowner turned out to be a nice elderly woman who explained that she enjoyed feeding and watching the raccoons. Every day she filled two large garbage can lids with dry cat food and estimated there were between 30 to 60 raccoons visiting her feeder every day. The inspector suspected the large population of well-fed raccoons was likely causing water quality problems downstream because raccoons tend to moisten their food and establish latrines, but he knew he would need another approach to convince the property owner that she should stop feeding them. He pointed out that the raccoons were causing damage to her house and property. His approach of emphasizing property damage worked. The homeowner had not noticed the damage and now that she was aware of it, she agreed it was in her best interest to stop feeding them. She also caged her chimney and installed flashing around her house to keep the raccoons out.



The homeowner has since passed away and the new owners are still working to control the raccoons. The District reports there are still raccoons in the area, but there is no evidence they are being fed and water quality in that drainage has improved.

The District is developing a postcard that highlights the impacts that wildlife can have on water quality. Residents are urged not to feed wildlife because it is not healthy for 1) wildlife to eat human food, 2) water quality, and 3) public health.

Partners and funding

The Kitsap Public Health District initiated the Port Orchard Passage Restoration Project in 2010. Between 2011 and 2013, Washington Department of Ecology provided \$118,000 in grant funding and the city of Bainbridge Island assisted with shoreline surveys and confirmation sampling. Their labor served as local match and helped reduce travel expenses for this project (\$25,000). The Kitsap County Surface and Stormwater Management Program provided \$8,600 in local match. Puget Sound Restoration Fund provided another \$6,000 in assistance and helped provide education and outreach at numerous community events including many community auctions, festivals, and sponsoring clam digs at local shellfish farms.

For more information

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