



ENVIRONMENTAL HEALTH IN ALL POLICIES CASE STUDY

Ensuring safe shellfish harvesting in Washington

Washington's Puget Sound region is the country's leading producer of farmed shellfish. With over 190,000 acres of shellfish beds, the harvesting of clams, oysters, geoducks, and mussels is a major industry that contributes over \$270 million per year and several thousand jobs to the state's economy.¹ Federal, state and local agencies, businesses, local organizations and property owners are working together to minimize pollution sources to ensure the safety of shellfish for consumption.

Pollution of Shellfish Beds

Shellfish beds are monitored for pollution by the Washington Department of Health (DOH). Fecal coliform bacteria from farms, septic systems and wildlife travel into rivers during heavy rains. The bacteria are deposited into bays where the toxins accumulate in the shellfish. If bacteria levels are high enough, DOH will “downgrade” the status of the shellfish beds. Downgrading restricts harvesting from the bed until bacteria levels return to a safe level. On average in 2012, 19% of beds in the Puget Sound were closed due to pollution.²

Climate change can also play a role in the pollution of shellfish beds. With more extreme rain events, flooding creates further erosion and runoff into the rivers. Warmer water temperatures also lead to longer seasons that affect shellfish safety and toxicity.

Working Together for Shellfish Safety

DOH has the responsibility to ensure fish are safe to eat, and the authority to re-classify shellfish beds when necessary. However,

addressing the overall problem requires cooperation with a number of state and local agencies, tribes, community partners and residents. The State Department of Agriculture oversees licensed dairies related to water quality protection, counties regulate land use, the State Department of Ecology has Clean Water Act authorities, tribes have treaty rights, and local health departments permit on-site sewage systems.

Property owners are primarily responsible for cleaning up pollution sources on their own lands. State agencies work closely with local agencies and decision makers to provide property owners with the information and resources they need to remedy problematic agricultural practices, such as relocating manure piles, installing fencing, and creating a buffer between farms and adjacent reservoirs. In addition, homeowners are encouraged to properly maintain septic systems, but high cost often prohibits them from doing so.

Turn for more »

Impacts of Pollution in Shellfish Beds

- » There is an increase in the health risk from eating contaminated shellfish. In recent years, the state has had at least two shellfish-related illness outbreaks.
- » Local communities can become divided about who should take responsibility for contamination.
- » The downgrade of shellfish beds also has an impact on Washington's economy.
- » Great progress is being made to clean up and protect the waters, but challenges clearly remain.

Restoring the Samish Bay

State and local agencies and community partners have been working together towards restoring 10,000 acres of shellfish beds by 2020. Steady progress was being made towards that goal. However, progress was halted in 2011, when the DOH was forced to downgrade, 4,037 acres of beds in the Samish Bay because of high levels of fecal coliform bacteria.² This was one of the largest downgrades in recent history, with numerous

impacts on the environment, public health and the economy.

To address this issue, in 2012m the DOH received a \$2 million EPA National Estuary Program grant to fund Pollution Identification and Correction (PIC) programs. The DOH awarded the PIC grants to local health, public works and planning agencies to identify key pollution sources, and work with communities and residents in the Samish Bay area to eliminate them.

As of 2014, there are PIC programs either being implemented or planned in each of the 12 counties adjacent to the Puget Sound.³ The resulting local projects demonstrate the importance of federal, state and local agencies, tribes, nonprofits, communities and landowners working together to make a significant impact on a statewide issue.

For more information, please contact:

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