C8. Agricultural Runoff
9-8-2011

The Challenge

Improperly managed surface water runoff from farms can convey a variety of pollutants to Puget Sound including sediment, phosphorous, pathogens from animal waste, pesticides, herbicides and other chemicals, and excess nutrients. Nutrients can pose particular risks because they can combine with other sources of nutrients to support production and accumulation of algal blooms. As the algae die and decompose, high levels of organic matter and the decomposing organisms deplete the water of available oxygen, causing the death of other organisms, such as fish and shellfish. In Puget Sound, inlets with few freshwater inputs and deep basins that have limited exchange with surrounding waters such as South Puget Sound and Hood Canal are particularly vulnerable to this process.

Agricultural and rural areas constitute about 30-35% of the Puget Sound. Strategies in this area seek to provide incentives and tools to farmers to help them apply best management practices to improve surface water runoff management and reduce pollution to Puget Sound, ensuring compliance with existing regulations, and ensuring that working farm land can be maintained and farming remains economically viable.

Relationship to Recovery Targets

Reducing pollution in runoff from agricultural lands will help achieve recovery targets for freshwater quality, shellfish bed recovery, insects in small streams, swimming beaches, dissolved oxygen in marine waters, marine sediment quality, and toxics in fish.

Sub-Strategies and Near Term Actions

C8.1 Target voluntary and incentive-based programs in ways that will best contribute to Puget Sound recovery.

Numerous programs, guidelines and technical assistance opportunities exist to help farmers identify potential pollution impacts from farming activities and implement best management practices to reduce, control or eliminate pollution.

For example, Conservation Districts will work with farmers to develop a voluntary Farm Management Plan. A Farm Plan identifies actions a farmer can take to achieve their land use goals while protecting water and other natural resources, such as streamside fencing, gutters and downspouts, manure composting, pasture renovation, and weed management techniques. The planning process takes into account the size of the farm, types of soil, slope of the land, proximity to streams or water bodies, types of livestock, or crops, resources such as machinery or buildings, and available finances. Once the farmer decides what changes he or she wants to make on their property, they work with the Farm

Planner to set a tentative implementation schedule. [Since [Year] over [XXX] farms have worked with Conservation Districts to voluntarily establish Farm Plans; and [NUMBER] are on schedule to implement identified improvements.]

In addition, the Conservation Reserve Enhancement Program (CREP) is a voluntary program that helps farmers protect environmental sensitive land, decrease erosion, restore wildlife habitat and safeguard ground and surface water resources. Under CREP eligible farmers can receive financial compensation when they enter into ten to fifteen year contracts to keep valuable resource land out of production and technical and financial assistance (up to fifty percent) to install restoration measures such as ripiarian plantings along streams.

Performance Objectives for Ongoing Programs

The primary objective of ongoing programs in this area is to implement private property stewardship, incentive and technical assistance programs that focus on reducing sources of water pollution from commercial and non-commercial farms and other nonpoint pollution sources, particularly in priority areas.

In an effort to better target voluntary and incentive and technical assistance programs and promote their use in Puget Sound the Conservation Commission has worked with all the Puget Sound Conservation Districts to develop a Puget Sound Conservation District Action Agenda. This document [insert more here]

The Conservation Commission also is working with counties and other state agencies to implement the Ruckelshaus Process bill, enacted in May 2011. This legislation creates the Voluntary Stewardship Program intended to address the contentious issue of the protection of critical areas on agricultural lands while maintaining viable agricultural production. The program provides Counties who opt in an alternative to protecting critical areas used for agricultural activities through critical area development regulations mandated by the GMA; they can instead choose to these critical areas through the Program. A county choosing this alternative has until January 22, 2012 to: opt in to the program, identify, in accordance with specified criteria, watersheds that will participate in the Program; and nominate, in accordance with specified criteria, watersheds for consideration by the Conservation Commission as state priority watersheds.

Prior to adopting an ordinance or resolution to participate in the Program, the county must confer with tribes and environmental and agricultural interests. The county also must, in accordance with specified public participation and notice provisions, notify property owners and other affected and interested individuals, tribes, agencies, businesses, school districts, and organizations. A statewide advisory committee will advise the Conservation Commission and other agencies in the development and operation the Program.

Washington State University and SeaGrant are [what ongoing programs should we describe here?]

[Should we also address:

- Nonpoint workgroup
- Agricultural technical assistance?
- Toxics reduction/assistance programs; integrated pest management programs?]

Near Term Actions

C8.1 NTA 1: [who] will identify which, if any, NRCS best management practices should be modified or tailored to more effectively account for local conditions and support Puget Sound protection and recovery and make any needed modifications by [date].

Comment [EDM1]: Is this accurate description of what is needed?

Performance measure:

C8.1 NTA 2: [Anything on reducing toxics?]

Performance measure:

C8.1 NTA 3: Fund and implement voluntary incentive, stewardship and technical assistance programs for rural unincorporated landowners, hobby farms, working farms and nurseries.

Comment [EDM2]: Current C.2.3.2 -- Can we make this more specific?

Performance measure:

C8.2 Ensure compliance with regulatory programs designed to reduce, control or eliminate pollution from working farms.

In additional to voluntary programs, a number of regulatory programs exist, through the Clean Water Act and other laws, to address all forms of water pollution, including improperly managed runoff from farms.

Performance Objectives for Ongoing Programs

Ecology identifies priority areas for work to address agricultural runoff largely through the Total Maximum Daily Load / Water Cleanup Plan process. Through this process, Ecology gathers data and information to describe the type, amount and sources of water pollution in a particular water body (such as a River, and analyzes how much of the pollution needs to be reduced or eliminated to meet water quality standards. When a water cleanup plan identifies a non-point source of pollution, like agricultural runoff, as a concern Ecology generally works with other agencies, local governments, and landowners to identify and implement best management practices to control pollution. In addition, if there is a significant pollution discharge from a private property, Ecology would approach the landowner and encourage use of best management practices to mitigate the adverse effects of the discharge. In many cases, local, incentive and technical assistance based programs are available to help land owners

identify and implement best-management practices. Some of these programs provide financial assistance. Ultimate Ecology will use a combination of tools – education, technical and financial assistance, wastewater discharge permits, and compliance actions to improve water quality. Enforcement can be used, but it is the least desirable option.

In addition, there are some specific programs focused on types of pollution that can be associated with agriculture. These include requirements for managing discharges of animal waste from concentrated animal feeding operations and [anything else?]. A concentrated animal feeding operation permit generally is required for farms that feed for 45 days or more in a 12-month period, confines and feed animals in an area that does not contain sustained crops, vegetation, forage grown or post-harvest residues, and discharges to waters of the state either directly or through any man made conveyance? Ecology's work implementing the concentrated animal feeding operations rules is focused on inspections and ensuring compliance with existing permits for these operations. [Is there an inspection frequency we can describe?]

Near Term Actions

C8.2 NTA 1: The Departments of Agriculture and Ecology and the Conservation Commission will establish priorities and develop related policies to effectively work together address pollution from agricultural lands by [date].

Comment [EDM3]: Should describe why the policy is needed and what it would address.

Performance measure: Done or not