

Stormwater Detention, Mosquitoes, AND WEST NILE VIRUS

Why does Snohomish County require stormwater detention facilities?

Stormwater detention facilities such as ponds and underground vaults have been a standard part of new development since 1980.

Impervious surfaces such as roads, pavement and roofs increase stormwater runoff and accelerate its movement to streams. Often this results in flooding, erosion, water pollution, and damage to streams and pipes.

Impervious surfaces also impede stormwater from soaking into the ground. This lowers water tables and stream flows, so streams that once flowed continually are now dry in summer.

Detention ponds and vaults are designed to help solve these problems. Ponds store stormwater above ground. Vaults store stormwater below ground. Both collect water during heavy rains and release it slowly to prevent flooding and property damage.

Ponds and vaults must be maintained in order to function properly.

Who is responsible for maintaining detention facilities?

Detention facilities serving residential neighborhoods are generally owned in common by all of the homeowners. Homeowners, through their homeowners association, are

responsible for maintaining their neighborhood facilities. There are approximately 2,500 privately owned residential and commercial detention facilities, for which the owners are responsible. Snohomish County owns and maintains approximately 300 detention facilities.



Should I be concerned about mosquitoes in detention facilities?

With the arrival of West Nile virus it is appropriate to learn about your relative risk and what precautions you can take.

The Washington State Department of Health considers the current risk from West Nile virus to be "very low".

Your best action is personal protection. Wear long sleeves and long pants at dusk. Screen your windows. Use insect repellants containing DEET.

Of the 28 mosquito species that live in Snohomish County, the one considered the primary carrier of

West Nile virus breeds in the small pockets of standing water often found near homes and businesses. Clogged gutters, old tires, flowerpot trays, buckets, and birdbaths provide ideal breeding habitat with no predators. Removing or maintaining these pockets of water can stop mosquitoes at their source.

Properly maintained detention ponds attract natural predators of mosquitoes and are less likely to produce adult mosquitoes.



Personal protection is your best action against mosquitoes: long sleeves, long pants, screened windows, and insect repellants containing DEET.



Stormwater Detention,

MOSQUITOES, AND WEST NILE VIRUS

Page 2

Should I attempt to control mosquitoes in my detention facility?

You are not required to control mosquitoes in your detention facility. However, after you have learned about your relative risk and what precautions are available, you may decide that some form of mosquito control is appropriate.

Mosquito populations can be safely controlled in detention facilities by a number of methods. Healthy wetland plants in your detention pond will help reduce mosquito populations and encourage mosquito predators.

As a last resort, larvicides (insecticides that kill insect larvae) can be applied to the water where eggs are hatching. By state and federal law, application of larvicide requires a permit and must be applied by a licensed pesticide applicator.

What should I NOT do?

You should NOT put pesticides or toxic chemicals into detention ponds, ditches, creeks, streams, or wetlands. Unless you are properly trained and licensed, such actions are illegal and violate county, state and federal laws.

Pesticides and other toxic chemicals can cause harm to people and the environment. They may even pose a greater health hazard than the mosquito-borne diseases they are intended to reduce. They can also kill natural predators of mosquitoes and may actually *increase* mosquito populations!



Placing pesticides and toxic chemicals in water can cause greater health hazards than the mosquito-borne diseases they are intended to reduce.



What is Snohomish County doing about stormwater detention facilities it owns?

Snohomish County is currently reviewing its detention facility maintenance practices to reduce potential mosquito habitat. Snohomish County is not currently applying larvicides, but may consider it if the Snohomish Health District indicates a significant public health problem.

What about mosquitoes in wetlands?

Mosquitoes are a natural part of our environment. They serve important roles as pollinators and as dinner for fish, amphibians, birds, and other wildlife.

Treating wetlands to kill mosquitoes can disturb the ecological balance of wetlands and reduce the food supply for beneficial insects and wildlife. Treating wetlands can also harm important predators of mosquitos such as dragonflies, aquatic beetles, frogs, and salamanders.

How can I learn more?

- ◆ **West Nile virus:** Snohomish Health District, 425-339-5250, www.snohd.org.
- ◆ **Detention facility maintenance:** Snohomish County Surface Water Management, 425-388-3464, www.surfacewater.info.
- ◆ **West Nile virus and larvicide application on private property:** State Department of Health, 360-236-3060, www.doh.wa.gov.