

What's Your Watershed Address?

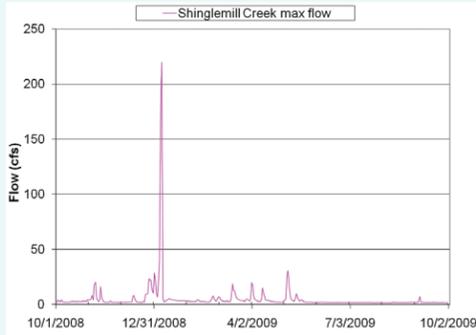
We all know our street address, but if we took away the roads, do you know where you live in our landscape? Think about the slope of your land. After a heavy rain storm, which way does the water flow from your property? Can you locate the watershed in which you live? Who are your watershed neighbors?

Map Orientation, Living watersheds

The map below depicts the boundaries of drainages on the Island. Look at the Island's "neck" on the north end. There are 11 capillary-like creeks that flow out the west side before you get to a big artery, Shinglemill Creek. Lots of these creeks are unnamed and were given numbers by Washington Trout in 2001. The light brown lines are topographic lines. The closer together they are, the steeper the landscape. Notice how close together they are in Shinglemill canyon and on the southeast side of Maury.

Shinglemill Creek watershed

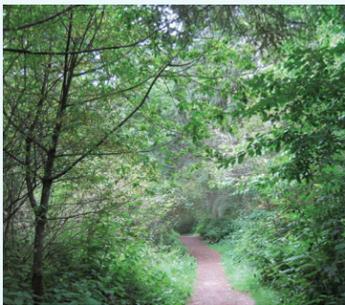
Shinglemill covers 1,846 acres, 8 percent of total Island land area. It is our second largest watershed. The stream is 2.7 miles long and has suffered from erosion and sedimentation, making it tough for salmon to successfully reproduce.



This hydrograph shows the daily 15-minute peak flows of water in Shinglemill Creek October 2008–September 2009. The winter peak flow was about 200 times the summer base flow.

Forested land

Analysis of satellite pictures taken in 2001 divided the Island into three broad categories of land cover: 73 percent forested, 16 percent non-forested and 11 percent developed. Keeping each watershed at least 65 percent forested with less than 10 percent impervious surface would lessen runoff and encourage groundwater recharge.



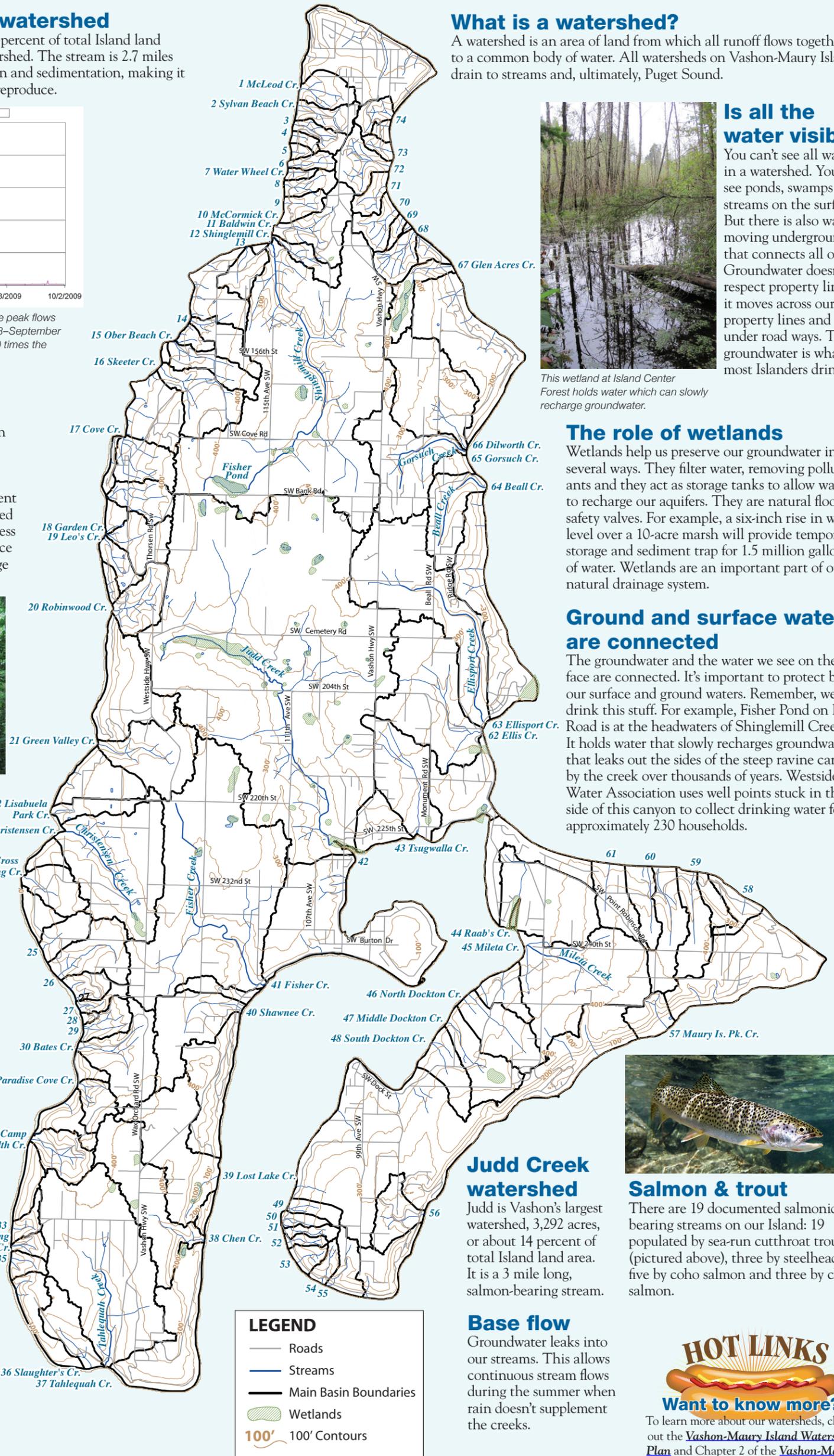
Forested land, like Island Center Forest, helps reduce stormwater runoff. Winter rain is stored in the organic duff layer on the forest floor, where it can percolate into the soils below and either be taken up by plants or recharge groundwater.

Christensen Creek watershed

Roland Carey's history of Vashon-Maury Island used this watershed to reflect the thinking of the time that our water resources were fed by the Cascades. Current research indicates that the ground and surface water we drink comes only from the rain that falls on the Island.

Monitoring

As part of the effort to better understand our ground and surface water system, we monitor stream flow on some streams. Stream gauges with continuous readings are maintained in Tahlequah, Fisher, Judd, Beall, Mileta and Shinglemill creeks.



What is a watershed?

A watershed is an area of land from which all runoff flows together to a common body of water. All watersheds on Vashon-Maury Island drain to streams and, ultimately, Puget Sound.

Is all the water visible?

You can't see all water in a watershed. You can see ponds, swamps and streams on the surface. But there is also water moving underground that connects all of us. Groundwater doesn't respect property lines; it moves across our property lines and under road ways. This groundwater is what most Islanders drink.



This wetland at Island Center Forest holds water which can slowly recharge groundwater.

The role of wetlands

Wetlands help us preserve our groundwater in several ways. They filter water, removing pollutants and they act as storage tanks to allow water to recharge our aquifers. They are natural flood safety valves. For example, a six-inch rise in water level over a 10-acre marsh will provide temporary storage and sediment trap for 1.5 million gallons of water. Wetlands are an important part of our natural drainage system.

Ground and surface waters are connected

The groundwater and the water we see on the surface are connected. It's important to protect both our surface and ground waters. Remember, we drink this stuff. For example, Fisher Pond on Bank Road is at the headwaters of Shinglemill Creek. It holds water that slowly recharges groundwater that leaks out the sides of the steep ravine carved by the creek over thousands of years. Westside Water Association uses well points stuck in the side of this canyon to collect drinking water for approximately 230 households.

Judd Creek watershed

Judd is Vashon's largest watershed, 3,292 acres, or about 14 percent of total Island land area. It is a 3 mile long, salmon-bearing stream.



Salmon & trout

There are 19 documented salmonid-bearing streams on our Island: 19 populated by sea-run cutthroat trout (pictured above), three by steelhead, five by coho salmon and three by chum salmon.

Base flow

Groundwater leaks into our streams. This allows continuous stream flows during the summer when rain doesn't supplement the creeks.



Want to know more?

To learn more about our watersheds, check out the [Vashon-Maury Island Watershed Plan](#) and Chapter 2 of the [Vashon-Maury Island Rapid Rural Reconnaissance Report](#).

