Elodea bio-mass and roots

After removal

Removal in progress

Photos courtesy of Michael Layes

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The Chehalis River Brazilian Elodea Removal Project

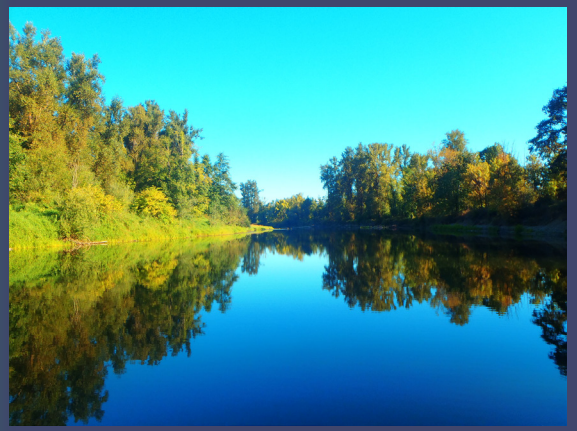

Photo courtesy of Michael Layes

What is Brazilian elodea?

Brazilian elodea (Egeria densa) is a non-native submersed freshwater aquatic plant.

It is found in both still and flowing waters, in lakes, ponds, pools, ditches and streams.
Brazilian Elodea creates beds of floating vegetation that restricts water movement.

This plant displaces native submersed plants, such as native elodea, pondweeds, and coontail.

Where did Brazilian elodea come from?

Brazilian elodea is native to South America. It has been a popular aquarium plant, the sale of this plant in Washington State is prohibited.

It was found in 1998 in the Chehalis River while surveying for purple loosestrife and parrotfeather. It is the only infested site in Thurston County.

It was most likely introduced into the river by someone dumping the contents of their home aquarium into Plummer Lake, in Centralia. The plant has spread 54 river miles downstream from the point of introduction.

The Chehalis River Brazilian elodea removal project

In Thurston County, the Noxious Weed Control program began removing individual plants as early as 1999. Hand removal continued to 2003 when the infestations became so large that individual hand removal was no longer practical. Funding was provided by D.N.R. The project was expanded in 2005 with funding from U.S Fish and Wildlife.

In 2006 the Chehalis Tribe joined the project, and began removal of elodea in the Chehalis River near Centralia. In 2007 the Dept. of Ecology provided funding. In 2008, the Salmon Recovery Funding Board provided funding through a project with the Nature Conservancy. From 2009 to 2013 the project continued with the U.S. Fish and Wildlife Service and Washington State Department of Ecology again funding this project.

Removal will increase water movement resulting in higher dissolved oxygen. In 2007, oxygen levels were measured before and after removal efforts. Following removal, oxygen levels increased 7.75%. Populations of elodea have now been reduced to the point where future readings will most likely not show any differentiation. Removal also decreases sediment retention.

From 2004 - 2010, the method of removal included diver suction dredging to remove the entire plant and root structure. The plants were then transported away from the river. In 2012, hand removal techniques were resumed due to reduced plant numbers.

In 2013, through a new grant provided by Department of Ecology (DOE), the scope of the project was expanded an additional 20 miles. Several areas of new infestation were found in this added portion of the project.

Several small infestations were discovered and removed by the dive team without the need to diver dredge.

Over the past 10 years 318,446 pounds of elodea biomass has been removed from the Chehalis River. In 2005 the infestestion covered 35 acres, in 2014 less than 1 acre was infested.

The project area has grown from 7 river miles in 2004 to 54 river miles. No solid infestations are now present anywhere throughout the entire 54 mile project site.

In 2013 the Thurston County Noxious Weed Control Board changed their goal for the control of Brazilian elodea on the Chehalis River. With the progress made the Board has established eradication of Brazilian elodea as their goal in the next five years.