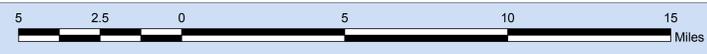


Clallam County Stream Health Ratings

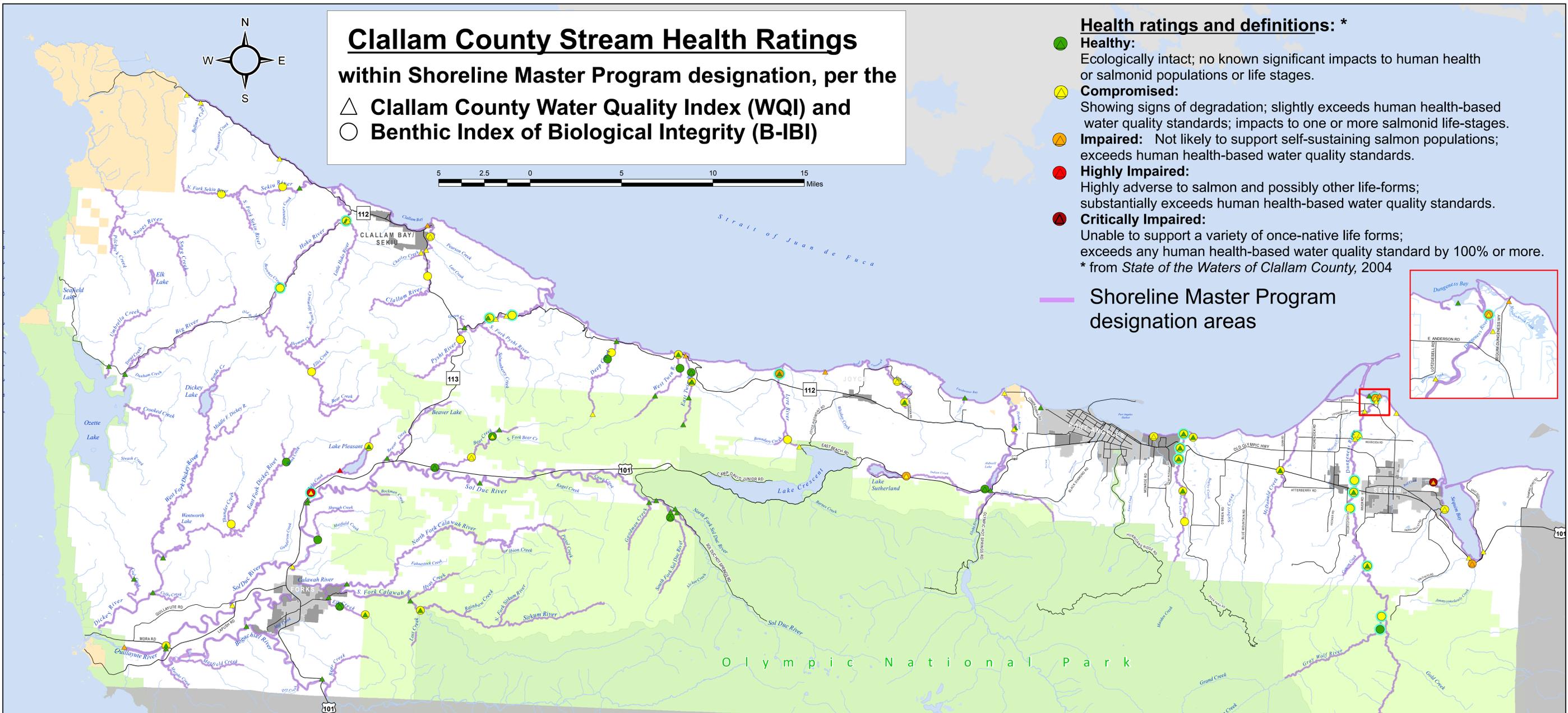
within Shoreline Master Program designation, per the

△ Clallam County Water Quality Index (WQI) and
○ Benthic Index of Biological Integrity (B-IBI)



- Health ratings and definitions: ***
- **Healthy:** Ecologically intact; no known significant impacts to human health or salmonid populations or life stages.
 - ▲ **Compromised:** Showing signs of degradation; slightly exceeds human health-based water quality standards; impacts to one or more salmonid life-stages.
 - **Impaired:** Not likely to support self-sustaining salmon populations; exceeds human health-based water quality standards.
 - **Highly Impaired:** Highly adverse to salmon and possibly other life-forms; substantially exceeds human health-based water quality standards.
 - **Critically Impaired:** Unable to support a variety of once-native life forms; exceeds any human health-based water quality standard by 100% or more.
- * from *State of the Waters of Clallam County, 2004*

— Shoreline Master Program designation areas



Health Ratings by Site from 2004 & 2010

2004 WQI B-IBI	2010 WQI B-IBI	Site Name
△ ○	△ ○	Olsen 0.0
△ ○	△ ○	Bullman 0.1
△ ○	△ ○	Snow 0.1
△ ○	△ ○	Umbrella 0.9
△ ○	△ ○	Big 1.6
△ ○	△ ○	Quillayute Site 7
△ ○	△ ○	Sol Duc 0.0
△ ○	△ ○	Sol Duc 6.5
△ ○	△ ○	Sol Duc 13.0
△ ○	△ ○	Sol Duc 19.0
△ ○	△ ○	Sol Duc 53.4
△ ○	△ ○	Sol Duc 55.0
△ ○	△ ○	Dickey 0.15
△ ○	△ ○	Coal (Dickey) 2.5
△ ○	△ ○	Stunk 0.1
△ ○	△ ○	Thunder 0.8
△ ○	△ ○	Bogachiel 0.0
△ ○	△ ○	Bogachiel 15.4
△ ○	△ ○	Calawah 0.0
△ ○	△ ○	Calawah SF 5.0
△ ○	△ ○	Calawah NF 0.4
△ ○	△ ○	Calawah SF trib WDFW 20-0204 RM 0.0
△ ○	△ ○	Siskum 0.0
△ ○	△ ○	Lake 0.0
△ ○	△ ○	Lake 0.6
△ ○	△ ○	Lake 1.6
△ ○	△ ○	Lake 4.5
△ ○	△ ○	Beaver 0.0
△ ○	△ ○	Bear (Sol Duc) 0.1
△ ○	△ ○	Bear (Sol Duc) 2.5
△ ○	△ ○	Bear (Sol Duc) 5.1
△ ○	△ ○	Bear (Sol Duc) 5.6
△ ○	△ ○	Camp 0.4
△ ○	△ ○	Goodman (Sol Duc) 0.0
△ ○	△ ○	Sol Duc SF 0.0
△ ○	△ ○	Tom 0.0
△ ○	△ ○	Sol Duc NF 0.1
△ ○	△ ○	Coville 0.0
△ ○	△ ○	Salt 1.5
△ ○	△ ○	Salt 4.2
△ ○	△ ○	Whiskey 0.0
△ ○	△ ○	Lyre 0.8
△ ○	△ ○	Lyre 4.2
△ ○	△ ○	Lyre 5.0
△ ○	△ ○	E. Twin R 0.3
△ ○	△ ○	E. Twin R 1.2
△ ○	△ ○	E. Twin R 1.9
△ ○	△ ○	E. Twin R 2.8
△ ○	△ ○	E. Twin R 4.6
△ ○	△ ○	Sadie 0.0
△ ○	△ ○	W. Twin R 0.1
△ ○	△ ○	W. Twin R 1.0
△ ○	△ ○	W. Twin R 3.7
△ ○	△ ○	Deep 0.2
△ ○	△ ○	Deep 0.9
△ ○	△ ○	Deep 1.5
△ ○	△ ○	Deep 4.5
△ ○	△ ○	Meadowbrook Slough 0.45
△ ○	△ ○	Meadowbrook 0.1
△ ○	△ ○	Matriotti 0.1
△ ○	△ ○	Gray Wolf 0.9
△ ○	△ ○	Hurd 0.2
△ ○	△ ○	Pyshk 8.5
△ ○	△ ○	Pyshk 8.6
△ ○	△ ○	Pyshk 9.5
△ ○	△ ○	Green 0.1
△ ○	△ ○	Clallam Lagoon #3
△ ○	△ ○	Clallam 2.3
△ ○	△ ○	Clallam 2.4
△ ○	△ ○	Clallam 3.4
△ ○	△ ○	Clallam 5.4
△ ○	△ ○	Hoko 03.2
△ ○	△ ○	Hoko 09.5
△ ○	△ ○	Hoko 18.0
△ ○	△ ○	Little Hoko 0.0
△ ○	△ ○	Sekiu 1.2
△ ○	△ ○	Sekiu 2.5
△ ○	△ ○	Sekiu 8.9
△ ○	△ ○	Chicken Coop 0.1
△ ○	△ ○	Jimmycomelately 0.1
△ ○	△ ○	Jimmycomelately 0.2
△ ○	△ ○	Jimmycomelately 0.2a
△ ○	△ ○	Jimmycomelately 0.6
△ ○	△ ○	Jimmycomelately 0.6
△ ○	△ ○	Dean 0.1
△ ○	△ ○	Johnson 0.0
△ ○	△ ○	Bell 0.1
△ ○	△ ○	Cooper 0.1
△ ○	△ ○	Dungeness 0.0
△ ○	△ ○	Dungeness 0.7
△ ○	△ ○	Dungeness 03.0
△ ○	△ ○	Dungeness 05.9
△ ○	△ ○	Dungeness 06.6a
△ ○	△ ○	Dungeness 07.8
△ ○	△ ○	Dungeness 11.6
△ ○	△ ○	Dungeness 16.7
△ ○	△ ○	Meadowbrook Slough 0.45
△ ○	△ ○	Meadowbrook 0.1
△ ○	△ ○	Matriotti 0.1
△ ○	△ ○	Gray Wolf 0.9
△ ○	△ ○	Hurd 0.2
△ ○	△ ○	McDonald 03.1
△ ○	△ ○	Bagley 0.0
△ ○	△ ○	Morse 0.3
△ ○	△ ○	Morse 1.1
△ ○	△ ○	Morse 1.8
△ ○	△ ○	Morse 4.0
△ ○	△ ○	Morse 5.6
△ ○	△ ○	Lees 0.1
△ ○	△ ○	Dry 0.1
△ ○	△ ○	Elwha @ E Levee Access Rd
△ ○	△ ○	Elwha @ WDFW Hatchery Site 1
△ ○	△ ○	Elwha @ WDFW Hatchery Site 2
△ ○	△ ○	Elwha 7.0a
△ ○	△ ○	Indian 0.3
△ ○	△ ○	Indian 4.9

Ratings are summarized from available data from 1997-2010, for sites where confidence ratings are moderate or high, subject to final check. (Some data from non-County sources were unavailable for summary)

Indices used:

The WQI, developed at Clallam County, is based on risks to salmonids and humans from high temperatures, low dissolved oxygen, and high fecal coliform bacteria counts. The B-IBI, developed at the University of Washington by James Karr and colleagues, is based on the biodiversity, tolerance levels, and population dynamics of stream invertebrate populations. We use the 10-metric genus-level index.

B-IBI score qualifications:

The B-IBI was calibrated for easily-wadeable, perennial streams. For certain sites assessed here outside that range, the B-IBI may be an inappropriate tool:

- --Larger streams (like the Dungeness, lower Morse, Lyre, Pysht, and Hoko)
- --Sites which go dry during low-flow periods (like Lake 0.6)

For more information:

- on the structure and development of the indices:
 - WQI: http://www.clallam.net/streamkeepers/assets/applets/CCWQI_explained.pdf
 - B-IBI: http://www.clallam.net/streamkeepers/html/biological_monitoring.html
- on the data underlying the ratings:
 - WQI: http://www.clallam.net/streamkeepers/html/water_quality_index.htm
 - B-IBI: http://www.clallam.net/streamkeepers/assets/applets/B-IBI_summary.pdf
- Streamkeepers volunteer monitoring program: <http://www.clallam.net/streamkeepers>
- Clallam County DCD: <http://www.clallam.net/DCD/dcdnaturalresources.html>



The waters of Clallam County provide recreational, aesthetic, economic and ecological benefits for residents and visitors.

The county's rivers, creeks, lakes, wetlands and estuaries provide habitat for a diversity of fish and wildlife species; recreational and commercial activities such as boating, fishing, and shellfish harvesting; and infiltration to groundwater aquifers which supply most of our drinking water.

Clallam County's streams vary in condition: some provide abundant resources for fish, wildlife and humans, while others have been severely impacted by human activities.

This "report card," based on the 2004 "State of the Waters" report, helps citizens evaluate the health of individual watersheds and to understand their problems, in order to better protect and restore them. Where possible, we have updated the 2004 report with more recent data about particular sites.