

Long-Term Index Site Monitoring Summary

2002-2011

A trend analysis of Clark County's watershed health

February 2013



Photo credit: Gary Piazza

Clark County's Department of Environmental Services (DES) provides a service to our citizens to protect our surface and groundwater resources. To best understand the health of Clark County's watersheds, rivers and streams, DES staff collect a variety of data through our Clean Water Program's monitoring activities. The *Long-Term Index Site Summary Report* provides an overview of the data collected from 2002-2011 at ten locations throughout Clark County. The report highlights conditions and changes to be considered for future planning efforts, such as identifying projects and priorities for improvements to protect stream health throughout our community.

Clark County analyzed monthly storm water quality and annual benthic macroinvertebrate data collected from ten wadeable stream stations during 2002 through 2011. A water quality index is calculated based on a set of measured water quality variables. A benthic macroinvertebrate index (aquatic bugs) is calculated based on measurements of the kind and number of insects living on the stream bottom. Each station was analyzed for the presence of significant trends in water quality and benthic scores, as well as individual water quality variables.

TRENDS stream health 2002-2011

Trends based on 10 years of data. Current conditions shown on next page

For more information about the Clean Water Program:

Ron Wierenga,
Division Manager
 (360) 397-2121 ext 4264
 ron.wierenga@clark.wa.gov

WATER QUALITY	BIOLOGICAL HEALTH	WATER CLARITY	
	Breeze Creek	Gee Creek	
	Cougar Creek	Chelatchie Creek	Chelatchie Creek
	Rock Creek North	Curtin Creek	Little Washougal River
	Curtin Creek	Rock Creek	Breeze Creek
	Chelatchie Creek	Cougar Creek	Cougar Creek
	Gee Creek	Little Washougal River	Curtin Creek
	Mill Creek	Matney Creek	Gee Creek
	Upper Whipple Creek	Upper Whipple Creek	Matney Creek
	Little Washougal River	Breeze Creek	Mill Creek
	Matney Creek	Mill Creek	Rock Creek
		Upper Whipple Creek	
Overall stream health	Aquatic bugs are an indicator of stream health	Amount of solids causing cloudiness in water	



CURRENT STATUS 2011 Results

As of 2011, the current water quality and biological health status for the ten stations is:

Water quality scores

- A = 1 station
- B = 2 stations
- C = 1 station
- D = 2 stations
- F = 4 stations

Biological health scores

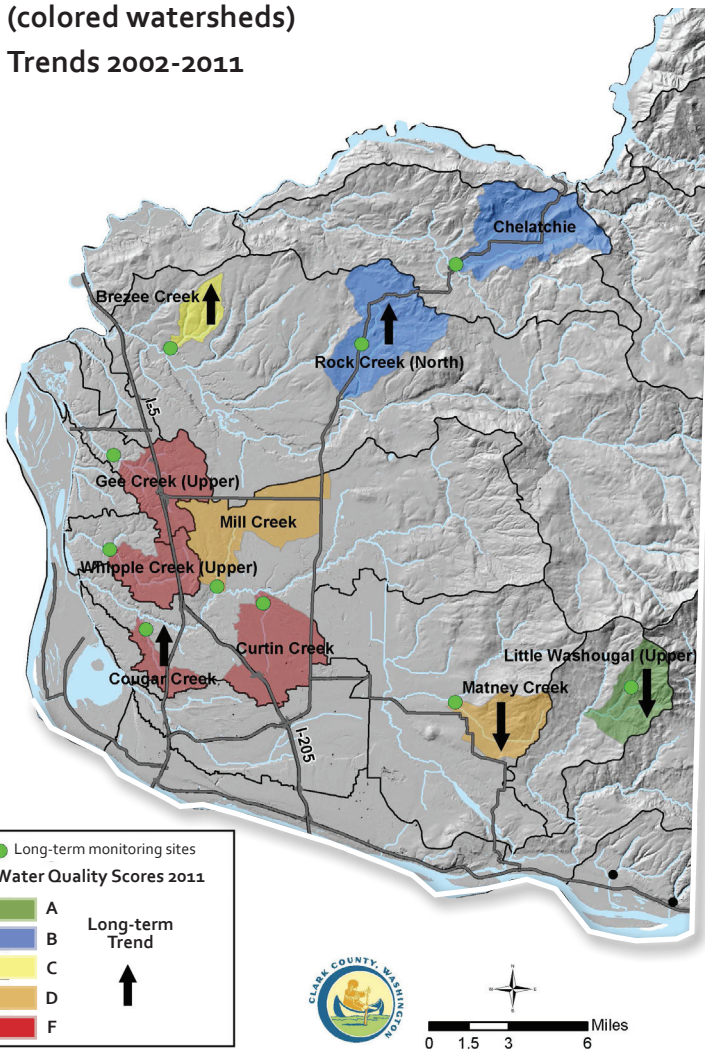
- A = 1 station
- C = 5 stations
- F = 4 stations

Variables measured:

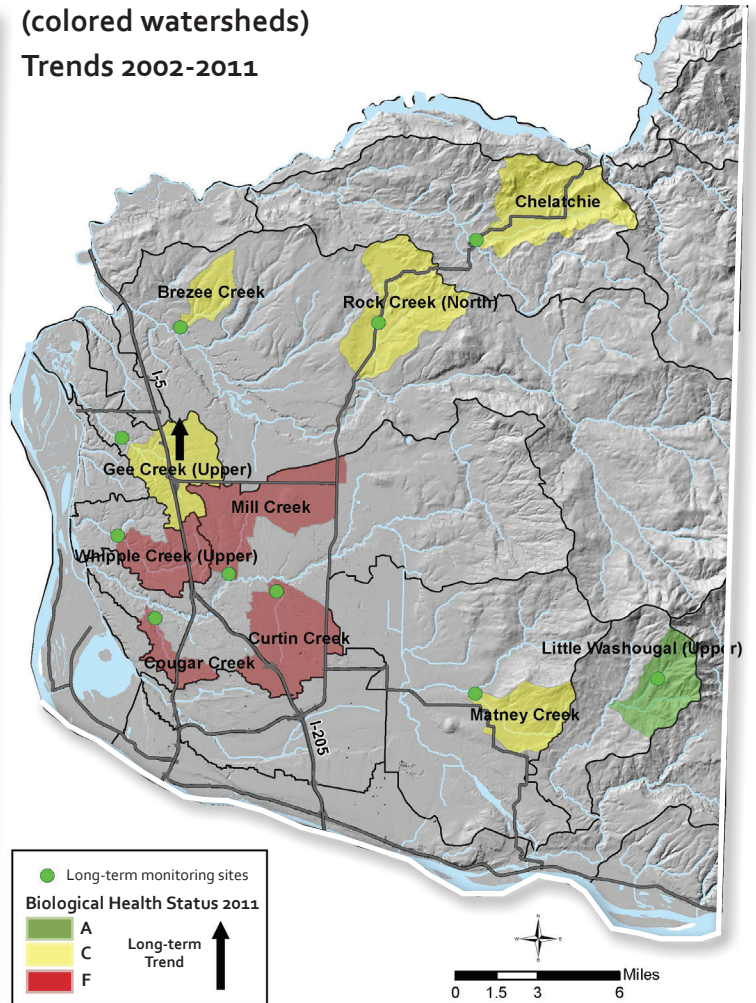
- Temperature
- Dissolved oxygen
- pH
- Total solids
- Inorganic nitrogen
- Total phosphorus
- Bacteria (fecal coliform)
- Benthic macroinvertebrates



Water Quality Status - 2011
(colored watersheds)
Trends 2002-2011



Biological Health Status - 2011
(colored watersheds)
Trends 2002-2011



Clark County Environmental Services
P.O. Box 9810
Vancouver, WA 98660
(360) 397-2121

The "Long-Term Index Monitoring Report" is available on:
www.clark.wa.gov/environment

