

## Streamkeepers of Clallam County: A Brief History (as of Nov. 2011)

**4/1/99:** Streamkeepers of Clallam County is created per unanimous vote of the Board of Clallam County Commissioners—**Martha Ireland, Carole Boardman, and Phil Kitchel**—and placed in the Department of Community Development. It succeeds the grant-funded 8 Streams Project of WSU Cooperative Extension. **Jessica Baccus** and **Ed Chadd** take the helm.

**1999:** A new monitoring program is devised with help from Streamkeepers advisors and volunteers, the first Volunteer Handbook is published, the first training held, and quarterly monitoring begins. There are 46 active volunteers. School outreach begins with **Bob Boekelheide's** class at Port Angeles High School.

**2000:** First direct results: SK data points to a failing septic system on Valley Creek that gets cleaned up; the data improves. First outside funding: SK performs work under a grant project to produce a "State of the Waters" report. First special project for an outside client: SK is hired by the Conservation District to monitor irrigation ditches for possible pipelining. First edition of Streamkeepers' Quality Assurance Project Plan (QAPP) is approved by the State.

**2001:** Clallam County Water Resources database is created, and volunteers begin to enter backlogged data. SK forms partnership with City of Port Angeles to collect additional bacterial samples. Bullitt Foundation makes a rare exception for a government agency and awards a grant for SK operating costs. The first of many grants comes from the WA Dept. of Fish & Wildlife (WDFW), which praises SK protocols and QAPP in a statewide publication. Outreach to schools continues with programs at Olympic Park Institute and Sequim School District. Volunteer Education & Outreach team kicks off.

**2002:** **Hannah Merrill** replaces **Jessica Baccus**, who decides to stay home with her second child. With backlogged data entered, SK submits its first batch of data for the State Clean Water Act report, and requests for data from outside groups begin rolling in. SK begins partnership with the U.S. Forest Service. SK volunteer time provides match for \$50,000 state grant to Clallam County for cleanup activities in the Sequim area. 100 volunteers log 2900 hours.

**2003:** SK match helps the Wild Salmon Center secure \$680,000 grant to protect Elk Creek near Forks. **Dr. James Karr**, creator of the Benthic Index of Biological Integrity (B-IBI), moves to Sequim, joins Streamkeepers, and speaks at the annual meeting, saying that citizen scientists can be an important counterbalance to government and business groups.

**2004:** Clallam County publishes "State of the Waters" report, relying heavily on SK data and featuring two multimetric indices: the regional B-IBI, which analyzes stream health based on "stream bug" populations, and an in-house Water Quality Index, which analyzes water chemistry and bacterial data. SK presents a draft of a third multimetric index, the Physical Habitat Index, at the National Water Quality Monitoring Council annual conference. SK is the first entity ever to submit B-IBI data for the State Clean Water Act report; these data indicate that certain stream reaches are Impaired and require cleanup. The State argues that B-IBI data can't be used for an "Impaired" designation. The Clallam County Departments of Community Development and Health appeal this decision.

**2005:** The EPA sides with Clallam County and orders the State to investigate sites listed as impaired due to B-IBI data.

**2006:** 148 active volunteers log 3700 hours, 50% more than staff. Their value is estimated at more than \$100,000.

**2007:** SK completes its first analysis of Land Use & Land Cover (LULC) in watersheds draining to SK sites, to enable correlations between LULC and stream condition, hiring graduate student **Robert Knapp** to perform the GIS analysis.

**2008:** **Hannah Merrill** takes a new job with Clallam County and is replaced by ex-volunteer **Adar Feller**. SK helps Clallam County land a \$536,000 EPA grant to develop a comprehensive stormwater management plan, and takes the lead on planning monitoring to be performed under this grant. Adar takes a different job with Clallam County and is replaced by **Robert Knapp**, who performed the LULC analysis in 2007, and who takes on primary responsibility for the stormwater monitoring project. Robert's first storm is on Christmas Eve.

**2009:** SK publishes revised version of Physical Habitat Index report. The two metrics showing the strongest positive correlation with biological condition are large woody debris and winter canopy cover, and those with the strongest negative correlation are aquatic and riparian noxious weeds. The State publishes its 2008 Clean Water Act report, and for the first time ever, B-IBI data is used to label stream reaches as Impaired and requiring cleanup. SK forms partnership with the North Olympic Peninsula Skills Center Natural Resources program to engage students in Streamkeeping.

**2010:** SK partners with the County Clean Water (Shellfish Protection) District to enable continued monitoring on streams related to Dungeness Bay after expiration of the District's grant project. This is a typical role: when funding can't be found, SK is called in. SK undertakes restructuring of the Clallam County Water Resources database in order to hold more types of data, portray Quality Control measures, and be compatible with the State Department of Ecology's Environmental Information Management database.

**2011:** To help with County belt-tightening, SK gives up **Robert Knapp's** half-time position and Robert becomes a full-time Planner. SK publishes a major revision of its Quality Assurance Project Plan, detailing extensive QA improvements undertaken since 2006. SK updates B-IBI and WQI scores from the 2004 "State of the Waters" report for use in Clallam County's Shoreline Characterization Report. In a further round of budget-tightening, Streamkeepers is dropped from the County Department of Community Development; the County Road Department offers to keep the program going with a half-time position, which Ed accepts rather than using his seniority to bump someone else, and Streamkeepers lives on.