

THE CANADIAN AQUATIC BIOMONITORING NETWORK (CABIN)

Giselle Bouchard & Rob Kent, National Water Quality Monitoring Office
Environment Canada
351 St. Joseph Blvd., 8th floor
Gatineau, Quebec K1A 0H3

ABSTRACT

The Canadian Aquatic Biomonitoring Network (CABIN; <http://cabin.cciw.ca>) is a national, collaborative program and network for collecting, assessing and distributing information on the biological condition and biodiversity of aquatic ecosystems in Canada. CABIN provides a standard protocol for the collection of benthic macroinvertebrate community samples and associated habitat and stream information. The development of CABIN began over 10 years ago through extensive biological assessments in the Great Lakes and in the Fraser River basin of British Columbia. CABIN uses the well-established Reference Condition Approach (RCA) where impairment of aquatic ecosystems at ‘test’ sites is assessed using a collection of reference or ‘best available condition’ sites that act as a baseline of conditions.

As a national program, CABIN is maintained by Environment Canada (EC) to establish a network of reference sites in selected areas across the country, initially with a focus on Canada’s National Parks. CABIN is also expanding into northern Canada through an International Polar Year (IPY) project involving research and training. The Parks Canada Agency (PCA), Department of Fisheries and Oceans (DFO), provincial and territorial governments as well as community groups, academia, and first nations are key partners in the network.

Due to increased demand across Canada, a new national CABIN training program has been developed by the CABIN team and the Canadian Rivers Institute (CRI; <http://unb.ca/cri/>) at the University of New Brunswick. The program will include five online learning modules and a 2-day in-person certification workshop to provide partners with the skills and knowledge to successfully conduct biomonitoring in wadeable streams using CABIN methods and to provide uniformity and consistency in the application of CABIN across Canada. Upon completion of training, participants have access to shared data and internet-based tools for storing, assessing and reporting on CABIN data.

KEYWORDS

CABIN, biomonitoring, aquatic ecosystem condition, water quality, streams, Reference Condition Approach (RCA), training