



# DISTRICT OF COLDSTREAM MEMORANDUM

**TO** Genevieve Dunbar  
Office & Grants Administrator  
Okanagan Basin Water Board

**FILE NO.** 6450

**FROM** Craig Broderick, MCIP  
Director of Development  
Services & Michelle Austin,  
Planning Technician

**DATE** August 5, 2009

**SUBJECT** Water Conservation & Quality Improvement Grant Program Progress Report  
for Sensitive Habitat Inventory and Mapping of Coldstream, Brewer and  
Craster Creeks

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Incorporated in 1906, the District of Coldstream has a total land area of 67.25 square km and a population of 9,471 (2006 Census). It is located just east of Vernon, surrounding the North end of Kalamalka Lake and extending through the beautiful Coldstream Valley. Mayor and Council of the District are *"committed to a long-range plan for Coldstream, which fosters orderly growth and which enhances rural living at its best... and to making this a living plan supported by efficient fiscal management, appropriate policy and procedure development, and effective delivery of services"*. The District provides financial, engineering, public works, planning, building, bylaw enforcement, business licencing, fire inspection and fire protection services to the community.

The new Mayor and Council have placed the stewardship of Coldstream Creek and its tributaries high on their priority list.

Ecoscape Environmental Consultants Ltd. has been retained by the District to complete Sensitive Habitat Inventory and Mapping (SHIM) of three major creeks in Coldstream (i.e. Coldstream, Craster, and Brewer). Coldstream Creek starts on the southerly slopes of Silver Star Mountain, and flows south and then west to discharge into Kalamalka Lake. Craster and Brewer Creeks start near Bluenose Mountain and flow north to join Coldstream Creek at Lavington.

SHIM is a standard methodology for mapping fish and aquatic habitat in BC based on the collection of reliable, high-quality and spatially accurate information. The objectives of the SHIM project are to:

- Identify, inventory and map Coldstream, Craster and Brewer Creeks, their associated riparian habitats and important fisheries habitat features within the District of Coldstream boundaries;
- Provide a basis for accurately mapped baseline data that can be integrated into local mapping and planning initiatives;
- Allow easy incorporation of stream mapping data into the Coldstream Official

Community Plan and the Greater Vernon Water database;

- Identify preliminary Streamside Protection and Enhancement Area (SPEA) values for respective reaches/segments based on mean channel widths recorded during field inventories; and,
- Augment and potentially enhance local land-use planning maps and/or specific site or detailed planning surveys.

By combining resource information from a variety of sources, the goal is that SHIM will provide a robust baseline inventory (cataloguing the three creeks with Coldstream's boundaries and all natural and anthropogenic features occurring within and along them) for improving integrated resource management and planning within the District of Coldstream.

The Regional District of North Okanagan (RDNO), through its Greater Vernon Water function, is collaborating on this SHIM project by contributing \$2,000. Coldstream Creek is a major contributor to Kalamalka Lake water quality and quantity and the information gathered from the SHIM will be shared with the RDNO.

In January of this year, a staff report was written to Council seeking endorsement for the submission of a grant application under the Okanagan Basin Water Board's (OBWB) Water Conservation and Quality Improvement Grant Program for SHIM of Coldstream, Craster, and Brewer Creeks. Council endorsed the application.

The OBWB approved the District's application for a grant in the amount of \$21,500. A staff report was subsequently written to Council to inform that the OBWB had awarded the District the funds to complete SHIM of Coldstream, Craster, and Brewer Creeks.

In July 2009 a letter was mailed, to landowners adjoining Coldstream, Craster, or Brewer Creeks, to notify them of the SHIM project. Brochures with information about streamside stewardship were also included in the mail out.

Field sampling commenced on August 11, 2009 at the mouth of Coldstream Creek where it pours into Kalamalka Lake. Since this date, the top-of-bank has been recorded, using GPS, for approximately half of the length (i.e. 8.5 kilometers km) along both sides of Coldstream Creek. SHIM field work and data processing has been completed for approximately 5.5 kilometers along Coldstream Creek.

The SHIM project is on schedule with the timeline in the grant application (i.e. April 15, 2009 to December 15, 2009). Digital data sets will be completed and provided to the District of Coldstream prior to November 1, 2009 and the report summary will be completed by December 15, 2009.

Obstacles in carrying out the SHIM project have not been encountered thus far and none are anticipated.

With respect to the application process, the District's Executive Research Coordinator (the person responsible for grant applications) experienced a couple of challenges. The online

application form did not provide the opportunity to save changes which resulted in the form needing to be filled out several times before it was completed satisfactorily. The application form was relatively short in length; however, the covering letter was lengthy because all information was requested to be provided in the covering letter. From a grants administration perspective, it would seem simpler and more efficient to evaluate grant applications if the details were required in the application and the covering letter was a concise summary, like a cover letter/resume package would be. Turn around time for the application was quick (i.e. 2 months) and this was greatly appreciated by District staff.

For examples of the type of data features that have been collected along Coldstream Creek, please refer to the following Photos 1 – 4.

Respectfully submitted by,

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Michelle Austin, Planning Technician



**Photo 1: Bridge crossing in a modified residential area along Coldstream Creek.**





**Photo 2: Bank armoring in a modified residential area along Coldstream Creek**





**Photo 3: Culvert crossing with enhancements downstream (i.e. constructed weirs and associated scour pools)**





**Photo 4: A large eroding bank - accumulations of clay are found downstream of these large points of erosion.**