

**International St. Croix River Watershed Board
Combined Sewer Overflows (CSO)
May 20, 2008
DFO Biological Station, St. Andrews, NB**

CSO Meeting Summary

The Board organized a meeting of officials from the three levels of government on the U.S. and Canadian sides of the border for a discussion regarding combined sewer overflows (CSOs) in Calais and St. Stephen, which occasionally overflow and discharge a mixture of sewage and stormwater into the St. Croix River.

Combined sewer systems are designed to transport both sanitary sewage and stormwater in a single pipe to a treatment facility. The capacity of these systems may be exceeded in periods of heavy rainfall or wet weather resulting in direct discharges of untreated wastewater to receiving environments. These overflows are referred to as combined sewer overflows or CSOs.

Presentations regarding CSOs and actions taken to eliminate them from their respective sewer systems were given by Anna Leis Hafford (Olver Associates) on behalf of City of Calais and Grant Godfrey, a consultant to the Town of St. Stephen. Presentations were also given by Ed Logue from the Maine Department of Environmental Protection regarding the State's CSO program and by Carol Wood from the U.S. Environmental Protection Agency, Region 1 (New England) regarding the U.S. Federal approach to the elimination of CSOs. Tim LeBlanc from the New Brunswick Department of the Environment described the Province's approach to CSOs.

The major conclusion of these presentations and discussions is that eliminating CSOs is an extremely costly venture that competes for limited resources with other essential services, e.g., maintaining safe and secure supplies of drinking water. Consequently, efforts to deal with this issue are necessarily being made over a long term planning horizon.

More specifically, the City of Calais has five CSOs including one at the sewage treatment plant. The City has embarked upon a 10-year plan, begun in 1997, to eliminate these CSOs. The City is ahead of schedule in implementing this plan. There has been an approximate reduction of CSO events from pump stations of 89% since 2003. The percent reduction in CSO events is expected to improve to 96% in the 2008 operating year. Ms. Hafford emphasized that an aggressive schedule and the ability to get grants have been key factors in moving forward with these initiatives.

There are currently 28 CSOs in the St. Stephen sewer system with 11 located along the riverfront. The Town embarked upon a two phase sewage system upgrade project in 2001. The first phase involved constructing a new sewage treatment plant which has been completed. The new plant is considered to be state-of-the-art, and is meeting the requirements established by the Province of New Brunswick. Wastewater from the plant is chlorinated and dechlorinated prior to being discharged to the river.

Phase 2, which has been partially carried out as resources permit, involved a plan to eliminate CSOs from the Town's sewer system. The Town applied for funding to carry

out this work under the Municipal Rural Infrastructure Fund program in 2001. The application is still awaiting a decision, however, it now appears unlikely that funding will be provided through this program. The cost of carrying out this work—estimated to be \$5.6 million in 2001—is now estimated to be in the order of \$7.5 million.

Note: please refer to Appendix 1 for key points from these presentations, Appendix 2 for handout provided by Olver Associates on Calais, and Appendix 3 for an overview of CSO issue provided by MEDEP and EPA.

