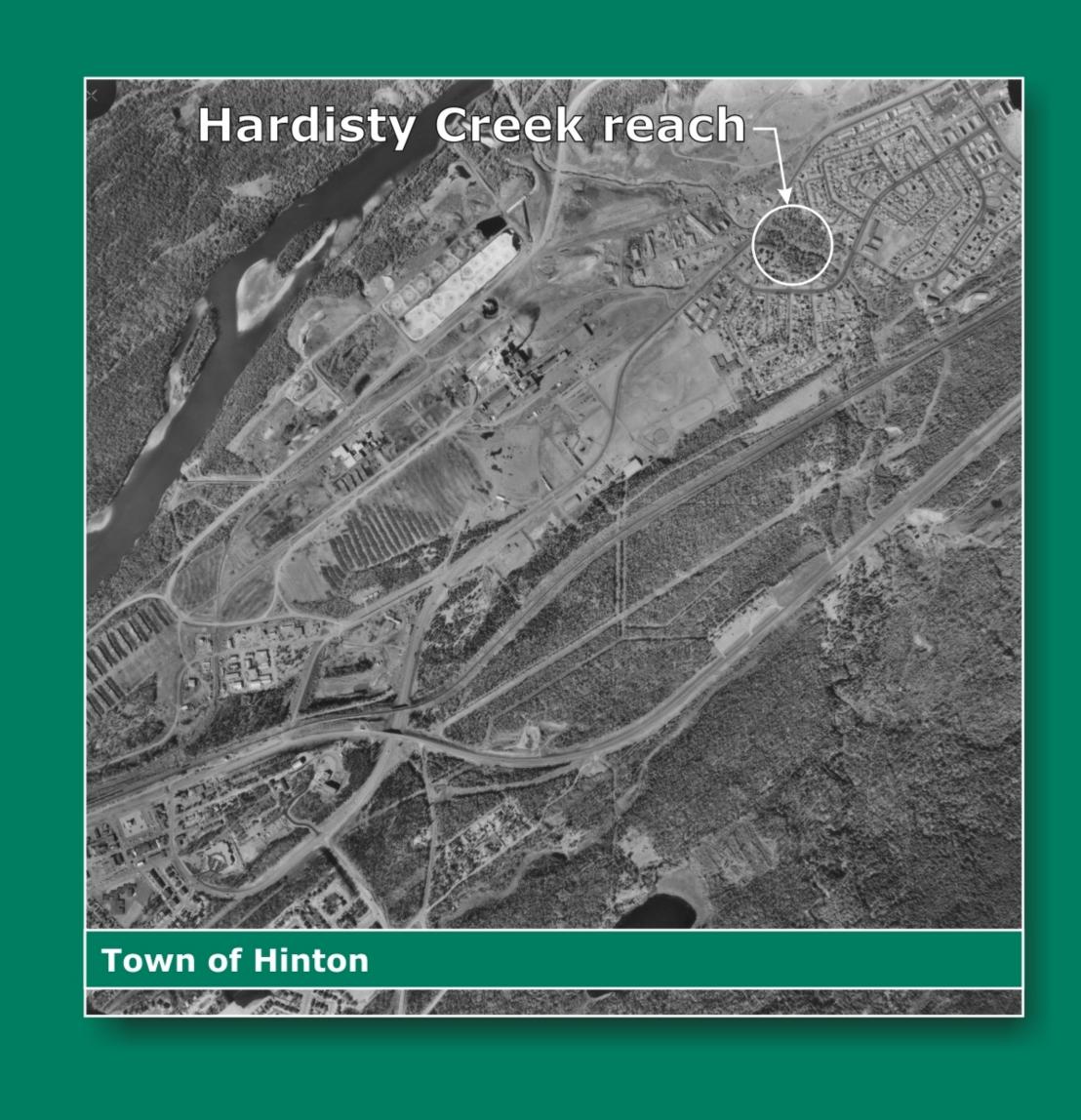


Hardisty Creek Restoration Project

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Pre-Restoration

Low water levels in overbroadened channel

he Hardisty Creek Restoration Project is a multi-stakeholder, community-based initiative to restore fish habitat and fish passage in Hardisty Creek. The creek is a mountain stream, with its headwaters in forested areas located above the Town of Hinton, Alberta and its lower reaches in the Town proper.

Hardisty Creek within the Town of Hinton had been altered by municipal and industrial development, with some activities resulting in fish passage impediments due to undersized and perched stream crossings and degraded stream habitat due to broadening of the channel. In 2002, a fisheries and hydrological assessment was initiated to characterize existing conditions and develop restoration prescriptions.

Project stakeholders:

- Athabasca Bioregional Society
- Foothills Model Forest
- Town of Hinton
- Alberta Sustainable Resource Development
- Alberta Transportation
- Fisheries and Oceans Canada
- Hinton Fish and Game Association
- West Fraser Timber

Recommendations included:

- Bridge construction to replace undersized, perched culverts at the West Fraser Timber yard to allow fish passage from the Athabasca River
- Placement of rock riffles, large woody debris and woody plantings in the 400 metre long Kinsmen Park reach to restore fish habitat and enhance passage
- Backflood riffle construction at Hardisty Avenue to allow fish passage above a pair of perched culverts

Construction and Community Involvement:

The Athabasca Bioregional Society secured funding for construction from a number of sources and additional in-kind contributions of materials, equipment and labour were received from project stakeholders and local businesses. The Kinsmen Park reach prescriptions were constructed in this fashion in October 2004. West Fraser Timber also constructed a new bridge in the lower reach of Hardisty Creek in 2004. The Hardisty Avenue culvert backflood riffle was constructed in October 2005.

Results of the Project:

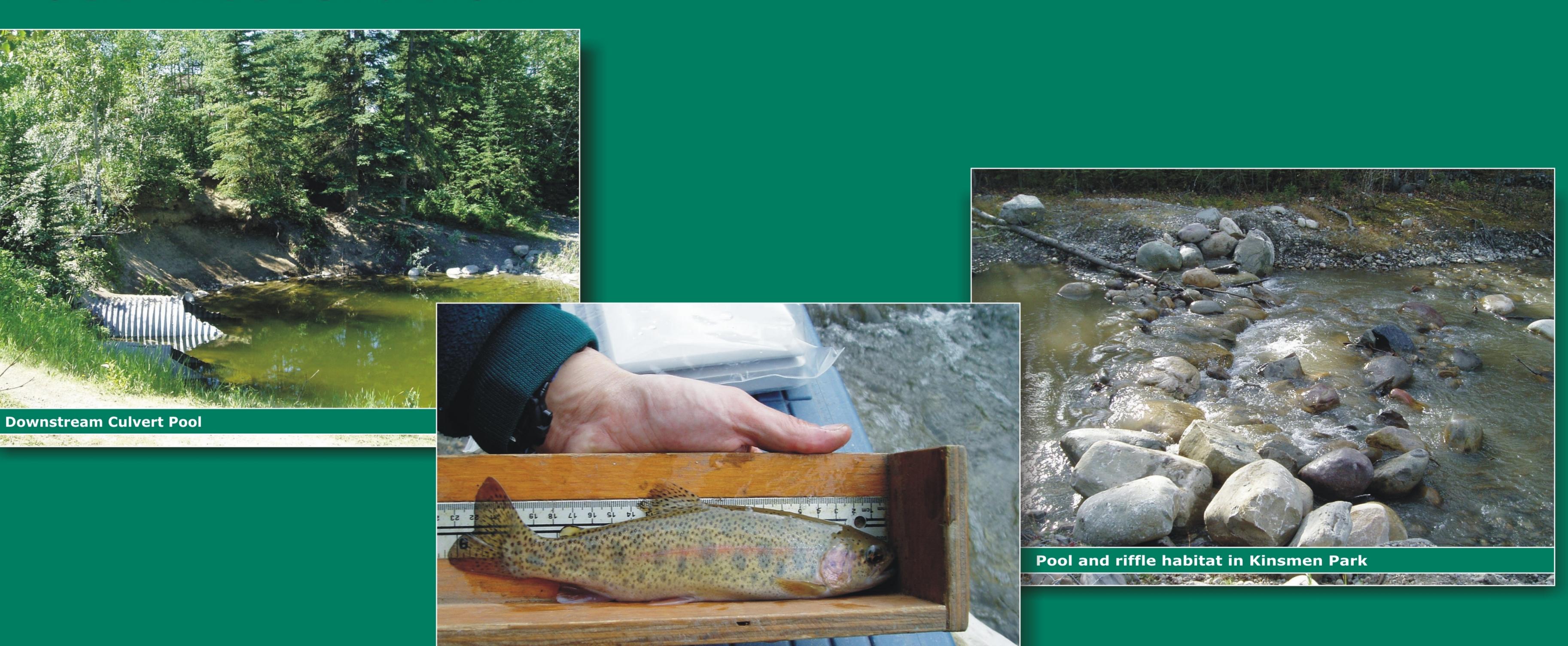
Electrofishing performed subsequent to each phase of construction has shown the Kinsmen Park reach to provide rearing habitat for mountain whitefish and brook, rainbow and bull trout. Both bull and rainbow trout were captured upstream of the backflooded culverts in 2006. The electrofishing results clearly indicate that the remediation work on this reach of Hardisty Creek has been effective at restoring fish habitat.

Community involvement in the project has increased public awareness about aquatic and riparian habitat issues and reinforced the concept of public stewardship of the creek.

Instream Construction



Post-Restoration



Rainbow trout captured after riffle construction