



Hamilton Watershed Stewardship Program

A program of:



Lower Spencer Creek

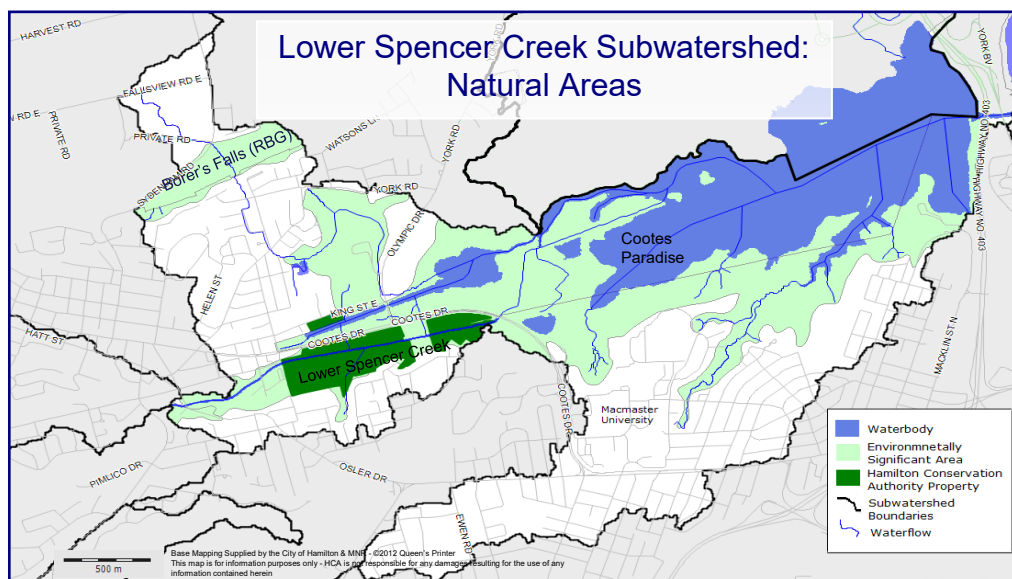
Lower Spencer Creek Subwatershed

A watershed is the area of land in which all the water drains into the same body of water. A subwatershed is a section within a larger watershed system. In the Lower Spencer Creek Subwatershed, precipitation and smaller creeks all flow into the Lower Spencer Creek which outlets into Cootes Paradise. The map on the right shows the subwatershed boundaries.

THE LOWER SPENCER CREEK Yesterday and Today

Lower Spencer (Lower Spencer Creek subwatershed) is a unique area with a vibrant history and environmental treasures. Historically, Lower Spencer Creek provided a transportation route and power for mills to the early residents of Dundas. Today the creek is still important to the citizens of Dundas and it still provides habitat for native resident fish species. Lower Spencer Creek has been straightened and channelized with concrete in sections to accommodate urban development. These modifications along with urban runoff stress the creek.

A creek needs naturally vegetated buffers to filter nutrients from runoff before it enters the creek and to help stabilize the banks to reduce soil erosion. Increasing and enhancing the natural area in and around Lower Spencer Creek can improve water quality and habitat for aquatic organisms. Hamilton Conservation Authority (HCA) property and Cootes Paradise (Royal Botanical Gardens) in Lower Spencer are designated as natural areas to protect water resources, conserve species diversity, and provide recreational opportunities.

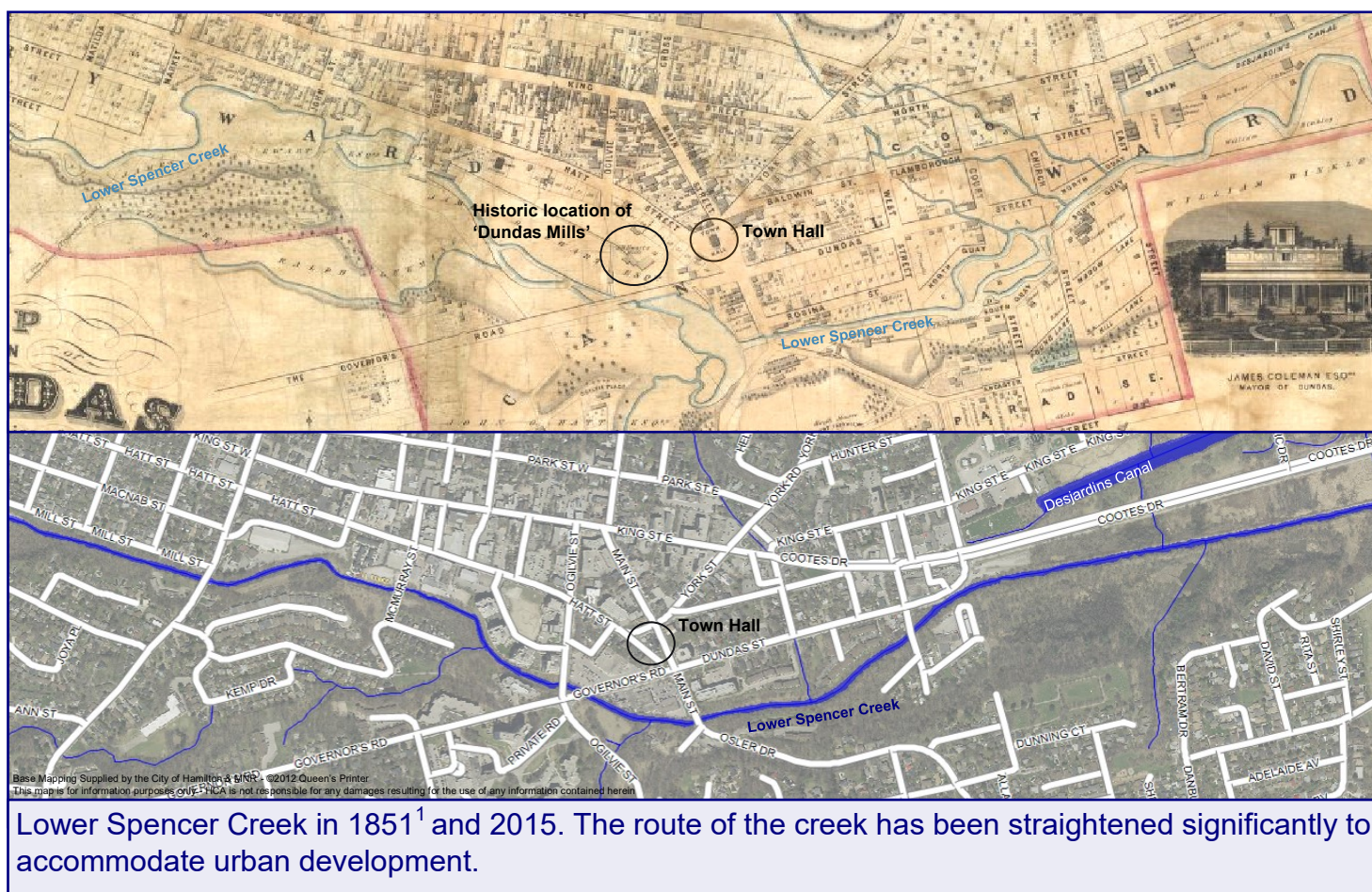


Early History of Lower Spencer

Historically, the Attawandaron First Nation (also known as the Neutrals) followed by the Mississauga First Nation resided in Lower Spencer and the creek is thought to have been part of a water passageway from Lake Ontario to the Grand River. At the end of the eighteenth century, settlers established along Lower Spencer Creek and built saw and grist mills that harnessed the power of the creek. Richard Hatt's Dundas Mills (near Main Street and Governors Road) were the core of the early community with shops and roads springing up around them.

Inside: History of Lower Spencer...

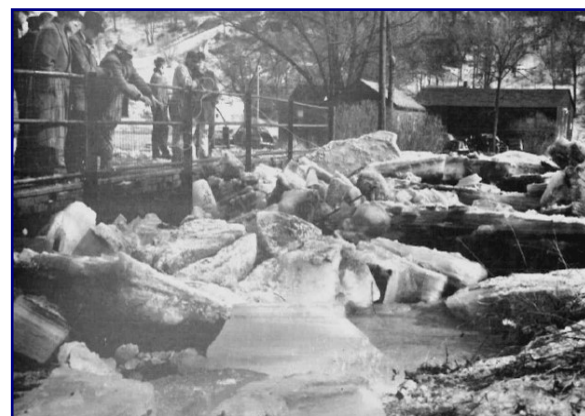
The Lower Spencer Creek – Yesterday and Today



When the community gained a post office in 1814, it was given the name Dundas after the successful mills. The name originated from nearby Dundas Street (an historic military route; Governor's Road in Dundas) named after Henry Dundas, a friend of John Graves Simcoe.

In 1820, Peter Desjardins petitioned the government to allow him to dig a channel through Cootes Paradise to provide a water transportation route from Dundas to Hamilton Harbour (known then as Burlington Bay). The Desjardins Canal, completed in 1837 after Desjardins' death, allowed Dundas to thrive as a shipping and transportation hub. Population growth slowed in the late 1800's as the completion of the Great Western Railway provided an efficient shipping method for Hamilton. With the continued expansion of Hamilton and the relocation of McMaster University to Hamilton in 1930, Dundas continued to succeed as a residential community with its own history, art scene and downtown culture.

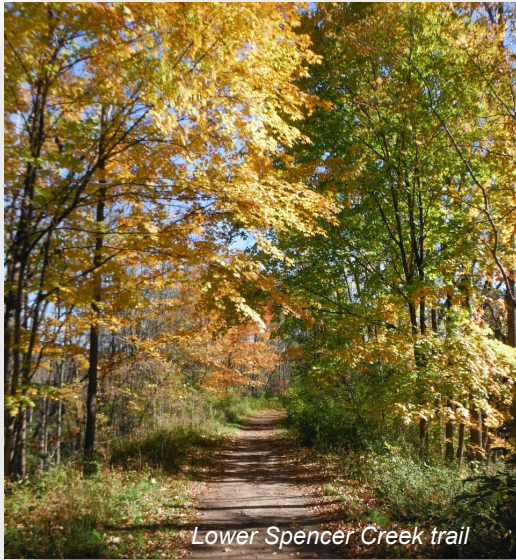
Spencer Creek Conservation Authority was founded in 1958 to conserve the land and water resources and create outdoor recreational opportunities. One of its major tasks was to control flooding in Dundas. This included the protection of wetlands, creation of dams upstream at Valens and Christie and designation of natural areas along Lower Spencer Creek. In 1966, Spencer Creek Conservation Authority joined with nearby communities and became the Hamilton Region Conservation Authority. Today, Hamilton Conservation Authority continues to conserve water resources through flood control, planning review, and monitoring.



Spring thaw at Thorpe Street bridge in Dundas, 1959

1. Map was taken from <http://digitalarchive.mcmaster.ca/islandora/object/macrepo%3A61445> and is licensed under Creative Commons 2.5. Additional labels have been added to the original map.

Flora and Fauna



Lower Spencer is located in a transition zone at the northern edge of the Carolinian deciduous forest region and the southern edge of the Great Lakes-St. Lawrence Forest Region. Before European settlement, forests dominated the upland areas with a high diversity of tree species; maples, oaks, chestnut, basswood, beech, pines and more. White-tailed deer, porcupines and raccoons along with wolves, elk and black bears (which are no longer here today) roamed the forests and meadows. The coastal wetlands were home to a host of reptile and amphibian species. The creeks provided ample fishing opportunities for early settlers and Cootes Paradise was known as a hunter's paradise with its large flocks of waterfowl. The fur trade flourished in the region and caused serious reductions in beaver numbers and the extirpation (the loss of a species from a specific area) of marten.

Like most of Southwestern Ontario, Lower Spencer has become increasingly urban. Currently, natural vegetation covers approximately 28% of the subwatershed.

The remaining natural areas provide habitat for;

- hundreds of plant species
- resident and migratory bird species
- spawning for large fish such as Chinook salmon, rainbow trout, and white sucker
- species at risk such as Blanding's turtles and Chimney Swifts

Past development and limited connections between natural areas are two of the threats to Lower Spencer's plant and wildlife populations.



The HCA event 'Spencer Creek Salmon Stroll' was held in October 2016 and local experts discussed the Chinook salmon run and restoration projects in Lower Spencer.

Creek Restoration

Concrete grade drops (used to reduce erosion) limit the movement of fish to potential upstream spawning habitat in Lower Spencer Creek. After conducting a feasibility study, a concrete barrier was removed from under Osler Drive in 2011. Since then, spawning sites have been observed upstream.



HCA has enhanced the natural areas on its property in Lower Spencer through;

- Tree plantings with volunteers at Canal Park and on its property south of Cootes Drive
- Management of Phragmites (an invasive wetland reed) in sections of the wetlands north and south of Cootes Drive in partnership with RBG

Current Work in Lower Spencer

The Lower Spencer Creek – Yesterday and Today

Current HCA Work



Lower Spencer Creek Integrated Subwatershed Study (in partnership with the City of Hamilton): an assessment of the overall health of the creek system

The **Hamilton Watershed Stewardship Program** works with landowners in Lower Spencer encouraging the protection and restoration of the natural features on their property

Ongoing Monitoring of wildlife road mortality on Cootes Drive in partnership with Dundas Turtle Watch and others in the community, and monitoring of water quality, fish populations, and spawning sites in Lower Spencer Creek

The Turtles of Lower Spencer

In 2016, HCA installed a wildlife directional fence on its property on the south side of Cootes Drive that directs turtles and other wildlife to a large culvert and Lower Spencer Creek to safely cross under roadways. Female turtles moving from wetlands to nesting sites are at great risk as they often cross over Olympic and Cootes Drive. Artificial turtle nesting beds were also installed along the Lower Spencer Creek trail on HCA property to increase the suitable nesting habitat for turtles. Ongoing monitoring is in place to determine the success of these projects.



Snapping turtle hatchling



Wildlife Directional Fence

Interested in getting involved?

You can connect with Hamilton Watershed Stewardship Program at (905)-525-2181 ext. 196. Call to arrange a free on-site consultation to learn more about the natural features on your property. We can also connect you to volunteer opportunities in Lower Spencer.

The Lower Spencer Creek lies within the **Dundas Valley 50 Year Vision and Strategy Area** and the **Cootes to Escarpment EcoPark Study Area**. The Dundas Valley 50 Year Vision is a comprehensive community oriented strategy focused on preserving and enhancing the unique culture, character and charm of the Dundas Valley community.

The Hamilton Watershed Stewardship Program acknowledges:



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada



Hamilton