

System Name: Lion's Head WTP

Municipality: Municipality of Northern Bruce Peninsula

Drinking Water System Category: Large Municipal Residential

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The Municipality of Northern Bruce Peninsula is in the Northern Bruce Peninsula Source Protection Authority jurisdiction and makes up the northern most part of Bruce County. The waters of Lake Huron border the west shore with Georgian Bay bordering the east shore. The Municipality contains the Fathom Five National Marine Park, Bruce Peninsula National Park, The Bruce Trail, Cabot Head and Lion's Head Nature Reserves, two First Nation Hunting Reserves, and a large Bruce County Forest Tract.

The Municipality was amalgamated in January 1999 and is composed of the former Townships of St. Edmunds, Lindsay, Eastnor, and the Village of Lion's Head. It is currently home to the communities of Tobermory, Dyer's Bay, Miller Lake, Stokes Bay, Lion's Head, Ferndale, Pike Bay and Barrow Bay. The total population was 3744 in 2011, which is a decrease of 2.8% from 2006 (Statistics Canada). With a land area of 781.51 km<sup>2</sup>, the population density is 4.9 people per square kilometre. Seasonal residents add to the population during peak periods due to 4870 private dwellings, which reflects the importance of tourism for this area.

The town of Lion's Head is located on Isthmus Bay, an inlet of Georgian Bay. This town receives water from a municipal drinking water system that draws water from an Isthmus Bay intake, which is classified as a Type A - Great Lakes intake. There are no major river or stream discharges to Isthmus Bay within the community. Whippoorwill Bay, which is connected to Isthmus Bay to the north, receives discharge from the Swan Lake Drain. The Lion's Head water treatment plant is classified as a Large Municipal Residential drinking water system because it services over 300 private residents and commercial users.

The intake pipe was constructed in 1992 and is located outside of the marinas facing Dock Street (Map 4.1.S1.1, Table 4.1.S1.1). The length of the intake pipe is 165m (Stantec 2008, Certificate of Approval in MOE, 2006). While the most recent Certificate of Approval states that the depth of the intake crib is 8.4m, but other sources suggest a shallower depth. A conservative estimate of 6.8m (top of intake crib) was used for the vulnerability analysis. The intake pipe has a diameter of 300mm and a capacity of 7960m<sup>3</sup>/day (Paragon Engineering Ltd, 1993). The intake is protected from zebra mussels by chlorine dosing at the intake. The intake structure is reinforced with stone to protect it against ice scour and wave action and its design was based on a fifty-year period.

"There is probably no better kept secret in all of Ontario than the town of Lion's Head, a Shangri-la on Isthmus Bay halfway up the Bruce Peninsula's Georgian Bay coast. This picturesque small town with its natural harbour and family friendly sandy beach. The village's central location on the Peninsula makes it an ideal base for exploring the Bruce. It was named for the rock formation located on the east escarpment. "

(Source: <http://www.explorethebruce.com/lions-head.php>)



Lion's Head marina  
and beach

