

# REALITY CHECK



## ENVIRONMENTAL SUSTAINABILITY

## WHY IS THIS IMPORTANT?

Everything that we need for our survival and well-being depends on our natural environment. To handle the effects of changes to our climate (increasing and severe weather events, etc.), its natural and built environments must be in good shape. Features such as an abundant tree canopy that help improve air quality and other health indicators are key to the city's resilience. Parks and green spaces enhance health and quality of life for all residents.

## DID YOU KNOW?

THE SAULT HAS  
**8,182**  
HECTARES  
OF PARKLAND

**20%**  
OF THE WORLD'S  
FRESH WATER  
SURROUNDS  
THE SAULT

## WHAT ARE THE TRENDS?

Sault Ste. Marie's location on the pre-Cambrian Shield and the shores of the St. Mary's River, connecting the three Great Lakes of Superior, Michigan and Huron, provide the city with a beautiful 'naturally gifted' environment, including access to 20% of the world's freshwater.<sup>1</sup>

Within the City itself, residents have access to 8,182.7 hectares of parkland which provides easy access to cross-country skiing and other winter sports, hiking, swimming and other recreational facilities.<sup>2</sup> Climate change impacts have included a rise in the temperature of the Great Lakes, as well as increasingly extreme weather conditions such as flooding in the fall of 2013.<sup>3</sup>

A growing culture of environmental stewardship, based on extensive community knowledge held by Anishinaabe elders, scientists and a rural region, is evidenced in a number of both community- and City-led initiatives such as an emphasis on food security, efforts to decrease spread of invasive species, the Green Transportation / Idle Free SSM Campaign wherein Transit Services has saved approximately 40,000 litres of fuel and 100 tonnes of greenhouse gases annually,<sup>4</sup> and increased residential waste diversion rate from 9% in 1999 to 35%.<sup>5</sup>

## WHAT ELSE NEEDS TO BE DONE?

- Continue to foster a culture of stewardship
- Coordinate the efforts of the broader community through the establishment of an environmental task force
- Expand environmental-focused youth-led initiatives such as school gardens, Yellow Fish, and youth and the arts

## WHAT'S NEW?

- Sault Ste. Marie is a net-exporter of 100% renewable electricity. Sault Ste. Marie has among the lowest electricity costs in the province due to the efforts and cost savings of our local Public Utilities Commission.<sup>6</sup>
- Air Quality across the city is currently in the "low risk" category for urban centres, however a 2010<sup>7,8,9</sup> study showed that areas surrounding Essar Steel Algoma have significantly higher rates of pollutants, resulting in elevated health risks, particularly for respiratory and vascular illnesses. Essar Steel Algoma continues to improve its pollution controls which are monitored by an independent third-party
- In May 2016 the City became a "blue-dot" community, passing a resolution respecting citizens' rights to a healthy environment, and has committed to a 5% reduction in energy consumption (and GHG emissions) from 2014-2019<sup>10</sup>
- Although the St. Mary's River is an 'Area of Concern', with current issues pertaining to contaminated sediments and fish health, recent studies show that water quality is not affected<sup>11</sup>
- Approximately 67,368 tonnes of waste was received at the landfill in 2015. Of this value 73% or 49,085 tonnes were landfilled, 23% was used as daily cover material or stockpiled for future use, and 4% was exported for recycling or reuse<sup>12</sup>
- The production of local food has grown exponentially over the past 5 years, with a 100% increase across the Algoma District.<sup>13</sup> In Sault Ste. Marie, community gardens are being grown across the City, including in several school yards, and the Mill Market has joined the Algoma Farmers' Market in making local produce available to consumers. Several restaurants are now promoting locally grown foods on their menus.
- Redevelopment of Etienne Brulé elementary school site in the City's Canal District has resulted in the City's first fruit tree orchard, as well as additional community gardens

## INTERESTING FACTS:

### ELECTRICITY IN SAULT STE. MARIE



<sup>1</sup> <https://www.ec.gc.ca/grandslacs-greatlakes/>

<sup>2</sup> City's Planning Department

<sup>3</sup> City's Engineering Department

<sup>4</sup> <http://saultstemarie.ca/City-Hall/City-Departments/Public-Works-Engineering-Services/Engineering-and-Planning/Engineering-and-Construction/Environment/Green-Transportation.aspx>

<sup>5</sup> Presentation by AECOM to City Council

<sup>6</sup> Sault Ste. Marie Innovation Hub

<sup>7</sup> Robert Dales, Lisa Marie Kauri, Sabit Cakmak, Mamun Mahmud, Scott A. Weichenthal, Keith Van Ryswyk, Premkumari Kumarathasan, Errol Thomson, Renaud Vincent, Gayle Broad, Ling Liu, "Acute changes in lung function associated with proximity to a steel plant: A randomized study," *Environmental International* 55 (2013): 15-19.aspx

<sup>8</sup> Ling Liu, Lisa Marie Kauri, Mamun Mahmud, Scott Weichenthal, Sabit Cakmak, Robin Shutt, Hongyu You, Errol Thomson, Renaud Vincent, Premkumari Kumarathasan, Gayle Broad, Robert Dales, "Exposure to air pollution near a steel plant and effects on cardiovascular physiology: A randomized crossover study," *International Journal of Hygiene and Environmental Health* 217 (2014): 279-286.

<sup>9</sup> Sabit Cakmak, Robert Dales, Lisa Marie Kauri, Mamun Mahmud, Keith Van Ryswyk, Jennifer Vanos, Ling Liu, Premkumari Kumarathasan, Errol Thomson, Renaud Vincent, Scott Weichenthal, "Metal composition of fine particulate air pollution and acute changes in cardiorespiratory physiology," *Environmental Pollution* 189 (2014): 208-214

<sup>10</sup> <http://saultstemarie.ca/City-Hall/City-Departments/Public-Works-Engineering-Services/Engineering-and-Planning/Engineering-and-Construction/Environment/Energy-Conservation-and-Demand-Management-Plan.aspx>

<sup>11</sup> [http://bpac.algomau.ca/wp-content/uploads/2016/09/Water-Quality-Technical-Report-2013-15\\_Aug-2016.pdf](http://bpac.algomau.ca/wp-content/uploads/2016/09/Water-Quality-Technical-Report-2013-15_Aug-2016.pdf)

<sup>12</sup> 2015 Annual Landfill Report to Council

<sup>13</sup> OMAFRA calculations from Statistics Canada Agriculture Census