

CARLISLE WATER STORAGE FACILITY

Municipal Class Environmental Assessment



INFORMATION SHEET

Additional water storage is required within the community of Carlisle. The current Elevated Water Storage Tank (ET) has a storage capacity of 1,400 m³. Based on the current population of Carlisle being serviced by the municipal water supply, the required water storage is 2,089 m³, which is 689 m³ below Provincial water storage requirements.

By 2045, additional population being serviced by the municipal supply within the community will further increase the total required storage capacity to 2,537 m³, pushing the total storage deficit to 1,285 m³ below Provincial water storage requirements.

Water storage requirements are calculated based on the *Ministry of Environment, Conservation and Parks (MECP) Design Guidelines for Drinking Water Systems (2008)* and consider fire storage, equalization storage, and emergency storage requirements.



Fire Storage – calculated using the City of Hamilton’s Target Available Fire Flows based on Land Use.

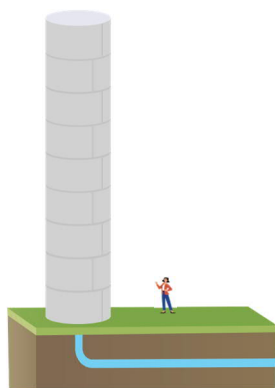
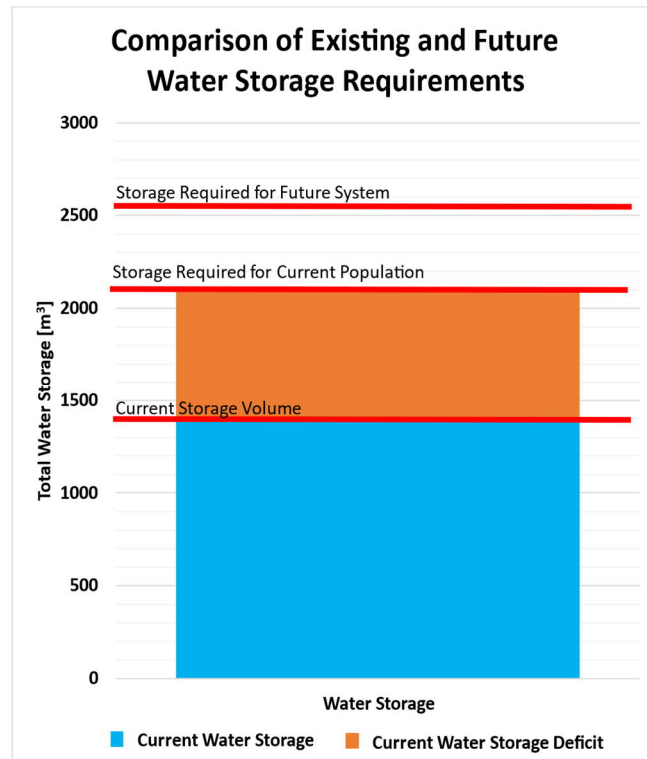


Equalization Storage – calculated based on the maximum daily water demand.



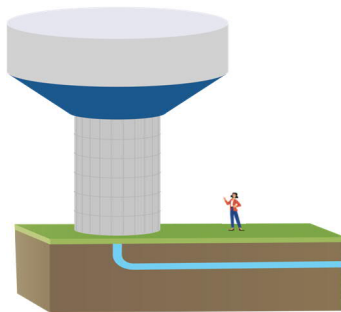
Emergency Storage – calculated based on the required fire storage and equalization storage.

Multiple infrastructure options to meet Carlisle’s water storage requirements will be considered through the EA Study. Learn about some of the different infrastructure options to meet the community’s water storage capacity needs below.



Standpipe

A standpipe is a tall tank, usually small in diameter compared to height, for holding water (MECP, 2008).



Elevated Tank

An elevated tank (what Carlisle has today) is a storage facility supported by a tower at an elevation to provide storage and pressure for a water pressure plane (MECP, 2008).



Booster Pumping Station & In-ground Storage Tank

A Booster Pumping Station & In-ground Storage Tank is a compartment used to accumulate water from a water treatment unit (MECP, 2008). Requires pumps to distribute water.