RESILIENT DESIGN: WATER AUDITS

DGH ENGINEERING LTD.

CIVIL | STRUCTURAL | MECHANICAL | ELECTRICAL | INDUSTRIAL

CIVIL

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Last week, we featured DGH's role in reducing water consumption in municipal recreational projects. DGH also helps building owners reduce their water use as a strategy for lowering operating costs at existing facilities. When thinking about a building's water use, you may think about water consumption solely as what comes out of your faucet and what goes down the drain. This is, after all, easily measured by water meters and can be seen on water bills. These points of consumption are only part of the picture when it comes to Resilient Design.

Resilient Design in Water Infrastructure considers the water supply and its impact on buildings and people. Reducing your building's water consumption is a great place to start when it comes to Resilient Design, as this approach can also meet the needs of Sustainable Design goals and reduce a building's operating costs.

OUR EXPERIENCE

The first step in identifying water reduction strategies is to perform a water audit. DGH Engineering's David Dy (P.Eng) has conducted a number of water audits for DGH's clients across Canada. Water audits have a number of benefits for businesses and property owners. Water audits are used to calculate the amount of water a building is using and to identify strategies for reducing water consumption, with the goal of decreasing water consumption, reducing costs related to water use, and contributing to sustainable design and business goals. Water audits can provide recommendations that can result in significant reductions in water use. For example, David Dy notes that the water audit of DGH's own offices in St. Andrews, Manitoba "estimated that by implementing the recommendations [of the water audit] DGH's water consumption could be reduced by approximately 71.2 cubic meters annually, or 30%".

Did You Know?

by implementing the recommendations of a water audit, a building's water consumption could be reduced by approximately 71.2 cubic meters annually, or 30%

DGH's experience goes beyond designing for water reduction strategies. We also have experience with systems to mitigate the impact of wastewater on the local communities: In response to local concerns with the potential impact of land use activities on water quality in the Red River/Lake Winnipeg watershed, DGH Engineering has installed a wastewater treatment system to minimize the impacts of its septic field. Using these strategies, DGH has been able reduce its use of the community-shared aquifer from which it draws its water and mitigate the impact of its waste water on the community.

While these strategies may not be applicable to your building project, we hope they get you thinking about strategies that might be. DGH's team of engineers and designers has the expertise to help you find solutions to make your building project more resilient. Reducing water consumption is a great place to start, because it also has the potential to reduce costs related to water and wastewater infrastructure.

To **find out more** about water audits or other ways you can future-proof your building projects, contact us at info@dghengineering.com. Make sure to follow us on LinkedIn and Instagram for more details on how DGH is working to create climate resiliency.

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