|  |
| --- |
| ***Instructions to complete the template for your Water Assessment***  *All grey italic text with borders are instructions to help you prepare the required BEST Practice for your building.*   1. *Replace all* [blue text in brackets] *in the document with building specific information.* 2. *Where required, complete the necessary tasks, or engage a third-party consultant to complete the tasks so that you are able to fill the relevant sections of the template with building specific information.* 3. *Delete all grey italic text when you have filled all relevant sections with building specific information.* 4. *Additional Resources[[1]](#footnote-2) can be found here:*  * [*Example Water Audit Report*](https://www.toronto.ca/wp-content/uploads/2018/07/9857-917c-sample-water-efficiency_report-revised-july-23-2018.pdf)  * *[Water Audit Guidance for Commercial Buildings](https://www.cityenergyproject.org/wp-content/uploads/2019/05/City_Energy_Project_Resource_Library_Water_Audit_Guidance_For_Commercial_Buildings.pdf) (City Energy Project)*  1. *Complete the Checklist below to confirm your Water Assessment meets the BEST Practice requirements.* |

|  |
| --- |
| ***Checklist***  *The Water Assessment Report must contain the following elements:*  *Analysis of water consumption through monthly utility bill analysis and benchmarking (utility bills must cover a minimum of 12 months of continuous data)*  *Assessment and list of current performance of water-using equipment*  *Prioritized list of proposed water conserving measures (WCMs) to enable greater water efficiency*  *Provision of estimates of financial savings the building owner will realize as a result of investing in WCMs and the simple payback period*  *A Water Assessment must have been conducted on the building in the last five (5) years* |

**WATER ASSESSMENT**

[Insert Building Name and / or Address]

[Insert Name of Organization]

[Insert Building Description – number of floors, tenants, parking spaces (underground or surface) and other distinguishing features]

[Specify which floor area is being used, e.g. gross floor area, net floor area, gross leasable area, etc.]

[Insert date of Water Assessment]

# Executive Summary

[Insert Key Findings]

Refer to the attached **Appendix A** for Water Assessment completed by [Insert Name and Organization of person who completed the Water Assessment].

*Summarize the key findings or pertinent points from the Water Assessment, such as the total amount of water consumed by the building per year and the estimated water that may be reduced if all water conservation measures identified were implemented (with estimated implementation / savings costs).*

# Water-use Analysis

[Briefly outline the 12-month consumption data, the building’s water use intensity and how your building’s performance compares to other similar buildings.]

|  |
| --- |
| *Request your third-party consultant or “in-house” technical staff to:*   * *Review water bills including cost and consumption history (utility bills must cover a minimum of 12 months of continuous data) and gain insight on how the major building operating systems and equipment use water* * *Calculate the building’s water use intensity or WUI (i.e., annual water use divided by building area) to obtain a building performance index such as m3/m2/yr for each energy source* * *Compare your building’s WUI to* [*similar buildings*](https://cdn.ymaws.com/www.realpac.ca/resource/resmgr/industry_sustainability_-_water_benchmarking/rp_water_report_05_hr_final.pdf)*[[2]](#footnote-3)*. |

# Water-using equipment inventory

[Insert inventory of major water-using equipment and systems in the building.]

|  |
| --- |
| *Prepare an inventory of water-using equipment in your building and assess if there is opportunity for water conservation, such as*   * *Domestic water fixtures (faucets, toilets, urinals)* * *Water using appliances (dishwasher, washing machine etc.)* * *Cooling equipment including cooling towers, equipment “once-through” cooling and customized tenant cooling equipment* * *Landscape irrigation equipment* * *Humidification equipment* * *Heating equipment (boiler blowdown, steam production and condensate management)* * *Any other specialized equipment (including production use and process loads)]*   *Describe the water sources that serve these pieces of equipment. Assess if there is opportunity for energy conservation.* |

# Recommended Water Conservation Measures (WCMs):

Refer to the attached **Appendix B** that shows the WCMs identified and basic estimates of financial savings the building owner may realize because of investing in WCMs.

# Conclusion

[Insert recommended next steps and closing statements. Sign and date document.]

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[Insert name and signature of person responsible for conducting the Water Assessment]

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[Insert Date the Water Assessment was completed]

Appendix A: Water Assessment

*Attach the most recent Water Assessment completed by the third-party consultant or “in-house” technical staff of the building. This assessment is valid for five (5) years.*

Appendix B: Water Conservation Measures and Financial Savings Estimate

*Insert a prioritized list of the retrofit and operation and maintenance water conservation measures (WCMs) identified. Explore the possibility of installing sub-meters for large water-using tenants.*

*Refer to* [*Example Water Audit Report*](https://www.toronto.ca/wp-content/uploads/2018/07/9857-917c-sample-water-efficiency_report-revised-july-23-2018.pdf) *and City Energy Project’s* [*Water Audit Guidance for Commercial Buildings*](https://www.cityenergyproject.org/wp-content/uploads/2019/05/City_Energy_Project_Resource_Library_Water_Audit_Guidance_For_Commercial_Buildings.pdf) *for further guidance on identifying WCMs and populate the table below.*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Potential Water Conservation Measure** | **Estimated Implementation Cost ($)** | **Estimated Incentive Amount** (if applicable) **($)** | **Estimated Net Capital Cost ($)** | **Estimated Annual Water Use Savings** (m3/m2/yr) | **Estimated Annual Cost Savings ($)** | **Estimated Payback Period (Years)** | **Notes** |
| *Example: Replace existing toilets with 6LPF models* | *Est. $300 per unit excl. installation* | *n/a* | *$137,700* | *7,269* | *15,266* | *9.0* |  |
| [Add for your building] | [Add] | [Add] | [Add] | [Add] | [Add] | [Add] | [Add] |
| [Add for your building] | [Add] | [Add] | [Add] | [Add] | [Add] | [Add] | [Add] |

1. *The additional resources presented above are suggestions and not intended as an endorsement by BOMA Canada of any method, process or specific product* [↑](#footnote-ref-2)
2. According to BOMA Canada’s [2020 National Green Building Report](http://bomacanada.ca/wp-content/uploads/2019/11/2020_BOMA_NGBR_English_191114.pdf), BOMA BEST office buildings averaged 0.67 m3/m2/yr water use intensity in 2019. [↑](#footnote-ref-3)