**W1.0a Walkthrough Water Assessment Template**

**Baseline Practice**: W1.0a – Walkthrough Water Assessment

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| ***Instructions:****All grey italic text with borders are instructions to help you prepare the required Baseline 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. *Complete the Checklist below to confirm your Water Management Plan meets the Baseline Practice requirements.*
5. *The intent of this Baseline Practice is to Develop a Water Management Plan that will act as foundation for water reduction. For additional guidance, refer to the* [*BOMA BEST 4.0 Field Guide*](https://bomabestfieldguide.org/field-guide-for-sustainable-buildings/w1-0a-walkthrough-water-assessment/)*,* [*Water Audit Guidance for Commercial Buildings*](https://www.cityenergyproject.org/resources/water-audit-guidance-for-commercial-buildings/)*, and the City of Toronto’s* [*Example Commercial and Institutional Water Efficiency Assessment Report*](https://www.toronto.ca/wp-content/uploads/2018/07/9857-917c-sample-water-efficiency_report-revised-july-23-2018.pdf).[[1]](#footnote-2)1

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| ***Checklist:***[ ]  *Check Baseline Practice applicability:** *Project must fall under the asset class Office and Healthcare*

☐ *A Water Assessment must have been conducted on the building in the last five (5) years*[ ]  *Assessment and list of current performance of water-using equipment** *Any water systems managed by a tenant, do not require a water assessment. However, these systems must be included in water system descriptions.*

[ ]  *The Water Assessment Report must contain the following elements:** *Building and system description and review of current performance of water-using equipment (including tenant-controlled water systems)*
* *Analyze minimum 12 months of water utility history for each water source.*
* *Low- and no-cost water conservation measures, with high level costing, simple payback, and anticipated savings. If no saving measures are identified, state why.*
* *Prioritized list of proposed water conserving measures (WCMs) to enable greater water efficiency.*

**OPTION 1: Complete the Water Assessment In-House:*** *Follow the instructions in the Water Assessment Template Below.*
* *Populate the Water Conservation Measure (WCM) Table in Appendix A with a prioritized list of WCMs.*

**OPTION 2: Third-Party Water Assessment:*** *If the Water Assessment Report provided by the third-party meets the requirements stated above, the Water Assessment report can be submitted to BOMA BEST Hub as documentation.*
* *If the Water Assessment Report provided by the third-party does NOT meet the requirements stated above, complete the template below and attach the Water Assessment Report in Appendix A.*
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**Water Assessment Report**

*Helpful Tip!*

*If this is a recertification project, project teams can use the previous Water Assessment completed for BOMA BEST 3.0 Best Practice 5 if it is no older than 5 years at the time of final submission.*

[Insert Building Name and / or Address]

[Insert Name of Organization]

[Insert date Plan was created / most recent date it was reviewed]

# Executive Summary

[Insert a Building Description, Summary of Building Water Systems and Summary of Key Findings from the most recent Water Assessment]

*Include the following in the Executive Summary:*

* *Building Description – number of floors, tenants (if any), parking spaces (underground or surface) and other distinguishing features.*
* *Clearly distinguish which systems are owned vs. managed vs. maintained by the owner, landlord, or tenant.*
* *Summarize key findings from the Water Assessment Report such as the total amount of water consumed by the building per year.*
* *Estimated water that could be reduced if all water conservation measures (WCMs) identified in the Water Assessment Report were implemented.*

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

# 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 water conservation.*

# Water-use Analysis

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

*The following should be completed by “in-house” technical staff or a third-party consultant:*

* *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. The 12-month span must be within 36 months of the final submission date.*
* *Calculate the building’s water use intensity (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.*
* *Identify the largest water end-uses. Consider opportunities for sub-metering significant loads.*

*Helpful Tip! EnergyStar Portfolio Manager can be used to produce water analysis data. By uploading water utility bills to the platform WUI will be automatically generated.*

# Recommended Water Conservation Measures (WCMs):

*If no WCMs are identified in the provide a narrative, stating why.*

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.]

*Include signature of the team member responsible for overseeing the implementation of Water Conservation Measures. Examples include the Property Manager, Building owner, or Building Operator.*

Signature of [Property Manager] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: 01-Jan-2024

Appendix A: Water Assessment

*Attach the most recent Water Assessment. Note! The water assessment must be dated within 5 years of final submission date.*

Appendix B: Water Conservation Measures and Financial Savings Estimate*.*

*Populate the table below with a prioritized list of Water Conservation Measures (WCMs) identified in the most recent Water Assessment. Explore the possibility of installing sub-meters for large water-using tenants.*

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| **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** |
| *Ex. Replace existing toilets with 6LPF models* | *Est. $300 per unit excl. installation* | *N/A* | *$137,700* | *7,269* | *15,266* | *9.0* | *[Add]* |
| [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)