**Water Assessment Report Template**

**Baseline Practice**: W1.0b – Water Assessment

**Applicable Asset Classes**: ESC, Universal, LI, OAR, and MURB

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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 Assessment Plan meets the Baseline Practice requirements.*
5. *The intent of this Baseline Practice is to Develop a Water Assessment Plan that will act as foundation for water reduction. For additional guidance, refer to the* [*BOMA BEST 4.0 Field Guide*](https://bomabestfieldguide.kinsta.cloud/field-guide-for-sustainable-buildings/w1-0b-water-assessment/?seq_no=2)*,* [*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 ESC, Universal, Light Industrial, OAR, or MURB*

[ ]  *Complete* [*BOMA BEST Form W1.0b*](https://bomabestfieldguide.org/wp-content/uploads/2023/10/Form-w1.0b-6.pdf)*. A copy of this form can be found in the Field Guide and in Appendix A of this document*. [ ]  *Determine which systems require a water assessment.* * *Any water systems managed by the tenant, do not require a water assessment. However, these systems must be included in water system descriptions.*

[ ]  *Complete a Limited Scope Water Assessment as described in Form W1.0b:**The Water Assessment Report must contain the following elements:** *Building and system description and review (including tenant-controlled water systems)*
* *Analyze minimum 12 months of water utility history for each water source.*
* *A summary of key findings from the most recent Water Assessment controlled by the owner or landlord.*
* *Low- and no-cost water conservation measures, with high level costing, simple payback, and anticipated savings. If no saving measures are identified, state why.*

**OPTION 1: Complete the Water Assessment In-House:*** *Follow the instructions in the Water Assessment Template Below.*
* *Attach a complete Form W1.0b in Appendix A*
* *Populate the Water Conservation Measure (WCM) Table in Appendix B 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 template below is not required to be completed. The Water Assessment report can be submitted along with Form W1.0b 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 B.*
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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, 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 B** 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 C** 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: Form W1.0b

Appendix B: Water Assessment

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

Appendix C: 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 4.2LPF 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)