

FREE CHECKLIST

Smart Water Management Checklist for Commercial Buildings

35 checks across seven systems — metering, leaks, fixtures, cooling towers, irrigation, alternative sources and reporting — with a scoring sheet to rank what to fix first.

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Why water deserves the same discipline as energy

Water and sewer rates in most US cities have risen faster than electricity for a decade, and a single running fixture or a poorly controlled cooling tower can quietly cost more than a lighting retrofit saves. Unlike energy, water waste is often invisible: it leaves through a drain. This checklist gives facility teams a repeatable way to find it.

How to score. Work through all seven sections. Count each ticked check as 1 point (35 possible). Then use the scoring sheet at the end to see which section is weakest — that is where the first project goes. Sections 1 and 2 are prerequisites: you cannot manage what you do not meter.

1. Know your water

Check	Owner / date
☐ Twelve months of water and sewer bills pulled and tabulated by month	
☐ Water cost per square foot calculated and compared to peers of the same building type	
☐ Every meter and sub-meter located and mapped to the area or system it serves	
☐ Night-time (2–4 am) flow read from the main meter — any steady flow is a leak or a process load to explain	
☐ Largest end uses ranked: cooling towers, restrooms, irrigation, kitchens, process, laundry	

2. Leak detection and metering

Check	Owner / date
☐ Smart sub-meters on cooling tower make-up, irrigation, kitchens and any tenant with wet process	
☐ Continuous flow monitoring with alerts on abnormal night flow or sustained high flow	
☐ Acoustic or pressure-based leak detection on long supply runs and buried lines	
☐ Automatic shutoff valves on mechanical rooms, laundries and vacant floors	
☐ Monthly meter reconciliation: sum of sub-meters versus main meter, variance under 5%	

3. Fixtures and plumbing

Check	Owner / date
☐ All toilets, urinals, faucets and showers inventoried with flow or flush rate	
☐ WaterSense-labeled or equivalent replacements specified for anything above 1.28 gpf / 0.5 gpm lavatory	
☐ Flush valves and aerators inspected annually; flappers and diaphragms on a replacement schedule	
☐ Hot-water recirculation controlled by demand or schedule so water is not run to waste waiting for heat	
☐ Pressure-reducing valves set so supply pressure is not above what fixtures need	

4. Cooling towers and mechanical

Check	Owner / date
☐ Cycles of concentration measured and maximized within water-chemistry limits	
☐ Conductivity-controlled blowdown instead of timer-based blowdown	
☐ Make-up and blowdown both metered so the tower's true consumption is known	
☐ Drift eliminators inspected and overflow drains checked	
☐ Alternative make-up sources evaluated: condensate recovery from air handlers, rainwater, treated greywater	

5. Irrigation and landscape

Check	Owner / date
☐ Weather-based or soil-moisture smart controller replacing fixed schedules	
☐ Drip or micro-spray for planting beds; rotary nozzles for turf	
☐ Rain and freeze sensors installed and tested	
☐ Turf area reduced or converted to native, drought-tolerant planting where use allows	
☐ Irrigation on its own meter so it is never confused with building leaks	

6. Alternative water sources

Check	Owner / date
☐ Rainwater harvesting feasibility: roof area, storage volume, and the loads it could serve	
☐ Air-handler condensate captured for cooling tower make-up or irrigation	
☐ Greywater reuse assessed for toilet flushing where plumbing separation is possible	
☐ Stormwater fees checked — on-site retention often earns credits that improve payback	
☐ Local code and health-department rules confirmed for each reuse pathway before design	

7. Monitoring, reporting and people

Check	Owner / date
☐ A water dashboard or monthly report reviewed by someone with authority to act	
☐ Water intensity tracked as a KPI alongside energy	
☐ Occupant reporting channel for running toilets, drips and wet spots	
☐ Water use included in ESG, LEED, or benchmarking submissions where applicable	
☐ Annual review of this checklist with actions and owners assigned	

Scoring sheet

Section	Checks ticked (of 5)	Priority if under 3
1. Know your water		Immediate — baseline before anything else
2. Leak detection and metering		Immediate — highest hidden-loss risk
3. Fixtures and plumbing		High — fastest payback measures
4. Cooling towers and mechanical		High — usually the largest single end use
5. Irrigation and landscape		Medium — seasonal, easy controller wins
6. Alternative water sources		Strategic — capital projects
7. Monitoring, reporting and people		Medium — locks in the gains
Total	/ 35	

Score band	What it means
28–35	Mature program. Focus on alternative sources and reporting integration.
18–27	Good foundation with gaps. Close metering and cooling-tower items first.
9–17	Reactive. Start with a night-flow test and a fixture inventory this month.
0–8	Unmanaged. Expect double-digit savings from the first pass.

The 30-day starter plan

Week 1: pull 12 months of bills, read the main meter at night, walk every restroom. **Week 2:** fix everything the walk found; set cooling tower blowdown to conductivity control. **Week 3:** quote smart sub-meters for the top three end uses and a smart irrigation controller. **Week 4:** assign an owner, set the monthly report, re-score this checklist.

Want a standing partner on water, energy and carbon?

Our Sustainability Strategy Retainer gives your building an ongoing advisor: monthly water and energy review, measure selection, incentive tracking and reporting support for LEED and ESG. Learn more at synnergyscape.com/sustainability-strategy-retainer

This guide is general educational information for building owners, developers and facility managers. Cost, savings and payback figures are order-of-magnitude planning ranges that vary by region, building condition, utility rates and incentives. They are not quotes and not engineering advice. Confirm every measure with a licensed engineer and your local code before design or purchase.