

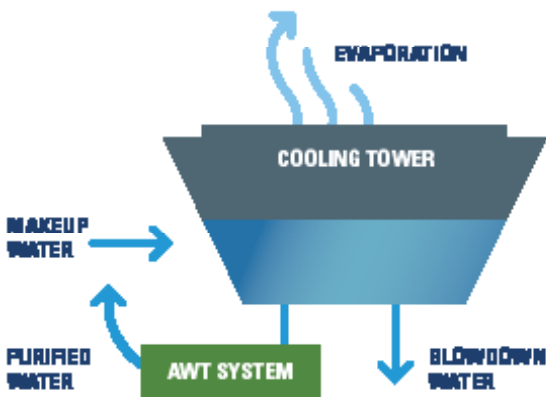
# ALTERNATIVE WATER TREATMENT FOR COOLING TOWERS

Guidance for GSA to select, operate, and maintain AWT systems

Water is the fastest growing utility cost

**40% INCREASE IN WATER RATES**  
in the past 10 years for GSA<sup>1</sup>

AWT systems purify water in order to reuse it



On average, cooling towers use 28% of water in commercial office buildings;<sup>2</sup> traditional treatment flushes (blowdown) up to half of that water to control mineral deposits

GPG evaluated seven AWT technologies

Six of the technologies proved successful and met GSA cooling tower water standards

**15% - 32% MAKEUP WATER SAVINGS**

52%–99% blowdown reduction<sup>3</sup>

**2-4 YEAR PAYBACK**

@ \$18.41/kgal<sup>4</sup>

**O&M PLANNING**

is critical. Most AWT systems are proprietary and require changes to standard O&M practices and contracts<sup>5</sup>

## MAINTAINING AWT SYSTEMS



Ensure local O&M teams are part of the decision making and receive adequate training on new systems



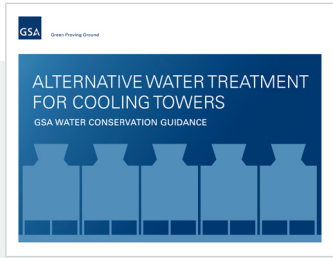
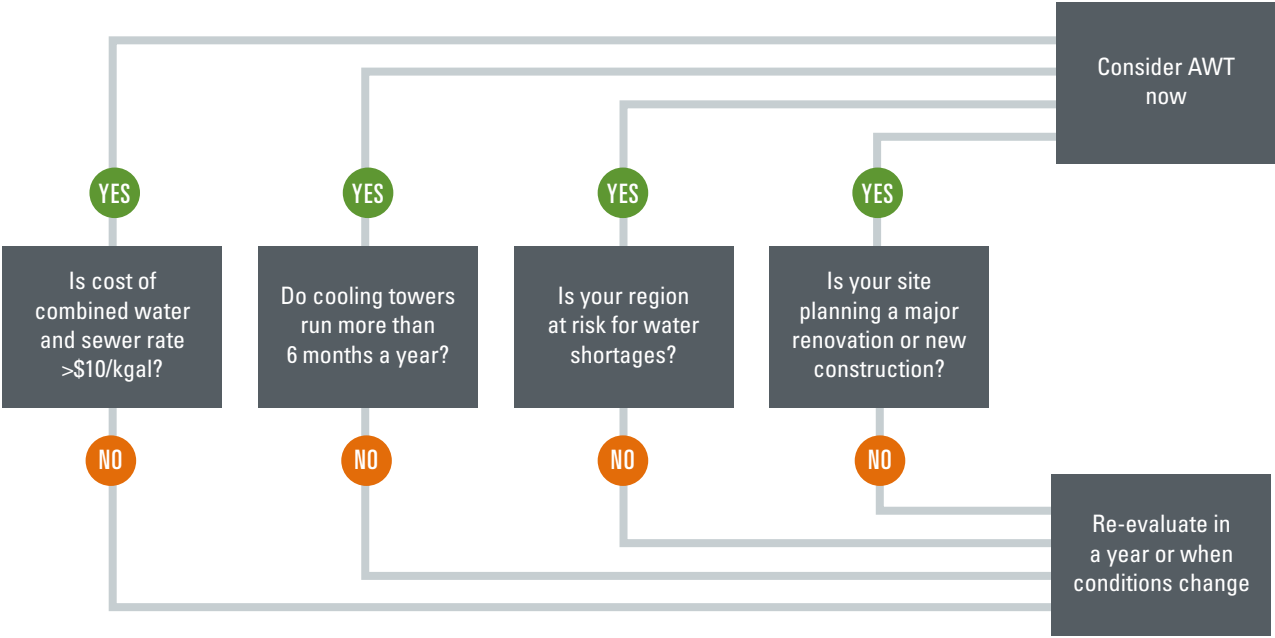
Add equipment to your computerized maintenance management system and transfer O&M requirements when contracts change



Include maintenance in energy savings performance contracts or have the vendor or an authorized 3rd party maintain the system

## WHEN TO CONSIDER AN AWT SYSTEM

If you answer yes to any question below, consider an AWT system now. If you answer no, reevaluate in a year or when conditions change.



**DOWNLOAD THE 40-PAGE GUIDE** [↓](#)

<sup>1</sup>Alternative Water Treatment for Cooling Towers, GSA Water Conservation Guidance, U.S. General Services Administration, July 2024, p. 5 <sup>2</sup>Ibid. <sup>3</sup>Ibid., 4. <sup>4</sup>Ibid. <sup>5</sup>Ibid., Appendix A: 24.



The Center for Emerging Building Technologies enables GSA to make sound investment decisions in next-generation building technologies based on their real-world performance.