Ice Machine Conservation

Air Cooled

40%-60% Water efficiency (Source Alliance for Water efficiency)

Savings potential 120-125 gallons/100 lbs ice http://infohouse.p2ric.org/ref/04/03103.pdf

Found that a 3 star hotel in the Nashville area uses about 1% of its water in ice machines
http://hotelexecutive.com/business_review/3282/water-benchmarking-is-it-important-to-your-hotel

Generally the same price as water cooled units. But both very expensive. Probably a hard sell to change out existing device based on water efficiency. Probably an easier sell to get to purchase air cooled unit up front.

More savings can be had by shopping for an efficient unit
Energy Star uses save 25% water
https://www.energystar.gov/products/commercial_food_service_equipment/commercial_ice_makers

Using energy star rated can save 2,500 – 10,000 gallons / year

Water cooled Ice Maker

Usually less than 15% Water efficiency (Source Alliance for Water efficiency)

Usually more energy efficient (Source Alliance for Water efficiency) The energy savings does not exceed the water savings https://www.icemachinesplus.com/blog/post/water-cooled-ice-machines-are-they-a-good-fit-for-you

Typically use 10x the water of an air cooled unit http://water.monroenc.org/wp-content/uploads/Water-efficency-for-industrial-commercial-and-institutional-customers.pdf

Works best at higher temperatures and are much quieter

Water cooled ice machines can't be approved by energy star

Water cooled air compressor

Uses about .1 gpm / hp and about .009 gpm / cfm Water savings can be substantial but it is becoming the exception today to see a compressed air system's cooling-water supply coming from the municipal utility.
http://www.airbestpractices.com/technology/air-compressors/calculating-water-costs-water-cooled-air-compressors-part-1

Smaller horsepower rotary screw compressors (40 hp and below) are not typically available water-cooled. https://kaesertalksshop.com/2016/09/26/choosing-between-an-air-cooled-or-water-cooled-compressor/

Water-cooled compressors require cooling water, obvious right? Water quality is also an issue. The better the water quality, the longer the lifetime of the compressor heat exchangers. Therefore you typically see closed loop cooling systems that control water quality rather than city water. When you factor in those costs, an air-cooled compressor is more cost-effective from an energy savings perspective.
https://kaesertalksshop.com/2016/09/26/choosing-between-an-air-cooled-or-water-cooled-compressor/

Water cooled Vacuum pumps

This seems to be significant especially in hospitals and dental facilities. Quantifying it seems to be difficult

dry vacuum pumps have significantly higher capital costs. An effective financial incentive would likely require a larger rebate than is commonly offered by water agencies in California.
https://cuwcc.org/Portals/0/Dry%20Vacuum%20PBMP%20Assessment.pdf.pdf

Vacuum pump technology is commonly used in medical facilities. But we were unable to find published information indicating the saturation of liquid ring and other types of vacuum pumps in medical facilities.
One vacuum pump supplier commented that oil sealed screw vacuum pumps are common in medical facilities. https://cuwcc.org/Portals/0/Dry%20Vacuum%20PBMP%20Assessment.pdf.pdf

X-ray Equipment

There appears to be some value here. However, water cooled x-ray machines used to be more common but they are being replaced by digital x-ray machines that do not need water. Savings and costs seem to be hard to find. It seems like water saver kits are available.

SWFWMD http://www.swfwmd.state.fl.us/conservation/waterwork/checklist-hospital.html Does not mention x-ray or vacuum pumps in a write up for hospitals

Car Wash Equipment

Car washes recycling water can result in significant savings. In a conveyor style wash savings can be about 20%. Estimated cost is approximately $35,000 estimated annual savings on water and sewer $7,260.
http://www.allianceforwaterefficiency.org/uploadedFiles/Resource_Center/Library/non_residential/EBMUD/EBMUD_WaterSmart_Guide_Vehicle_Washes_Technology.pdf

Tankless Water Heaters

Study Finds Tankless Water Heaters Save Energy But Not Water

http://www.allianceforwaterefficiency.org/1Column.aspx?id=5632&LangType=1033&terms=tankless+water+heater#g_tankless

Flapperless toilets - eliminates leaking flapper valves

The unrivaled savings of the Stealth can translate to annual water savings of 20,000 gallons per household.

http://www.allianceforwaterefficiency.org/1Column.aspx?id=4630&LangType=1033&terms=flapperless+toilets

Steam Boiler Efficiency

I searched and found little about water savings

High Efficiency Steam Cookers

An Energy Star Qualified Steam Cooker uses an average of about 4 gallons per hour
Standard models typically use about 40 gallons per hour

https://www.epa.gov/sites/production/files/2017-01/documents/ws-commercial-casestudy-certified-restaurants.pdf

Combination Oven

Typically uses 30-40 GPH

Connectionless uses (has its own self-contained water reservoir and heat source)(typically <15 GPH)

https://www.epa.gov/sites/production/files/2017-01/documents/ws-commercial-webinar-slides-kitchens.pdf

Toilet fill cycle diverters

The **Fill Master™ Fill Cycle Diverter** is a water saving product for the toilet tank that saves 1/2 to 1-1/2 gallons of water per flush.

http://www.amconservationgroup.com/products/water-conservation-products/the-fill-master-fill-cycle-diverter/

This ingenious little device pays for itself in just a few days.

Long Life Toilet Flappers

Can't find saving info but looks to reduce leakage due to flapper failure. So savings would be related to prevented leaks.

Dual Flush Toilets

In Canada Flush volumes were reduced by 68 per cent in single-family dwellings, 56 per cent in office washrooms, and 52 per cent in the participating restaurant.

https://www.cmhc-schl.gc.ca/publications/en/rh-pr/tech/02-124-e.html

Waterless Urinals

They save all of the water used. Estimates for a commercial building range from 20,000 gallons to 45,000 gallons per year per urinal. In a household estimated savings is 3,250 gallons/ year.

http://home.howstuffworks.com/how-much-water-waterless-urinals-have1.htm

HVAC Cooling Tower Efficiency Improvements

This is highly dependent upon the existing operating efficiency of the Cooling Tower.

It seems to be hard to estimate or generalize. However, there is significant potential to save water here.

Increasing the cycles of concentration from 3 to 10 can save 20% of the water used.

http://www.chemaqua.com/downloads/cases/AFE_Reducing_Water_Costs_in_Bldg_HVAC.pdf

Florida-Friendly landscaping practices

It seems to be difficult to find anything here because of the many components to Florida-Friendly Landscaping practices. However, the City of North port estimated a savings of 26,600 gallons annually per residential home.

http://cityofnorthport.com/home/showdocument?id=6516

Garbage Disposal Efficient Usage

I can't seem to find much here but based on estimated water usage of 1 Gallon per capita per day there is not much to be saved here

http://www.nyc.gov/html/dep/pdf/grinders.pdf

Metered flow Faucet Installation

Metering or self-closing faucet. The benefit here depends on the flow rate of the faucet. Going to self-closing faucets in the wrong flow range actually causes use to go up. It seems that .5 gpm or less is the key. A study showed that changing to .5 gpm sel-closing faucets saved 58%.

http://www.allianceforwaterefficiency.org/Faucet_Fixtures_Introduction.aspx