

Efficient water use in cleaning

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Contractor Success

Facility service providers can benefit from using less water.

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The U.S. National Weather Service maintains a Climate Prediction Center on its website which provides current and predicted trends in climate conditions throughout the country.

One of the most useful — if not most revealing — ways it presents its forecasts is with interactive maps of the U.S.

One of the first things a visitor notices when viewing the U.S. Drought Monitor map is that about a third of the country, covering most of the states from Montana south to Arizona and west to California as well as many surrounding states, is painted a dark or light brown color.

This means that drought conditions exist in these areas and although improvement is indicated in some localities, for the most part, drought conditions are likely to persist throughout these areas of the country for the foreseeable future.

To complicate matters, not only are many areas of the country experiencing tight water conditions, the demand for water in the U.S. has nearly tripled in the years between 1950 and 1995.

Although the rate of growth has slowed somewhat since the mid-1990s, it continues to increase.

This means that all of us, including this industry, are going to need to become much more water-conscious, making sure we use water more efficiently.

In fact, some experts believe that wise water usage should be recognized as a major component of green cleaning and that this is likely to be addressed much more in the future.

Fortunately, there are things facility service providers (FSPs) can do right now to help conserve this natural resource and, in the process, possibly help improve cleaning effectiveness and productivity, while being more environmentally sensitive and promoting sustainability at the same time.

And, these measures can be incorporated into every major component of cleaning, including general cleaning as well as carpet care and floor care.

General cleaning

One of the last major water shortages to hit the U.S. occurred in the late 1970s in California.

Because of extremely dry weather conditions and possibly poor planning, residences, which use approximately 60 percent of the state's water, were restricted to less than 40 gallons of water per

person per day — the average person normally uses 75 to 100 gallons of water per day — and some businesses had to scale back water usage even more.

At that time, it was very common to clean restaurant kitchen floors, warehouse floors and outdoor areas, such as sidewalks, parking lots and walkways, by simply hosing them down using hundreds of gallons of water per washing.

With the water restrictions, however, this practice ended virtually overnight and, in some areas of California, FSPs have never resumed their old water-wasting ways.

And, in many situations, new opportunities for cleaning professionals emerged as a result of the drought.

Instead of hosing down kitchen floors, for example, buckets were filled with rinse water to wash away cleaning solution and debris.

This way, FSPs could better regulate how much water was used and use it more efficiently.

Floor machines and autoscrubbers, which use water more resourcefully, were brought in to clean warehouse floors and outdoor areas.

And, the parking lot vacuuming industry got a big boost as washing away debris with water was replaced by vacuuming with portable and truck-mounted industrial vacuum cleaners.

Carpet care

Whether using a traditional or low-moisture carpet extractor, many of the extractors available today use water much more efficiently than extractors made five or more years ago.

One reason for this is the much more powerful, multistage vacuum motors now used in these machines.

In addition, some walk-behind units are brush-assisted.

These systems lay solution on the carpet as they agitate carpet fibers to loosen dirt and soil for easier removal.

This makes the machine more effective, while requiring less water for cleaning.

Some more advanced extractors have on-board heating units that heat the cleaning solution to 212 degrees Fahrenheit.

This improves the effectiveness of the cleaning chemicals, which means less solution — and thus less water — is necessary in the cleaning process.

Additionally, some extractors have variable psi, which can help FSPs regulate how much water is used in the cleaning process.

Floor machines

Some of the latest automaticscrubbing floor machines use water more efficiently and leave little or no water when maneuvering around corners and doorways.

Additionally, some scrubbers are now designed to use less water and detergent.

These features not only lower water usage, but also help improve cleaning productivity.

However, auto scrubbers are designed only for large floor cleaning jobs.

For most jobs, smaller floor machines will be required.

A significant water-reducing floor care technology that has been introduced to the U.S. market is cylindrical floor machines.

Instead of a central rotating pad, these machines have counter-rotating brushes on each end, of the machine, which rotate at 1,000 to 1,500 rpm.

Because the brushes can penetrate porous floor surfaces more efficiently and have greater contact pressure on the floor, they tend to use less water and chemical in the cleaning process.

Additionally, rotary machines tend to “spray” water on to nearby surfaces as they operate, which can be wasteful.

This is not the case with cylindrical machines, so water is never wasted.

Become a partner

Another way to reduce water usage is often overlooked.

FSPs should make sure the facilities they clean have high-performance matting systems at all major entries.

These systems help reduce the amount of soil entering a facility — the less soil, the less cleaning necessary and the less water used.

Also, FSPs often know their customers’ facilities, especially the mechanicals of those facilities, better than the customers.

They should always be on the lookout for water leaks and drips.

In addition, and especially in areas where drought conditions exist, FSPs should educate their customers on how they can reduce water usage in their facilities by installing low-flow toilets and urinals as well as no-water urinals.

Not only will this help save a significant amount of water, but this elevates the cleaning contractor from vendor to partner in their customers’ facilities and business operations.

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