

Making Every Drop Count: The Employee's Role in Water Conservation

VIDEO SCRIPT

Water....It touches our lives every day - from recreation to cooking, bathing, cleaning and watering our lawns and landscapes. Clean water is an essential part of daily living.

COMMERCIAL BUILDING UNDER CONSTRUCTION. Yet competition for water is increasing nationwide. Growth and development in and around urban areas bring new jobs and new people. For example, today two-thirds of Georgia's population live in urban areas. Over half of the state's population lives in just 13 of Georgia's 159 counties.

LAKE LANIER. A large percentage of municipal water comes from rivers and reservoirs like this one. Unfortunately these surface water supplies do not automatically increase with population growth; they depend on seasonal rainfall to maintain their capacity. Building new reservoirs is limited by environmental regulations, lengthy permitting requirements and the availability of suitable land. That means, if the landscape industry is to continue to grow, we must conserve clean water and use every drop wisely.

WATER BEING APPLIED OVERHEAD IN A CONTAINER NURSERY. Like many other agricultural industries, the horticulture industry depends on water for its livelihood. A single shrub may require over 100 gallons of water from the time it is a cutting until it is planted in the landscape.

HOLDING POND AT NURSERY. Nursery and greenhouse producers often conserve water by collecting it in holding ponds and recycling it back onto plants.

LANDSCAPER HAND-WATERING NEWLY PLANTED SHRUBS OR ANNUALS. In contrast, most commercial and residential landscapes in Georgia are irrigated from municipal water supplies. As a result, periodic droughts and restrictions on outdoor water use can negatively impact not only landscape quality but also the reputation of your firm. Therefore, it is extremely important for your client and the general public to recognize you and your firm as good stewards of the environment, using water wisely at all times.

INTRODUCTION TO THREE TYPES OF OPERATING IRRIGATION SPRINKLER SYSTEMS. On a job site you may encounter more than one type of irrigation system. The most common type is an overhead sprinkler on a turf area.

MICRO-SPRAY OPERATING. Micro-spray saves water by targeting irrigation to small areas. This irrigation method is frequently used on annual and perennial flower beds and groundcover areas.

DRIP TUBING. Drip irrigation directs water to the roots and away from the foliage. Drip irrigation is frequently used in shrub and tree areas. It minimizes evaporation and drift and is the most efficient method of applying water.

SPRINKLER SYSTEM RUNNING/SPLIT SCREEN SHOWING FIXED AND ROTARY. Municipal water systems vary greatly in water pressure. Proper operating pressure results in an even application of water.

SPRINKLER OPERATING UNDER HIGH PRESSURE/SPLIT SCREEN OF TWO SYSTEMS.

Irrigation systems operating under abnormally high water pressures waste a great deal of water. If the irrigation system appears to be applying water as a mist or fog instead of droplets, ask your supervisor to check the system pressure.

SPRINKLER HEAD GURGLING AND NOT SPRAYING. On the other hand, low pressure results in a poorly operating system and wasted water.

WORKER FLAGGING BROKEN IRRIGATION HEAD. You may not be responsible for maintaining irrigation equipment on the job site, but it is your responsibility to report to your supervisor any noticeable malfunctions of an irrigation system. Marking a broken irrigation head alerts others in your firm that there is a problem and indicates to your client that you are taking care of it.

CLOSE-UP OF PRESSURE REGULATOR. A pressure regulator is an important component of sprinkler systems where excessive pressure is a problem. It prevents fluctuations in water pressure and damage to the sprinkler system components. It also assures a more uniform and efficient application of water.

CLOSE-UP OF BACK-FLOW PREVENTER. Another essential component of all irrigation systems operating from municipal water supplies is a back-flow preventer. This device prevents water in the irrigation lines from moving back into the main water supply when the irrigation system is turned off. This avoids possible contamination from chemicals and other residue that may find their way into the irrigation lines. Back-flow preventers are required by federal law for irrigation systems supplied by municipal water.

RAIN GAUGES ON TURF AREA AND SPRINKLER RUNNING. Rain gauges are useful not only for measuring rainfall amounts but also for determining the output and uniformity of sprinkler systems. Placing several rain gauges on a turf area and running the sprinkler system for a set period of time will determine how evenly water is being applied. Once the output rate is determined, you will know how long to run the irrigation system to apply the amount of water needed.

EMPLOYEE CHECKING RAIN GAUGE. Irrigation frequency and amount of water needed varies with changes in rainfall pattern. A rain gauge placed outside the irrigated area will collect rain water and will help you decide when to irrigate and how much water to apply.

CLOSE-UP OF RAIN SENSOR. Still another device well worth the investment is a rainfall sensor. This device is tied directly to the irrigation system, sensing rainfall and preventing the irrigation system from running during rain. A sprinkler system running during a downpour in a public area gives a negative image of your firm's client and wastes a precious resource.

WORKER OBSERVING OPERATION OF SPRINKLER SYSTEM. While in your work area check periodically for broken irrigation heads, leaks or misdirected sprinkler heads, even though you may not be responsible for servicing the irrigation system. Cars and mowers often damage irrigation heads, and problems are not apparent until the system is turned on. Note the problem and report to your supervisor or the irrigation crew.

IRRIGATION WATER BEING SPRAYED ONTO PARKING LOT. Misdirected irrigation water is wasteful and gives your client a poor impression of your company. Make note of these types of problems when you see them and report them to your supervisor.

CLOSE-UP OF VALVE BOX. Valve boxes are another part of the system easily damaged by cars and mowers. Make certain the valve box cover is securely in place. Damaged valve boxes are a liability problem in recreational areas or places where there is pedestrian traffic and should be reported promptly.

IRRIGATION SYSTEM SPRAYING CARS PARKED IN PARKING LOT. Another safety and liability problem occurs when mis-directed irrigation heads spray parked cars, passing motorists or pedestrians. Spotting and correcting these types of problems are important to the professional image of your firm.

PERSON EXAMINING A LANDSCAPED AREA. Proper irrigation requires more than the right equipment. It involves knowing the water needs of the plants you are irrigating as well as the type of soil and its drainage characteristics. Irrigation water should only be applied at a rate in which the soil can absorb it, and it should be used to supplement natural rainfall, not replace it. Proper irrigation results in a healthy root system and a more stress-tolerant plant.

SPRINKLER SYSTEM WATERING JUNIPERS. More plants are killed each year from too much water than from not enough water. Some plants, like junipers, generally do not need a permanent irrigation system and are very drought tolerant once established. They should be irrigated only during establishment and during extended periods of limited rainfall. Too much water promotes root rot, spider mites and foliar diseases.

OVERALL SHOT OF GROUPING OF ESTABLISHED SHRUBS AND TREES. Most healthy, established trees and shrubs, if they are adapted to local soils and climate, also adapt to the natural rainfall of the region. They can survive long periods without supplemental irrigation.

TREE GATOR AROUND TREE. Watering bags are an efficient way to irrigate trees outside irrigated areas. The bags are zipped in place around tree trunks and filled with 15 to 25 gallons of water. The water drips slowly from small holes in the bottom of the bag. Many landscape firms use watering bags to irrigate trees during establishment and during dry periods.

EMPLOYEE HAND-WATERING A FLOWER BED WITH A WATER WAND. With all the technology available, hand-watering is still an efficient method for applying water to selected plants, like annual and perennial flowers, containerized plants or individual plants under water stress. When hand watering, be sure to apply water slowly enough to saturate the soil yet minimize runoff.

OVERALL SHOT OF A NICE LANDSCAPE SHOWING A SMALL TURF AREA, TREES, SHRUBS AND FLOWERS. As a landscape professional and steward of the environment, being water wise is an important part of your job. Water wise means knowing more than just how an irrigation system operates and how to spot problems. It means knowing which plants need supplemental irrigation and which ones do not. It also means knowing how much water to apply and how to apply it most efficiently.

EMPLOYEE PUTTING OUT PINESTRAW. And as your water wisdom grows, you will discover new ways to save water, like mulching an area instead of irrigating it. Your water wisdom will save your client and your company water, time and money.

All of these water wise practices are collectively called XERISCAPE, a simple seven-step approach to landscape water conservation. To learn more about Xeriscape, view the video that follows this segment.

EMPLOYEE HAND-WATERING SOME ANNUALS. As competition for water grows, we simply will not be able to use as much water outdoors as we have in the past. Restrictions on outdoor water use will become more common. Your firm will face the challenge of providing clients with the same level of landscape quality with less water.

CHILDREN PLAYING IN OLYMPIC RINGS FOUNTAIN. WATER ...It's a resource we can no longer take for granted. As the landscape industry continues to grow, we must conserve water by making every drop count.

Remember.... the water you save today is an investment in your future.

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