# WaterSense-AWE Webinar Recap

# Efficient Irrigation Practices for Medians and Park Strips





#### **TODAY'S SPEAKERS**

- Mary Ann Dickinson President and CEO, <u>Alliance for</u> <u>Water Efficiency</u>
- Julius Duncan Environmental Engineer, EPA WaterSense
- Malarie Gotcher Water Conservation Manager, <u>City of</u> Oklahoma City, Oklahoma Utilities Department
- David Langridge <u>East Bay Municipal Utility District</u> (EBMUD)
- Annie Barrow Manager of Horticulture Outreach Programs, <u>Denver Botanic Gardens</u>

# ORIGINAL DATE: OCTOBER 31, 2019

WaterSense Webinars Webinar Recording on YouTube

#### WEBINAR SUMMARY

In the introduction, Ms. Dickinson provided an update on the Alliance for Water Efficiency's (AWE's) <u>Landscape Transformation Study</u>. The study, released earlier in 2019, took a look at landscape program water savings that came from programs that emphasized landscape changeouts. Based on the findings in the study, AWE has developed a <u>sustainable landscapes guide</u> for utilities just getting started and for those enhancing existing programs. AWE is also completing work on a study that evaluated the effectiveness of drought restrictions. The study is undergoing review by the Project Advisory Committee and plans to launch in January 2020. It will answer questions related to savings expectations from irrigation restrictions during drought.

Following that, Mr. Duncan gave a brief introduction to WaterSense labeled products. To address outdoor water use, WaterSense has labeled irrigation controllers and spray sprinkler bodies with integral pressure regulation. Irrigation controllers use local weather data to adjust the irrigation schedule based on rainfall and landscape needs. Spray sprinkler bodies reduce the incoming pressure to the most efficient pressure range for the sprinkler. Park strips and highway medians offer a unique challenge to irrigating WaterSense Materials at https://www.epa.gov/watersense

- <u>WaterSense labeled spray sprinkler</u> bodies with integral pressure regulation
- Learn what to plant based on your region

efficiently. Due to their narrow design it can be difficult to accurately direct spray heads. In the presentation, speakers described challenges and solutions ranging from using the right plant in the right place to using WaterSense labeled products to reduce water waste.

# EAST BAY MUD: PARK STRIP CHALLENGES

Lawn strips are the planted area between the street and the sidewalk. Although they have the benefit of providing space between vehicles and pedestrians, they can also be a major source of water waste. Due to their narrow size, sprinklers often spray beyond the borders of the park strip, with water landing on the sidewalk and flowing to the drain.



EBMUD looked at 62 irrigation-only meters that irrigate park strips and found that they typically exceeded their estimated water budget by 148 percent in 2018. When evaluating their rebate programs, they identified park strips as an opportune area to increase rebates for lawn conversions. Because the clay soils infiltrate water slowly, users often flood the landscape during irrigation cycles. Problems such as overplanting and using plant material that can outgrow the planting area become difficult to control. They also found examples of drip irrigation not installed or spaced properly caused increased water waste.

# DENVER BOTANIC GARDENS: WATER-WISE LANDSCAPE HORTICULTURE

At Denver Botanic Gardens, they offer planting designs and consultation for streetscapes, medians, and other public places. Sustainable landscape design will help reduce water consumption, promote pollinators, and improve the landscape aesthetic. Highways offer a good opportunity for xeriscaping which can significantly reduce the amount of irrigation. They are working on two median strips in Denver, between 1 and 3 miles long with a goal to turn off irrigation after 3 to 5 years. Both medians were designed to be low water use and xeric using the resources of the <u>Plant Select</u>® program developed by Colorado State University and Denver Botanic Gardens to help select plants because the program tests for different survival conditions and attractiveness.

Plant installation is just as important as plant selection, and soils play an important role. Using a healthy soil ensures that plants get the nutrients and water that they need. Denver Botanic Gardens staff have also found that the use of soil amendments helps the plants adapt to the soil. Lastly, capturing stormwater and providing sufficient drainage are important. Curb cutouts allow water to flow to the plant area where it can be absorbed into the soil rather than run off as stormwater.

# OKLAHOMA CITY UTILITIES: MEDIAN RETROFIT PROJECT

Medians are highly visible and offer a chance to show the results and benefits of water-saving choices. The City of Oklahoma City partnered with OKC Beautiful and Urban Lawn and Landscape to install efficient irrigation in medians around the city. To demonstrate water efficiency, Oklahoma City Utilities chose three medians that have separate water meters and replaced their sprinklers with <u>WaterSense</u> <u>labeled sprinkler bodies with integral pressure regulation</u>.

On each median, before installation, the average pressure on the sprinklers was around 60.5 psi. When the irrigation would run, the high pressure would cause misting and water would end up on the street instead of the plants. Before installation, they would irrigate more than 60% of the theoretical water need. After installation they were able to reduce irrigation to within 12% of the theoretical water need. In follow-up visits, they identified any leaks or broken sprinklers and immediately fixed them.

# SPEAKER QUESTIONS AND ANSWERS

#### Q: What are suggestions for planting in narrow strips?

A: Mr. Langridge suggested using the right plant for the right area. Avoid large plants that will outgrow the area or ground covers that will need to be trimmed back. Ms. Barrow also pointed out that turfgrass in small strips would be difficult to mow in that space. Keep in mind the full mature size of plants that after several years could become a hazard to drivers or pedestrians.

#### Q: What methods are used for weed control?

A: Ms. Barrow answered that there are different alternatives to herbicides. It depends on the needs of the client and the local conditions. It also matters to have good soil. Soils with good drainage do not require as much irrigation or compost and that will reduce the growth of weeds.

#### Q: Can you provide images for xeriscapes in different seasons?



A: Ms. Barrow suggested the blog by Panayoti Kelaidis, the Director of Outreach at Denver Botanic Gardens, titled Prariebreak. It has examples of xeriscapes in different seasons and the different plants that can be in those landscapes. By using plants that contribute to all seasonal interests, attractive landscapes can be designed that last throughout the year.

