Facilities Management Utilities Contacts:
Mike Fan, Director
mmfan@ucdavis.edu | 530.752.7553
Courtney Doss, Lead Civil Engineer
cahall@ucdavis.edu | 530.752.9079

Surface Water curtailment for the State of California – Important Notice to Laboratories and Users with Special Equipment

On June 5, 2020, the State of California Department of Water Resources enacted Term 91, which is a water curtailment protocol to avoid diversion of surface water in seasonably dry conditions. During 2019/2020, seasonal rainfall did not meet the needs for the California delta watershed resulting in the need to release stored water from other reservoirs. The University's domestic (drinking) water system includes both groundwater and surface water supply sources. When the state initiates Term 91, it reduces the amount of surface water that can be diverted. Since July 2017, the University has supplied a portion of the campus domestic water demand with surface water from the Sacramento River. On any given day, the University will use a number of water supply sources to meet the campus domestic water demand. Operation of the system changes, but typically the University uses the surface water allocation and supplements peak periods of demand with groundwater. During normal conditions, surface water comprises approximately 85-90% of the daily campus demands; during Term 91 curtailment conditions this drops to below 50%. Term 91 will remain effective likely through October 31, 2020 or later. Prior to 2020, Term 91 curtailment was last enacted in 2018 and a similar notification was sent out to the campus customers. There was no water quality related complaint from campus customers in 2018 and there are no anticipated water shortages to the campus during this year's Term 91 curtailment.

Each source of domestic water has different water chemistry, and it can vary over time. Facilities Managements Utilities division monitors specific water quality parameters at each source including the distribution systems. During curtailment, hardness and conductivity are two parameters that are regularly monitored and can be used as indicators for groundwater versus surface water make-up. Hardness is a measure of the amount of dissolved minerals, typically calcium and magnesium. While harder water does not cause adverse health effects, hard water can cause mineral deposits to accumulate in pipes and building equipment such as water heaters, dishwashers, and boilers. Over time, the mineral deposits may cause clogs or other maintenance issues. Conductivity has a direct correlation with the amount dissolved ions in water, thus the conductivity increases as the amount of dissolved ions increases. California State Water Resources Control Board, Division of Drinking Water suggests that water systems provide water with conductivity below 900 µS/cm. All of UC Davis's water supplies are well below this recommended limit.

Facilities Management is aware of changes to the water chemistry and potential impacts to equipment, including water treatment systems that provide ultra-pure water or deionized water to campus laboratories. Maintenance will be adjusted as needed to ensure that users do not notice a change to the quality of water from these systems.

Equipment that is maintained by an individual department or outside vendor contracted by the department may require a more frequent preventative maintenance schedule to account for the

changes to water chemistry. The water chemistry may be, at times, comparable to the water chemistry that served campus prior to 2017 when surface water was added to the system.

To learn more about Term 91 visit
www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/term_91