Mountain Democrat

PLACERVILLE, CALIFORNIA



Peter Brostrom, who leads the water use and efficiency branch of the California Department of Water Resources, speaks about implementing new water legislation at the Mountain Counties Water Resources Association's workshop. Photo by Ginny Borkowski

Georgetown Gazette, <u>News</u> Implementing water conservation legislation

By Dawn Hodson

Water agency personnel from throughout the mountain counties gathered on March 15 at El Dorado Irrigation District headquarters for a workshop on how the state's new water conservation legislation will be implemented.

Sponsored by the Mountain Counties Water Resources Association, the workshop's featured speaker was Peter Brostrom who leads the water use and efficiency branch of the California Department of Water Resources.

Brostrom explained in detail how the new legislation, Senate Bill 606 and Assembly Bill 1668, which was passed last year, will be implemented and the role the DWR will play.

John Kingsbury, the executive director of the MCWRA, opened the workshop by noting that the organization had opposed the legislation, saying it represented a loss of local control and personal freedom. He also worried, "where this is all headed and the unintended consequences for the region."

Other concerns he had were the potential revenue losses to water agencies, the cost of all the additional reporting that will be required, losses to agriculture, tourism and the local economy and the effect on people's quality of life.

Diving right into the topic, Brostrom began by explaining that the goals of the legislation are not conservation but rather using water more wisely, eliminating water waste, strengthening local drought resilience, improving agricultural water use efficiency and drought planning.

Any unintended consequences of the legislation can be addressed either through variances or administratively or legislatively, he said, as he noted that the laws apply mainly to urban water suppliers with 3,000 connections or those supplying more than 3,000 acre feet of potable water.

Water use standards

Emphasizing that the legislation does not apply to individuals, Brostrom said the conservation requirements apply to the average use across the service area and are based on four budgets calculated using efficiency standards. Those four include an indoor residential budget, outdoor residential budget, a budget for dedicated irrigation accounts whether commercial, industrial or institutional and distribution system loss. Water suppliers won't have to meet the individual budgets for each of these areas. Instead it's the aggregate of the four targets that will form a supplier's objective in terms of water conservation.

As examples, he said the indoor residential budget would be calculated using an area's residential population, times the indoor standard, times 365 days a year. That would give the supplier the volume of water considered efficient to supply that customer base.

For the outdoor residential use budget, the supplier would take the landscape area, reference the evapotranspiration rate for the area, and multiply it against the landscape standard to calculate an outdoor budget. Suppliers would use the same equation for the dedicated irrigation accounts to calculate a budget for those. The outdoor water use standards are separate for outdoor residential and dedicated irrigation accounts and are based on irrigable area and local evapotranspiration.

Evapotranspiration is the sum of evaporation and plant transpiration from the Earth's land and ocean surface to the atmosphere.

Each supplier will have an annual urban water use objective that includes indoor residential use, outdoor residential use, outdoor irrigation of landscape with dedicated irrigation meters, estimated efficient water losses and estimated water use for approved variances. Then suppliers will compare actual use with the objective and be in a position to eliminate water used in excess of what's needed for beneficial use.

The paperwork jungle

New legislation entails considerably more reporting requirements by water agencies, a cost that will be passed on to customers. The laws require that urban retail water suppliers submit an updated urban water management plan, a water shortage contingency plan, an annual water shortage assessment report and an annual report on urban water use objectives, actual urban water use, implementation of commercial, industrial and institutional water use performance measures. They also must make progress towards urban water use objectives and submit a report on implementation of demand management measures to achieve urban water use objectives.

Urban wholesale water suppliers have to update and submit an urban water management plan, prepare a water shortage contingency plan and drought risk assessment and also an annual water shortage assessment report.

Agricultural water suppliers have to submit an annual report summarizing aggregated farm-gate delivery data on a monthly or bimonthly basis organized by basin although it only applies to suppliers providing 2,000 acre feet of water. Suppliers of 25,000 acre feet of water have to submit an updated agricultural water management plan including development of a drought plan.

In addition, in 2022 agencies will have to submit an annual water supply and demand assessment to the DWR which will include the assumptions and calculations used to determine water supply reliability. The report is designed to give the state more assurance about the reliability of water supplies by agency. The results may also be used in the event of another drought so that instead of mandatory cuts for all suppliers, the cuts would be based on how much water individual suppliers have.

Brostrom said there are fines for noncompliance. Water suppliers that violate the rules may incur a civil liability after Nov. 1, 2027. There is also progressive enforcement to ensure agencies prepare their annual urban water use reports so, for example, if a supplier doesn't supply a plan, the DWR can hire a third-party to do so and charge the agency for the cost of preparing it.

Setting performance standards

In order for water suppliers to meet their water objectives, the DWR is developing standards for different kinds of water uses.

The indoor standard was set legislatively to begin in the year 2022 at 55 gallons per capita per day until 2025 and 52.5 between 2025 and 2030. After 2030 it goes down to 50 gallons per day. The DWR has also been directed to do a study on indoor residential standards which will go to the State Water Board for approval.

Brostrom said there is currently a pilot program to assess landscape definitions and classifications which measures three types of landscape: irrigated land, irrigable but not irrigated land and not irrigable that includes such things as paved areas, roof tops, etc. He said when the studies are completed, the DWR will provide water suppliers with data on the area of residential irrigable lands they can use to calculate aggregated outdoor residential use.

DWR will also provide landscape area data and other data for calculating an agency's urban water use objective. The results will set the standard for irrigation for a water agency, however, there was no information on to how often this information will be updated.

As far as agricultural water use, Brostrom said agricultural water suppliers will be required to prepare an annual budget based on all inflow and outflow for their service areas. Based on a water budget, they will identify ways to meet their water management objectives and reduce water loss. DWR will be providing water agencies with individual parcel data that will allow them to identify users who are significantly over budget, which could be due to a leak or inattention to their irrigation system. Brostrom said he believes that once all the data comes in, most agencies already meet the agriculture standards and only a few will have to work to meet them.

The State Water Board is responsible for setting the standards for distribution system loss. That is still being worked on and when completed that standard will be given to water suppliers to use in calculating water losses.

As far as performance measures for different commercial sectors, the state plans do a study to determine what would be the most cost-effective and beneficial method on how to pursue it. Other near-term projects the DWR is working on include a wholesale water loss study, residential water use study, setting standards for outdoor landscaping that is metered, recommendations on reporting requirements and studies on variances.

Variances allow some flexibility in water use standards and might include such things as areas where there is the significant use of evaporative coolers, populations of horses and other livestock, fluctuations in seasonal populations, use of water for commercial or noncommercial agricultural use or other factors. The standards for water use will apply to every urban retail water supplier who will compare them to their actual use. All the new requirements for urban water use objectives are effective after June 2022 when the State Water Board will adopt urban water use efficiency standards, performance measures and variances.

Organizations may also be asked to undertake audits to determine if they are using the most appropriate technology to help in conserving water. When asked if such audits and the cost of replacing older equipment that consumes too much water might put smaller firms out of business, Brostrom said the legislation includes the requirement that performance recommendations have to be economically viable. There will also be thresholds in terms of who has to do these audits or water management plans.

Asked about what happens to water saved by all these conservation measures, Brostrom would only say, "This is part of the discussion," adding that as the value of water goes up, consideration will be given to water transfers and also to replenishing groundwater that is overdrawn. However, there are no assurances that the agency which supplies the water will benefit from such transfers.

It was also pointed out by one audience member that as the cost of water increases due to limiting what agencies can sell while raising the cost of delivering that water, it will be water agencies that will be blamed rather the state legislature.

As for increasing water supplies, Brostrom said the state is looking into adding more water storage facilities and the use of recycled water including a move towards potable reuse. That is recycled water that is treated and either put into the ground and pumped out again or allowed to be put directly into the distribution system.

Discussion | 1 comment

• MikeApril 02, 2019 - 6:45 pm

In the last 12 consecutive months Pollock Pines has had 85.63 inches of rain according to my PWS. That is over 7 feet of water deposited at the 4,000 foot level. Something to think about. That does not count the snow which my rain gauge does not measure. Since people will be limited by over-reaching government to control what water they use and there is no storage facilities to hold it - it will flow out to sea. This is just another initiative that was not thought through at all. Again the Water Companies and State of California wins and everyone else looses. Higher Water Rates, Penalties and Taxes. When the vegetation dries up due to people not watering -because it will be too expensive -- the fire danger will increase dramatically. Again Laws are passed in California without the vote of the public and without the necessary research. There is no way California will be able to enforce this law because they are still chasing their tails on how to make it work. When people can't grow their own food due to these regulations they will be packing their bags.