

March 11, 2016

ITP Committee

RE: PUBLIC DRAFT REPORT: Recommendations Report to the Legislature On Landscape Water Use Efficiency

The on-going drought conditions in CA along with overdraft of groundwater has put a strain on irrigated agriculture and landscape, and this report is a timely effort in that regard. However, I am perplexed by the disproportionate emphasis put on one irrigation system component setting it apart from all other recommendations. Singling out just one component of an irrigation system with such harsh potential penalty is very hard to understand.

Section 7, recommendation #1A cites the 2014 Lawrence Berkeley National Laboratory (LBNL) report for most of the findings and recommendation. In LBNL report the conclusion, paragraph 2 states:

" Our meta-analysis demonstrates that advanced irrigation controllers on average can capture substantial water savings—38 percent for soil moisture sensors, 21 percent for rain sensors, and 15 percent for weather-based irrigation controllers. Our conclusions may have limited value from a predictive standpoint given the small sample size, especially when divided into controller type. However, the data support the assertion that although some individual sites may experience an increase in water use, in aggregate, advanced controllers can provide substantial water savings in both residential and commercial applications."

Section 7 of the aforementioned report used the LBNL report as the basis for their recommendation, but singles out the Soil Moisture Sensors (SMS), **"Until a recognized and verifiable standard and test method is developed, stand-alone SMS-based controllers ought not be sold in California "**. We believe this is a **misrepresentation of the LBNL report**, which clearly reports the SMS to have best water savings, compared to the other two technologies.

Additionally, for comparison, I am noting these two examples:

Section 4 recommends tax incentives for turf replacement. No mandatory use or prohibition from being able to sell the product is suggested without any sort of proof being required that the item is operational or beneficial.

Section 5 #1 recommends home inspections include an irrigation system review. Again there are no restrictions of any sort and this is proposed solely as a reporting function.

However, it is distinctly different in Section 7 1A's recommendation relevant to soil moisture sensor control devices. The paragraph dedicated to soil moisture sensor control devices, on page 30, suggests tracking the future development of testing procedures, recognizing that they are in process. It also suggests how they should be considered for inclusion in title 20 requirements once testing is available. This sounds very reasonable and I am in full support. Yet, the last sentence of this paragraph makes an abrupt turn in attitude and says that they shouldn't even be offered for sale until the testing protocol is fully developed.

Why is the use and sale of soil moisture control devices being singled out as so different that it should not even be allowed to be sold if a testing standard does not exist? Many components in an irrigation system do not have standards or testing protocols established (Section 4: page 9 high efficiency nozzle and emitters are being recommended with no standard protocol in place), yet bans on their sale are not being proposed. While soil moisture sensor control devices in all likelihood will have a testing protocol and standard in place by the summer of 2016, in line with EPA's announcement, it doesn't mean action such as disallowing the sale of these devices should be allowed or even suggested. What if something unforeseen occurs and it doesn't get done? Then why should manufacturers, who have been selling such devices for decades, no longer be able to help those Californians, who choose to use them save water and improve their landscape plant health, be able to do so?

No such restrictions are being proposed for other products. Rain shutoff devices do not yet have standards developed, yet similar restrictions are not being suggested, in fact the recommendation is to use them anyway with adoption of the existing testing protocols with performance metrics yet to be determined.

I oppose this portion of the recommendation and suggest the paragraph be left as proposed with the last sentence stricken. As the completion of the ASABE testing protocol and EPA labeling program for this component device is nearing, perhaps the recommendation can be to have the CEC complete the rulemaking process once the testing protocols for soil moisture sensor control devices has been completed.

My concern is strictly with the suggestion that if the standards development doesn't happen for some reason, then the sale of such devices "*ought not be sold in California.*" Nothing else in the document makes such strong recommendations so as to disallow the sale of any other products. Soil moisture sensor control devices have been in use for decades and have a history of documented proof of their effectiveness. Section 10 #1, in the purpose section, mentions a literature review by DWR. I have submitted a number of reports at the following Dropbox address that should be reviewed, which document the effectiveness of water saving through the use of soil moisture sensor control devices for landscape applications:

[PUBLIC DRAFT REPORT Recommendations Report to the Legislature On Landscape Water Use Efficiency](#)

<https://www.dropbox.com/l/sh/8EjgHr6v2JuM9Qxo89AVfs>

Thank you for the opportunity to comment and for what, I hope, will be your thoughtful consideration.

Best regards,



Tom Penning
President