

Q1 – WUCOLS, what is it based upon, field research, expert opinion, a combination?

WUCOLS (Water Use Classification of Landscape Species) is primarily based on the opinions (rather than research based information) of experts in each of 6 major climate zones in CA. In cases where research based information is available, those data are used. Field research is tedious and time-consuming and would take entire UC careers to compile information on the thousands of taxa in CA if that was exclusively used.

Q2 – Can you provide the references for all studies mentioned?

Hartin, J. Oki, L., Fujino, D., Reid, K., Ingels, C., Haver, D., Baker, W. UC ANR research and education influences landscape water conservation. *California Agriculture*. 73:1, 1-8.

Reid, K., Fujino, D., Oki, L., Hartin, J., et al. (2018). Maintaining urban landscape health and services on reduced irrigation: A multi-site study in best management practices. *ActaHortic*.2018. 1215. <https://doi.org/10.17660/ActaHortic.2018.1215.33>

Hartin, J.S.; Fujino, D.W.; Oki, L.R.; Reid, S.K.; Ingels, C.E. (2018). Water requirements of landscape plants studies conducted by the University of California researchers. *HortTechnology*. 28:4, 422-426. August.

Hartin, J., Oki, L., Fujino, D. (2015). Keeping plants alive under drought or water restrictions. UC ANR publication 8553. <https://anrcatalog.ucanr.edu/pdf/8553.pdf>

Lacan, I. and McBride, J. (2018). The impact of climate-change induced temperature increases on the suitability of street tree species in California (USA) cities. *Urban Forestry & Urban Greening*. DOI: 10.1016/j.ufug.2018.07.020

Igor's master list of tree pairings:

https://ucanr.edu/sites/Igor/Street_Trees_and_Climate_Change/

Q3 – Why was water impairment 0%?

The data referred to pollution of watersheds.

Q4 – Has there been a study of “yesterday” and “today,” using the space for time but looking back not forward?

This certainly would be interesting and relevant but we don't currently know of any such study.

Q5 – In the face of fire and fuel concerns is there resistance to increasing urban tree canopy? How can conflict in objectives be navigated? In fire-prone areas, this is certainly an important issue. Trees should be selected on their appropriateness both regarding species and fire-resistance. In addition to the searchable Urban Forest Ecosystem Institute/Cal Poly index found here: <https://selectree.calpoly.edu> another useful publication is Fire Resistant Plants for Home

Landscapes which can be downloaded here:<http://www.firefree.org/wp-content/uploads/2016/02/Fire-Resistant-Plants.pdf>. It is a Pacific Northwest Extension publication co-authored by experts at Oregon State University, Washington State University, and the University of Idaho. The UC ANR Sustainable and Fire Safe Landscapes website <https://ucanr.edu/sites/SAFElandscapes/> and the UC ANR Home Landscaping for Fire publication <https://anrcatalog.ucanr.edu/pdf/8228.pdf> are also very useful websites.