

Improving the (Net) Almond Water Footprint

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PROJECT SUMMARY

Objectives for current year:

- Match water footprint and Life Cycle Assessment (LCA)/water to existing sustainability reporting carried out by ABC.
- Associate water footprint and LCA with types and sources of water.
- Investigate geographic variation of current and potential future water availability as it relates to water footprint.
- Describe trade-offs and benefits between water footprint and conservation activities.
- Compare California almond water footprint to other regions globally and assess overall industry water savings gained through trade.

Background and Discussion:

The water footprint and life-cycle analysis (LCA) tools are two related ways that industries can track their impact and reliance on water supplies, waterbodies, and water-dependent supply chains. By getting a handle on the meaning and utility of these tools, the Board can improve its communication in the public realm/media and with growers. People are increasingly aware that sustainability is something that can be measured and expect that they can find out about their food in order to make better decisions. Water footprint

is one index of water sustainability across the geography and cycles of almond production and life cycle analysis is one way to track how water uses and impacts can be modified.

The almond water footprint is one of the highest among non-meat foods. In a previous project, we showed that the water footprint has steadily declined (by 28%) over the last decade, varies across the production area, and is actually much lower than has been reported previously in the global literature. Almonds are one of the most nutrient-dense foods and indirectly provides >100,000 jobs and >\$21 billion in GDP benefits to California. In addition to the benefits to health and economy, consumers would like the health of the planet to be part of the overall equation. Accurately describing issues with water sustainability and how they will be addressed is probably a wise course of action for ABC. Water footprint has already been used to criticize the industry and in turn by the industry to respond to critics. The proposed work would improve the scientific nature of this discussion, both from the point of view of framing the water footprint and describing how growers' activities will help improve water use for almond production.

Project Cooperators and Personnel: Alissa Kendall, Department of Civil and Environmental Engineering, University of California, Davis

For More Details, Visit

- Poster location 73, Exhibit Hall A + B during the Almond Conference; or on the web (after January 2017) at Almonds.com/ResearchDatabase
- 2015 - 2016 Annual Reports CD (15-WATER6-Shilling); or on the web (after January 2017) at Almonds.com/ResearchDatabase
- Related project: 15-AIM1/13-AIR8-Kendall