

Meeting Agenda Water for 2060 Advisory Council Crop Irrigation Efficiency Workshop

Date:February 18, 2014Time:1:00 P.M.Location:OWRB Board Room – 3800 N. Classen, Oklahoma City

Introductions and Goals for Today

- Advisory Council Members
- Presenters and Guests
- Goals for Today's Workshop

Existing Practices and Programs in Conservation and Reuse 1:10-2:30

- Crop Irrigator Perspectives (10-15 min. each): Fred Fischer (Panhandle), Jerry Wiebe (Panhandle), Mark Nichols (Lugert-Altus Irrigation District)
 - ✓ Existing conservation/reuse practices: What's working for you now?
 - ✓ Current incentives/disincentives for water-efficient practices
 - ✓ Additional conservation: What constraints are preventing increases in efficiency?
- Efficiency measures identified in Panhandle Regional Water Plan (John Rehring)
- NRCS Programs (Chris Stoner, State Conservation Engineer)

Break

Brainstorming: Incentives and Education Programs

- Brainstorming of potential concepts for incentives for conservation and reuse
- What incentives would be effective and used by irrigators?
- Questions about examples and concepts that we can research further
- Prioritization of incentives we can recommend to the Legislature

Next Steps and Group Resources

- Next meeting: content and timing
- Analyses of Conservation, Marginal Quality Water Use, and Regionalization for Hot Spot Basins: Upcoming public/stakeholder meetings
- Water for 2060 web page

3:50-4:00

2:30-2:40 2:40-3:50

1:00-1:10

Supporting Information:

1) Water for 2060 Advisory Council Background Report, July 2013: Refer to Section 3.1 regarding Crop Irrigation water efficiency practices. Report is posted to the Water for 2060 website at http://www.owrb.ok.gov/supply/2060council/BackgroundReport.pdf.

2) Crop Irrigation Considerations

Submitted by Tom Buchanan, Water for 2060 Advisory Council Member and Manager, Lugert-Altus Irrigation District, February 2014

Because of a calendar conflict, I am unable to make the Water for 2060 meeting discussing Ag water uses; please allow me to offer some thoughts. With the acknowledgement of Ag being such a large user of water, it stands to reason that this is an area where more bang for the buck and true conservation can be achieved. Irrigated agriculture produces not only larger yields, it also accounts for more consistent production and higher quality commodities. Irrigated Ag is currently a large economic driver in the areas where irrigation supply, ground or surface water, is available. As an example, year in and year out, Texas County in the Panhandle is one of the top Ag producing counties in the nation. I believe that we should work to keep this portion of the Oklahoma economy active and look to provide the opportunity for additional growth. With recent advancements and new technology, innovative irrigation practices are showing great promise.

From updating existing pivots to reduce evaporation to reusing irrigation runoff, to subsurface or drip irrigation, expanding treated wastewater usage, etc., the opportunity to achieve real savings is a reality. These practices are currently being implemented in varying degrees and have the potential to be more widely adapted by irrigated agriculture. One of the larger obstacles to broader adoption of the new technology is producers' concern of will it "work on my farm." While these practices have been proven in other areas, until we can answer this question, producer apprehension will hinder adoption. Some of the questions that need to be answered are how will these new practices work on Oklahoma soil types, different crops, environmental conditions, crop demands throughout the season, water quality requirements, longevity and maintenance of the systems etc. Research dedicated to answering these concerns, showing results from local testing (technology being used in Israel or Arizona is promising but not locally validated), will go a long way toward gaining producer support. Additionally, irrigators are currently asking for help with timing of irrigation applications, research to identify methods or hardware which will answer the questions of when and how much (this topic is being explored but needs additional work); this would be received with open arms by the irrigated Ag community.

Costs of implementation are certainly an impediment; irrigators are growing high yielding crops today using existing practices. The question of why invest in the unknown and unproven is front and center on producers' minds. Research alone won't guarantee the desired water savings. Financial incentives (tax credits, matching grants, etc.) offered to reduce investment costs will be an integral part of the overall success of adoption and adaptation of technology. While there could be resistance to offering incentives to individuals on private property (if it is theirs, they should spend their money to achieve gains), remember that groundwater is a private property right and a carrot will be needed to involve landowners and accomplish the desired outcome.