

Consolidated Notes from Water and Natural Resources Workshop

August 30, 2016

Challenges

- Declining and Limited Resources
 - Competing interests – different uses of water and needs
 - Seeing the productivity of water – is it where it needs to be/when it needs to be
 - How does it factor into economics as a producer, adding value in Kansas – are we adding value based on our usage?
 - Limited access in some areas to rural water supply
- Wastewater and Water Quality
 - Nutrient-loading/ water quality (harmful algae blooms)
 - Restoring and sustaining soil health
 - Economics drives crop selection – not rotating crops based on economic returns
 - How to re-incorporate farming and livestock back together? Water-intense crop half the year, water saving/cattle grazing crop/land use for the other half?
 - Rotational grazing systems – textbooks from Dust Bowl era describe process
 - If we don't have GMOs, we're not going to feed the world
- State Rules and Regulations
 - How do we work across different agencies/states coordination
- Federal Policy
 - Perception that federal agencies do not follow the same rules and policies as imposed on citizens
- Air Quality
 - Non-native tree issues – disease issues, fire is necessary but must address smoke issues

Solutions

- No statewide single solution – Education is the answer!
- Increase education and engagement on both water quality and conservation
- Variable issues require variable responses
- Locally led, voluntary, incentive-based solutions

- Declining and Limited Resources
 - Encourage adoption of new water-related technology (sensors, water technology farms)
 - Conservation – irrigation allotment
 - Funding for drought research
 - Augmentation
 - Address groundwater declines through technology adoption
 - Address surface water declines by increasing storage and decreasing storage loss
 - Locally targeted control measures = WCAs and LEMAs

- Research opportunities at KSU for cattle water consumption and efficiency studies
- Ability of local groups to propose and implement local solutions
- Diversification in cropping systems, crops that use less water
- Beef genetics – select animals with less water intake requirement
- Building a facility at KSU for water intake measurement
- Wastewater and Water Quality
 - Provide cost share programs to help users afford Best Management Practices (BMPs)
 - Funding for best management practices
 - Runoff – other states have more rain to deal with, therefore have had to deal with these issues for a long time... we should look toward their leadership for what they have done.
 - Stream bank stabilization – help erosion – open to new ideas and technology
 - Best management practices – no-till and wise land use
 - No-till has created great changes in water conservation/quality
 - Restoring and sustaining soil health – healthy soil can filter and sustain more water
 - How to re-incorporate farming and livestock back together? Water-intensive crop half the year, water saving/cattle grazing crop/land use for the other half?
 - Rotational grazing systems – textbooks from Dust Bowl era describe process
 - If we don't have GMOs, we're not going to feed the world
- State Rules and Regulations
 - Give flexibility to water users who manage their own water resources (WCAs, LEMAs)
- Federal Policy
 - Waters of the US
 - Solution – need incentive-based solutions
 - Bring EPA out to educate them on the process. Get them in the field
- Air Quality
 - Regarding Fire – we have the science for rangeland health and the detrimental effects to ozone – don't need more research