INPUT FROM OWRB WATER FOR 2060

HOT SPOT BASIN MEETINGS

The Oklahoma Water Resources Board, working in partnership with the US Army Corps of Engineers under their Planning Assistance to States program, held a series of public meetings to share information and obtain feedback on water conservation strategies that could mitigate projected water shortages in Oklahoma's most compromised areas. Agriculture producers, water providers, and interested citizens residing in and around twelve "Hot Spot" planning basins—those determined to have the most significant water supply challenges within the next 50 years—were offered an opportunity to shape actions that could collectively satisfy future water demands and thus avoid substantial water shortages projected in those areas.

Presentation materials discussed at the meetings are posted to the OWRB Water for 2060 webpage at http://www.owrb.ok.gov/2060. The following information summarizes the feedback received at each meeting, but is not indicative of meeting attendees' consensus, nor does it represent any form of endorsement by OWRB or its partner agencies.

PANHANDLE WATERSHED PLANNING REGION:
OKLAHOMA PANHANDLE STATE UNIVERSITY – Goodwell, March 11, 2014

- Additional incentives for water reuse
- Additional Oklahoma State University (OSU) research for efficient crop irrigation technologies and practices
- Consider potential implications from Arbuckle-Simpson legislation and potential future maximum annual yield implications for groundwater in the Panhandle
- Identify financial resources for public water supply system regionalization
- Salt Cedar eradication
- Additional research and development for drought-tolerant crops
- Water credits (like California's energy conservation incentives program) to allow efficient use credits to be bought/sold
- Consider modifying "use it or lose it" water rights rules; this serves as a disincentive to conservation
- Revise crop insurance rules to not require irrigating a crop that is certain not to produce
- Investigate reservoir feasibility – Forgan/Englewood sites
- Recycled water for industrial uses (e.g. biodiesel) and municipal uses/fire suppression
- Brackish groundwater – consider use for salt tolerant crops/livestock

SOUTHWEST WATERSHED PLANNING REGION:
QUARTZ MOUNTAIN LODGE – Lone Wolf, March 12, 2014

- Monitor/meter crop irrigation – same rules should apply for all users to protect/preserve supplies
- Find uses for brackish groundwater – significant supplies but very high hardness/TDS
- Dual-piped system to deliver recycled water to irrigation or other non-potable uses (especially in newer developments)
- Look at desalination technologies and ability to recover resources
- Maintain/repair infrastructure to reduce losses – leak detection
- Augment potable supplies with recycled water
- Complete aquifer studies in unstudied aquifers as a conservation tool (scheduled to be completed by OWRB by 2022)
- Better data on groundwater depth/amount in storage
- Interconnect systems between basins to diversify supplies; use excess in full reservoirs to supply lakes with low levels
- On-demand/circulating hot water systems in homes
- Capture stormwater runoff in cisterns
- Conservation pricing for public water supply customers
- New reservoir on North Fork of Red River
- Use a combination of approaches – e.g., reservoirs and conservation
- Extend canals to better capture runoff in existing reservoirs
- Trade Southeast Oklahoma water to Texas in return for water from Texas Panhandle to Oklahoma
- Regulatory solutions and technology to dispose brine from advanced treatment – recent DEQ/Corporation Commission agreement allows for combined use of oil and gas deep injection wells for water treatment residual disposal
- Dredge lakes in drought when levels are low
- School educational programs
- Lay water pipes in same trench as oil/gas pipelines to reduce costs
- Need regulations/enforcement to make sure leaks are fixed
- Incentives to remove irrigated turf and increase wastewater reuse
- Fund rehabilitation of Blaine Gypsum recharge wells
- Cloud seeding

BEAVER-CACHE AND LOWER WASHITA WATERSHED PLANNING REGIONS:
SIMMONS CENTER – Duncan, March 13, 2014

- Capture floodwater
- Protect groundwater from oil/gas activity
- Rainwater capture at households
- Find a way to capture more floodwater in Waurika
- Reallocate flood control pool in federal reservoirs
- Divert Cache Creek to Waurika Lake
- State financial incentives for residential efficiency (similar to trash systems)
- Less water use for swimming pools
- Make sure you plan time and dollars for permitting – identify opportunities to streamline regulatory processes and timelines
- Use multi-pronged approach – no silver bullets
- Incentives to plant more trees to increase humidity/supply
- Eradicate invasive species – e.g., red/salt cedar – and incentives to prevent planting/spreading
- Support wind power – does not use water to generate power
- Newer technology allows for cost-effective treatment of brackish groundwater and disposal of brine
- Use treated wastewater to augment potable supplies
- Find largest users and conduct water use audits
- Prevent runoff from excess irrigation
- More local Mesonet stations
- Challenge with regionalization is that existing water lines are not sized for higher flow; also need more inter-local agreements
- Use a standby fee for emergency interconnects between public water supply systems

CENTRAL WATERSHED PLANNING REGION:
DALE ROBERTSON CENTER – Yukon, April 16, 2014

- Integrated management of limited supplies for multiple users and uses
- Additional education and outreach on impacts of one user's diversion on other users, considering rate of replenishment
- Significant challenges in trans-basin supply projects, but also many challenges in using local brackish groundwater
- Unfunded federal mandates on water quality are challenging
- Infrastructure improvements to reduce channel losses and address sedimentation in reservoirs
- Limit allocations/permits to match available supply
- Need strategies for gaining public support and acceptance of water reuse
- Public awareness programs to gain understanding of level of wastewater treatment and high water quality
- El Reno is looking for reuse opportunities now that the treatment process has been upgraded to a sequencing batch reactor
- Multi-agency partnerships for outreach and efficiency programs
- Need solutions for disposal or reuse of brine from advanced treatment facilities
- Financial incentives – build on existing financing programs
- Basin 51 is doing (and is capable of doing and funding) projects on efficiency and marginal quality water and regionalization – significant interest in supporting Water for 2060 work. Basin 51 is a key transition area between limited northwest OK supplies and metro area demands, with limited replenishment of local sources.
- Use Water for 2060 to head off local shortages
- Yukon is promoting rain barrels and other programs; methods for outreach are available (Channel 20, website, etc.)