

Water Conservation Area (WCA) Official Review

Review of the Consent Agreement and Order Designating a WCA
 T&O LLC/Thomas Willis (T & O) WCA; Finney County, KS
 January 2019 through December 2021

Review of Total Water Use of Water Rights Enrolled:

During the term of this WCA, water use was limited to 4,500 acre feet. The total water use reported annually, under the referenced water rights, during the term of this WCA are as follows:

2016 Water Use (AF)	2017 Water Use (AF)	2018 Water Use (AF)	Total WCA Use (AF)	Unused WCA Allocation (AF)	Total WCA Limit (AF)
1,232	1,123	1,078	3,433	1,067	4,500

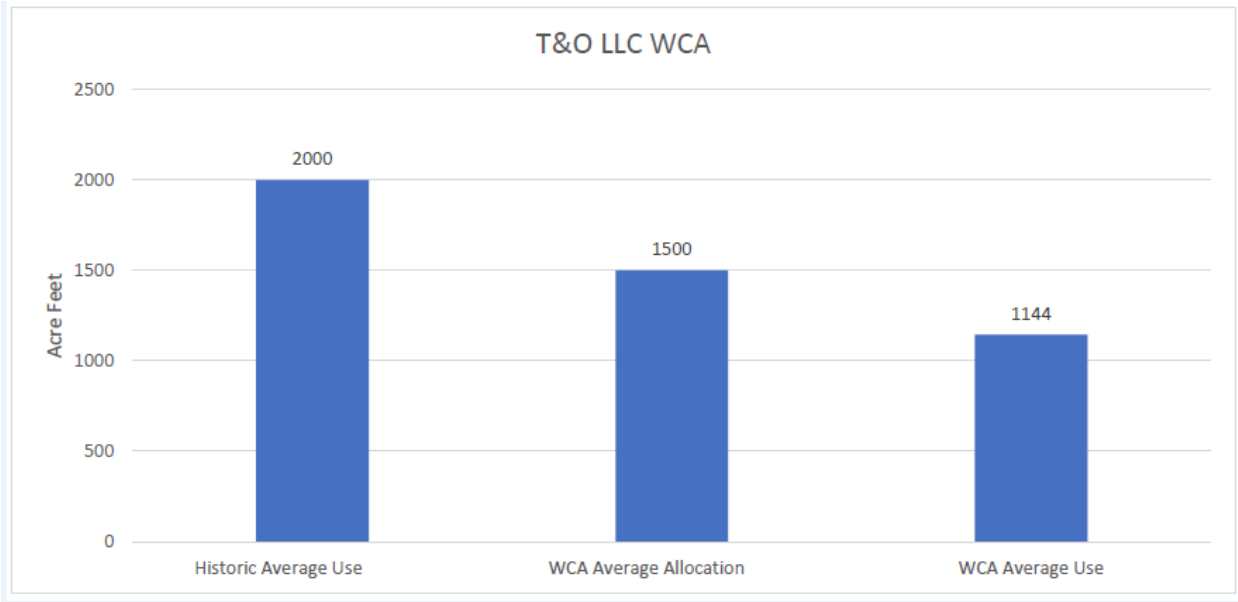
The total average use during this WCA was 1,144 acre-feet. The total amount of unused WCA allocation for this WCA was 1,067 acre-feet over the entire period.

Review of Corrective Control Provisions:

This WCA had eight irrigation wells within its geographic boundaries. The only flexibility within the plan was the combining of an allocation between two wells. Water Right File Nos. 7,517 and 34,769 were approved for the flexibility thru the management plan. The management plan allowed a total allocation of 238 acre-feet during a calendar year as a combined total between these two wells. The management plan allowed each well the opportunity to exceed the base water right annual authorized quantity in a calendar year as long as that total combined allocation of 238 acre-feet was not exceeded in a calendar year.

File No. 34,769 did exceed the base water right’s annual authorized quantity one year during the WCA, however during that year (2019) it only pumped 9 acre-feet over the base water right authority (109 acre-feet). A total of 238 acre-feet was never pumped between the two wells in a calendar year. Approximately 75% of that quantity was pumped in any of the three years.

As of the end of the 2021 irrigation season, no adverse impacts have been noted and no reports were received from nearby well/landowners. Flexibilities afforded are a major positive attribute of the WCA and the goal of water that was conserved. (See chart below)



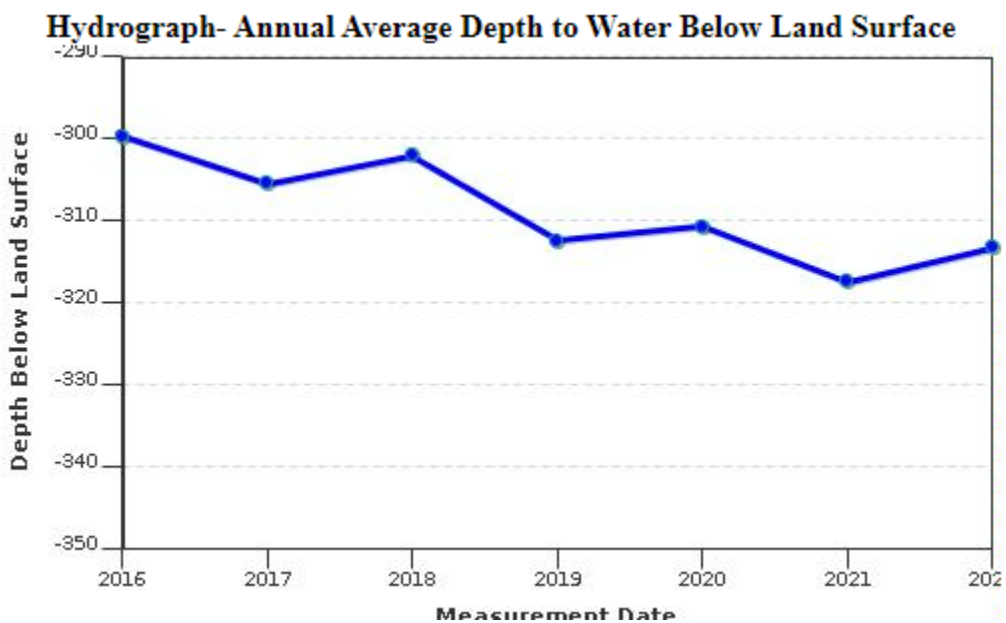
Review of Compliance Monitoring and Enforcement:

During the period of this WCA, there were no compliance or enforcement issues relating to the water rights and the corrective controls of the management plan.

Review of Water Level Changes:

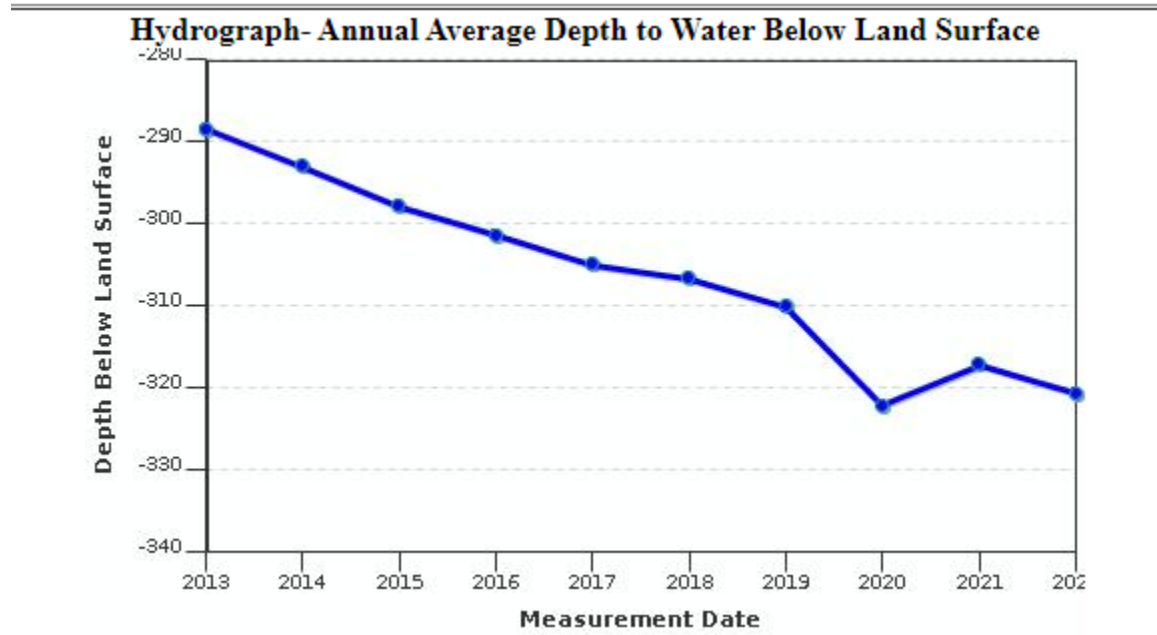
Location:

On-Site KGS index well: 26S-33W-20 ACC

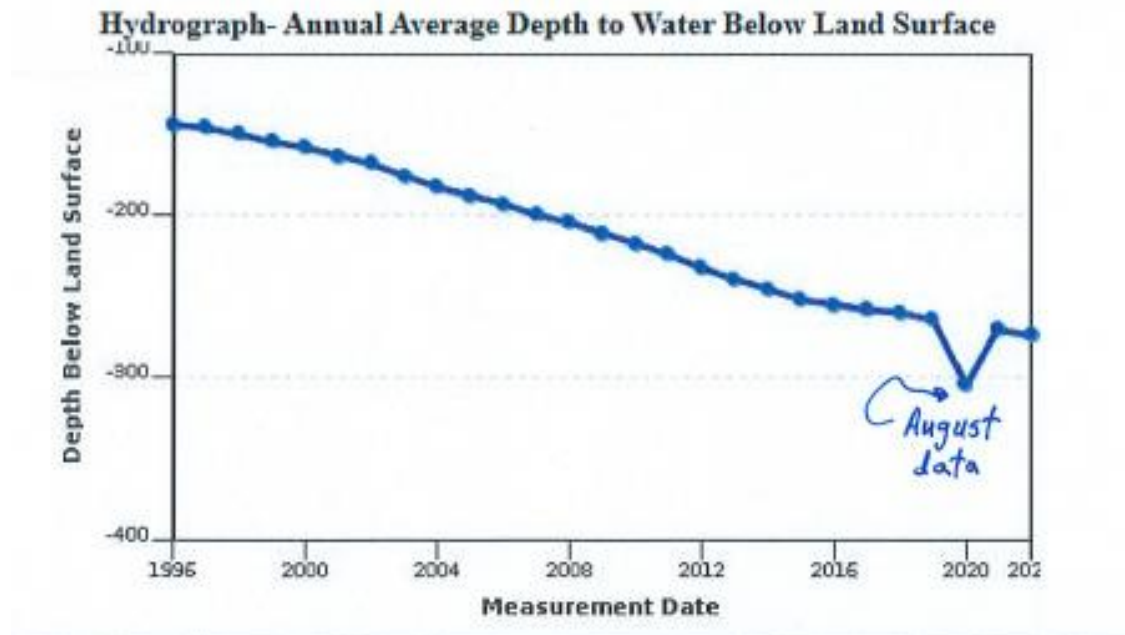


Location:

Nearby well measured annually by KS Geology Survey: 26S-33W-30 ADC



Nearby well measured annually KGS Kansas Geological Survey: 26S 33W 10- CCD 01



Review of Economic Impacts:

No official economic reports have been published at this time but after speaking with the Kansas Water Office regarding the Water Technology Farm that exists on the WCA geographic boundaries, that is also associated with this WCA, it has been stated that reducing water use does save money. The owner/operator of the T&O LLC WCA, Tom Willis, stated that by making the appropriated measures to increase irrigation efficiency this ultimately reduced the need to pump more water; thereby reducing the cost of fuel to pump the wells, and reducing other inputs such as fertilizer, herbicides, and wear and tear of equipment that relates to costs and repairs. As well, other methods to increase crop yield required less inputs on the crops overall and have saved additional costs by the end of the season. In conclusion, this WCA in conjunction with a Water Technology Farm has provided more yield with less, thereby allowing for more profit after harvest.

Review of Public Interest:

The T&O LLC WCA has had no appreciable negative impacts on the public interest. Conversely, it can be stated that the conservation of water along with extending the useable life of the Ogallala Aquifer in that regional area, on the land owned by T&O LLC, has positively impacted the public interest area. Along with the existing Water Technology Farm, being the first of its kind in the Ogallala region concentrating on technology to conserve water, Water Technology Farms have grown statewide to approximately 18 farms by the end of calendar year 2021.

Summary of Review by KDA-DWR:

It is determined that this WCA has met its goals throughout the designated term. This WCA conserved over 25% of its original WCA allocation; thereby saving much more water beyond the agreed original WCA reduction. By conserving this quantity of water, water levels have become sustainable locally, as compared to a nearby well outside the WCA boundary. The owners of this WCA met all requirements of the WCA Consent Agreement and Order and had no legal issues with KDA-DWR. In summary, should the owners voluntarily choose to renew their Water Conservation Area plan, it should be a positive step again in achieving conservation in the local area.