

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 2016 through December 2018

Review of Total Water Use of Water Rights Enrolled:

During the term of this WCA, one of the corrective controls allocated no more than 1,511 acre-feet per calendar year to be used for irrigation use. The total water use reported annually, under the referenced water rights, during the term of this WCA are as follows:

2016 Use- 1,150 acre-feet
2017 Use- 954 acre-feet
2018 Use- 950 acre-feet

Given these total water use reports, the total average use during this WCA was 1,018 acre-feet. The total amount of unused WCA allocation for this WCA was 1,478 acre-feet over the entire period.

Review of Corrective Control Provisions:

This WCA had six 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 a flexibility thru an approved term permit. The term permit allowed a maximum total of 238 acre-feet to be allocation during a calendar year as a combined total between these two wells. This term permit 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 each year during the WCA, however it never pumped more than 8 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.

As of the end of the 2018 irrigation season, no adverse impacts have been noted and no reports were received from nearby well/land owners. The flexibility afforded is one of the major positive issues of the WCA as well as water conserved.

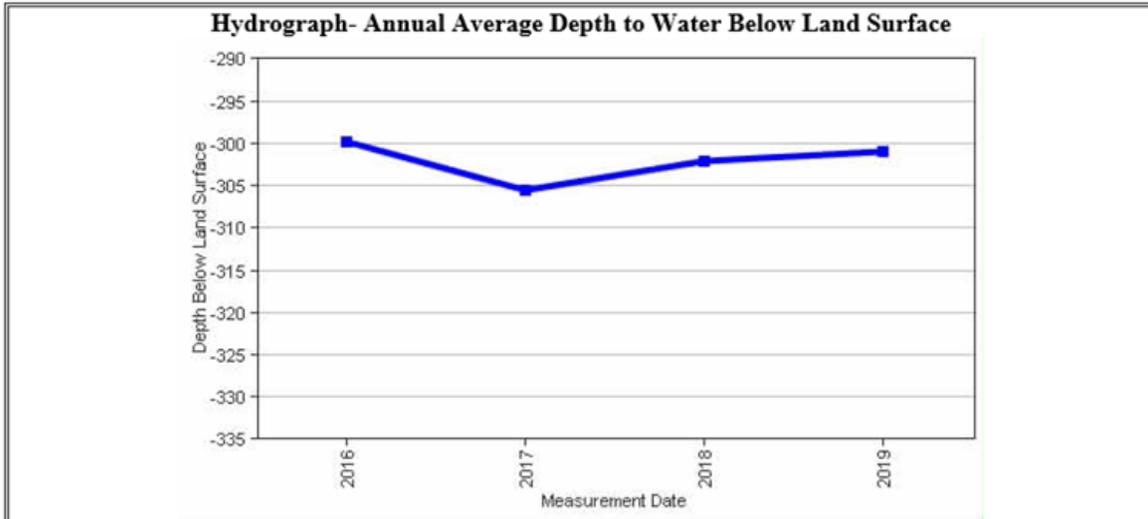
Review of Compliance Monitoring and Enforcement:

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:

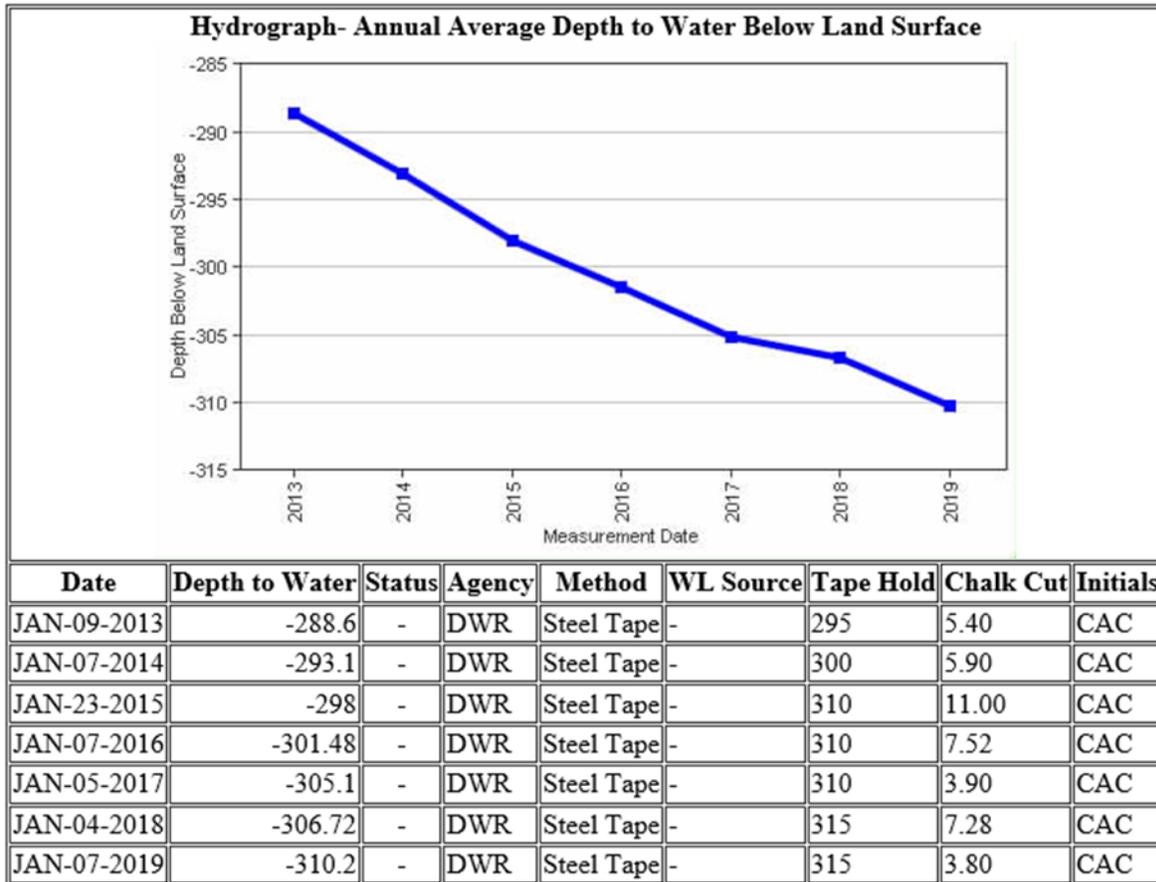
On-Site KGS index well: 26S-33W-20 ACC



Date	Depth to Water	Status	Agency	Method	WL Source	Tape Hold	Chalk Cut	Initials
JUN-30-2016	-299.78	-	KGS	Electronic-Tape	-	-	---	ECR
JAN-05-2017	-296.14	-	DWR	Steel Tape	-	310	12.29	CAC
FEB-21-2017	-294.49	-	KGS	Electronic-Tape	-	296.06	---	ECR
SEP-01-2017	-330.94	-	KGS	Electronic-Tape	-	-	---	ECR
NOV-15-2017	-300.44	-	KGS	Electronic-Tape	-	-	---	ECR
JAN-04-2018	-297.59	-	DWR	Steel Tape	-	310	10.84	CAC
FEB-20-2018	-298.1	-	KGS	Electronic-Tape	-	299.67	---	AEB
MAY-23-2018	-310.78	-	KGS	Electronic-Tape	-	-	---	ECR
JAN-07-2019	-301.82	-	DWR	Steel Tape	-	310	6.61	CAC
FEB-28-2019	-300.22	-	KGS	Electronic-Tape	-	301.79	---	ECR

Location:

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



Review of Economic Impacts:

No official economic reports have been published at this time but after speaking with the Kansas Water Office in regards to 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 ground 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 currently 10 farms by the end of 2018 and are growing with each year.

Summary of Review by KDA-DWR:

It is determined that this WCA has met its goals throughout the designated term. This WCA conserved nearly one-third of its WCA allocation; thereby saving much more water beyond the agreed original WCA reduction. By conserving this quantity of water, we have seen water levels 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, we see no need to deny a request, from the owner(s), should they request to renew this WCA for another term.