Water Conservation Area (WCA) Official Review Review of the Consent Agreement and Order Designating a WCA Westside Dairy WCA; Stanton County, KS January 2016 through December 2018

### Review of Total Water Use of Water Rights Enrolled:

During the 3-year term of this WCA, water use was limited to 928 acre-feet per calendar year for irrigation and/or stockwater use. The total water use reported annually, under the listed water rights, during the term of this WCA are as follows:

2016 Use-	719 acre-feet.
2017 Use-	739 acre-feet.
2018 Use-	628 acre-feet.

Given these total water use report, the total average use during this WCA was 695 acre-feet. The sum of the unused allocation for this WCA was 698 acre-feet.

#### **Review of Corrective Control Provisions:**

This WCA had one irrigation well and two stockwater wells within its geographic boundaries which were used for irrigation and stockwater purposes. The only flexibility within the plan was the combining of an allocation between three wells, Water Right File Nos. 8,209 and 9096 ID-1 & ID-2 thru approved term permits. The term permits allowed a total of 928 acre-feet to be pumped as a combined total between these three wells each year for either use. These term permits allowed each well the opportunity to exceed the base water right authority in a calendar year as long as that total combined base authority is not exceeded in a calendar year.

File No. 9096 ID-1 & ID-2 did exceed their base water right's authority during these years but the total allocation of 928 acre-feet was never exceeded in any calendar year during this period.

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

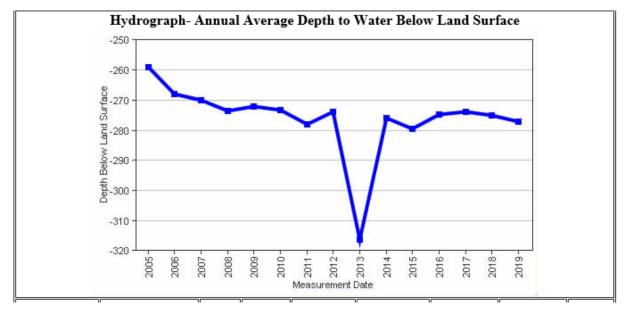
### **Review of Compliance Monitoring and Enforcement:**

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

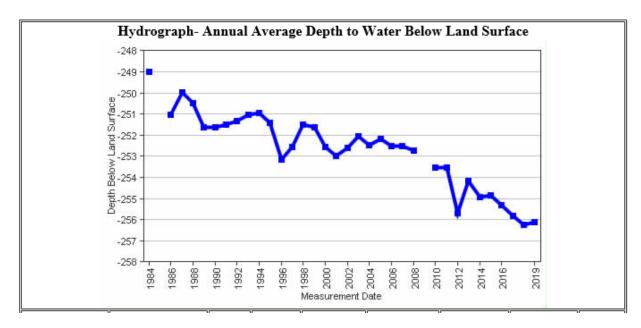
### **Review of Water Level Changes:**

Below are the nearby observation wells documented in the management plan.

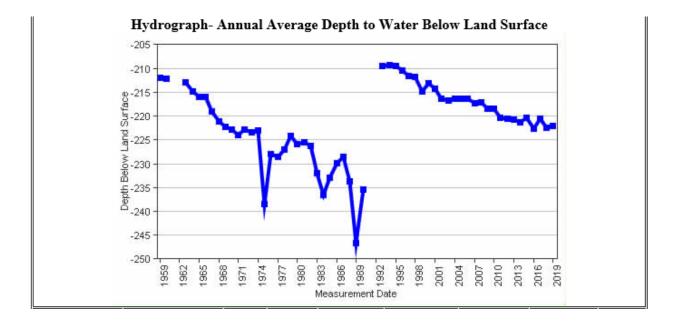
### Location: 28S-41W-17CDD



# Location: 28s-42w-20BBC



# Location: 28S-42W-32BBB



#### **Review of Economic Impacts:**

No official economic reports have been published at this time. Implementation of the Westside Dairy WCA has provided several positive economic impacts related to dairy operations and sustainability. The flexibility to supply water to the dairy from any of the three facility wells provides a very desirable level of security and also ensures a backup source of water in the event of a well failure. This assurance has allowed the dairy to operate at its design capacity.

Compliance with the facility's KDHE-mandated Nutrient Management Plan is necessary to continue dairy operations. Nutrient accumulations in the fields used for wastewater (effluent) application must be maintained at or below threshold levels. The WCA plan provides the flexibility to alternate irrigation with wastewater and groundwater. Such an approach limits nutrient accumulation while maximizing crop growth and nutrient uptake. This facilitates compliance with KDHE regulations and allows the use of the same fields to be sustained. The alternative is to purchase additional land and install more infrastructure for irrigation operations. The costs associated with this alternative would ultimately be infeasible, resulting in a reduction of the dairy capacity or providing an incentive for relocation.

### **Review of Public Interest:**

The West side WCA has had no known 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 Westside Dairy, has positively impacted the public interest area. The closet wells are over one half mile of the WCA wells. There has not been any concerns or issues reported in regards to this recent WCA and no negative impacts have been determined based on the corrective controls authorized.

## 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, there has been no observable increase of average water level declines as seen in the nearby observation wells historical records. The owners of this WCA met all requirements of the WCA Consent Agreement and Order and had no noncompliance issues with KDA-DWR. In summary, we see no need to deny a request, from the owner(s), should they request another WCA for another term.