## MANAGEMENT PLAN

# For the Designation of a Water Conservation Area (WCA) Syracuse Dairy, LLC - Westside Dairy Location WCA, Stanton County January 2016 through December 2018

In order to reduce the rate of decline of water levels in our aquifer and extend the life of our water supply, we, the undersigned water right owners propose the following management plan, pursuant to 2015 Kansas Session Laws, Chapter 37, Sec. 1 (WCA Law), to form the basis of a Consent Agreement and Order Designating a Water Conservation Area (WCA).

## **Goal Expression**

The water right owners of the Syracuse Dairy, LLC - Westside Location WCA desire to conserve and extend the productive life of the aquifer in our region. We have concluded that conserving Ogallala aquifer water today will increase the value and viability of our water rights and water resources for future generations.

Syracuse Dairy, LLC – Westside Dairy Location is an existing facility that is permitted to milk 4,200 head of lactating cows as well as confine an additional 1,100 head of heifers. The facility holds a National Pollutant Discharge Elimination System (NPDES) permit issued by the Environmental Protection Agency in conjunction with the Kansas Department of Health and Environment. A Nutrient Management Plan (NMP) is required as part of this permit. There are four irrigated circles near the facility that are used for land application of effluent generated by the facility.

In addition to conserving water and prolonging the life of the aquifer, implementation of this WCA will allow for long-term compliance with the NMP and NPDES permit. Flexibility is needed to rotate freshwater around to the designated land application areas in effort to maximize yield goal and nutrient uptake. The WCA will create a balance between water conservation and nutrient applications.

## Water Rights Enrolled and Geographical Boundaries

The Syracuse Dairy, LLC – Westside Location WCA shall include the following water rights and all points of diversion associated with those water rights. The following legal descriptions define the areas included in Syracuse Dairy, LLC - Westside Dairy Location WCA:

Water Right Number	Twp Range Sec Qual ID
8209	28S 42W 14 SWNENW 3
9096	28S 42W 11 NWNENW 1
	28S 42W 11 NWNWNW 2

The current appropriation for the water rights included in the WCA totals 1,216 acre-feet. The 10-year average (calendar years 2003 to 2012) is 1,092 acre-feet. All water diversions within the Syracuse Dairy, LLC - Westside Dairy Location WCA are to be collectively restricted to an allocation of 928 acre-feet (stockwater and irrigation) in each of three consecutive one-year

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periods from January 1, 2016 to December 31, 2018. This is a 15% conservation factor based on their annual use from 2003 through 2012.

The geographic boundary for the place of use for the stockwater and irrigation use is shown on the attached map and described as follows:

All (160 acres) of the Northwest Quarter (NW¼) (dairy facility) 120 acres (center pivot irrigation circle) in the Northeast Quarter (NE¼) 240 acres (center pivot irrigation circles) in the south half (S½) All in Section 11, 120 acres (center pivot irrigation circle) in the Northwest Quarter (NW¼) In Section 14

Both in Township 28 South, Range 42 West, Stanton County, Kansas.

# **Findings Regarding Groundwater Conditions**

The WCA Law requires a finding that one of the following conditions be present within the area proposed as a WCA.

- Groundwater levels in the area in question are declining or have declined excessively;
- The rate of withdrawal of groundwater in the area equals or exceeds the rate of recharge within such area;
- Preventable waste of water is occurring or may occur within the area in question; or
- Unreasonable deterioration of the quality of water is occurring or may occur within the area in question.

We have determined that the following conditions exist:

- Groundwater levels in the area in question are declining or have declined excessively;
- The rate of withdrawal of groundwater in the area equals or exceeds the rate of recharge;
- Preventable waste of water is occurring or may occur within the area in question.

See the attached maps and figures supporting these findings and observations:

- Water Use Density, 2003 to 2012
- Changes in Water Levels, 2003 to 2012
- Location Maps
- Change in Water Level, Observation Well
- Estimated Useable Life Map

These conditions necessitate the implementation of the Syracuse Dairy, LLC - Westside Dairy Location WCA.

# **Duration and Terms**

The Syracuse Dairy, LLC - Westside Dairy Location WCA shall be in effect upon issuance of a Consent Agreement and Order Designating a Water Conservation Area, approved by the undersigned and the Chief Engineer of the Division of Water Resources. The proposed term of the WCA is 3 years, with an option to renew for three 5-year evaluation periods.

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- a) All allocation values shall be expressed in terms of total water volumes for each of the three 1-year evaluation periods.
- b) All water rights shall be limited to no more than 928 acre-feet annually over three 1-year periods beginning January 1, 2016 and ending December 31, 2018.
- c) Wells pumping to a common system shall be provided a single allocation (982 acre feet annually) for the total system acres and dairy facility. The total amount pumped by all of the wells involved must remain within the system allocation.
- d) Water rights may, at the discretion of the owners, be combined into a single allocation account with flexibility of pumping the multiple wells within the account as directed by the owner, provided the total account allocation is not exceeded and the annual authorized quantities of the constituent water rights are not exceeded
- e) Temporary transfers (or Term Permit application) of allocations between water rights may be made anywhere within the boundaries of Syracuse Dairy, LLC Westside Dairy Location WCA. Said transfers shall be in effect for the balance of the current allocation time period. No transfer shall result in an allocation that exceeds the authorized amount for the water right receiving the transfer unless a Term Permit if filed and approved within the conditions expressed in this Management Plan.
- f) No water right shall receive more than the currently authorized quantity for that right, times five (5).
- g) No water right shall be allowed to pump more than its authorized annual quantity in any single year unless a Term Permit if filed and approved within the conditions expressed in this Management Plan.
- h) In all cases the allocation shall be assigned to the point of diversion and shall apply to all water rights and acres involving that point of diversion.
- i) Moreover, in all cases the original water right, such as it existed before the WCA, shall be retained.

# **Review of Effectiveness**

A review of the WCA shall be completed in December 2018 to ensure the above terms are appropriate and are achieving the stated goals of the Syracuse Dairy, LLC - Westside Dairy Location WCA. The review shall be completed prior to renewing for another 5-year period (prior to March 1, 2019). Upon review, and a finding by the Chief Engineer that the WCA has achieved the goals stated herein, the terms of the WCA may be continued upon written request by the water right holders to the Chief Engineer.

#### **Additional Flexibilities**

For additional producer flexibility, the Syracuse Dairy, LLC – Westside Dairy Location requests that water rights enrolled in the WCA may be combined into a single allocation account with flexibility of pumping the multiple wells within the account, provided the total account allocation is not exceeded. Temporary transfers (or Term Permit) of allocations between water rights may be made anywhere within the WCA boundaries understanding that no transfer shall result in an allocation that exceeds the authorized amount for the water right receiving the transfer. Term Permits issued by the Chief Engineer may be necessary to approve this authority and to administer this allocation. Any Term Permit that is filed and approved, shall be considered to be automatically renewed for the life of this WCA unless there is known impairment or not in the public interest or an alternative request is made by Syracuse Dairy, LLC – Westside Dairy Location.

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Since this WCA agreement requests flexibilities such as changes in places of use, an evaluation was conducted by staff at the KDA Garden City Field Office to assess potential impacts resulting from moving pumping locations, with special attention given to the perimeter of the proposed WCA, to ensure neighboring water rights will not be harmed.

It is proposed that rotation of the irrigation land within the Management Plan be approved and monitored each year by the KDA, DWR. Currently 400 acres are authorized to be irrigated, which is also the current "base acres" of Water Right, File No. 8,209. It is proposed that a total of 480 acres (as described above in this plan under "Water Rights Enrolled and Geographical Boundaries" be authorized by this Management Plan. The Plan shall be limited so that the net acres physically irrigated in any one calendar year (Of those 480 acres, only 240 acres (two center pivot irrigation circles)) shall not be exceeded. The owners of the Management Plan shall contact the KDA, DWR, Garden City Field Office by March 1st each calendar year to confirm and document the planned acres that will be irrigated for that calendar year. The KDA, DWR, Garden City Field Office will make frequent site checks throughout the year to ensure that only those confirmed acres are irrigated for that year.

## Corrective Control Provisions and Plan for Conservation

WCA Law states that Corrective Control Provisions may include any of the following:

- Closing the water conservation area to any further appropriation of groundwater. In which event, the chief engineer shall thereafter refuse to accept any application for a permit to appropriate ground water.
- Determining the permissible total withdrawal of groundwater in the water conservation area each day, month or year, and apportioning such permissible total withdrawal among the valid groundwater right holders in such area in accordance with the relative dates of priority of such rights.
- Reducing the permissible withdrawal of groundwater by any one or more appropriators thereof, or by wells in the water conservation area.
- Requiring and Specifying a system of rotation of groundwater use in the WSA area.
- Any other provisions necessary to effectuate agreed-upon water conservation goals consistent with the public interest.

The following corrective controls will be in effect within the Syracuse Dairy, LLC - Westside Dairy Location WCA during the term of the WCA:

- Following adoption of the proposed modification to K.A.R. 5-23-4, GMD#3 will be closed to any further appropriation of groundwater. In which event, the chief engineer shall thereafter refuse to accept any application for a permit to appropriate ground water.
- All water right owners within the Syracuse Dairy, LLC Westside Dairy Location WCA shall be responsible for ensuring their water flowmeters are in compliance with state and local law(s). Any water right owner or authorized designee who finds a flow meter that is inoperable or inaccurate shall within 48 hours contact the KDA, DWR, Garden City Field Office concerning the matter. Whenever an inoperable or inaccurate meter is repaired or replaced, the owner or authorized designee shall notify the KDA Garden City Field Office within seven (7) days on a form prescribed by the Chief Engineer of the water flowmeter installation and any water flowmeter repair or replacement event.

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# **Compliance Monitoring and Enforcement**

The following compliance monitoring and enforcement provisions are proposed. This section also includes any specific provisions regarding measuring or reporting water usage.

There are three recognized observation wells within the Syracuse Dairy, LLC - Westside Dairy Location WCA that have for many years been measured annually by the Kansas Geological Survey (KGS). See attached Water Right Area map. These wells will continue to be measured annually and the data collected will help in evaluating the effectiveness of the WCA. An onsite observation well may be necessary to monitor the local water level.

Syracuse Dairy, LLC - Westside Dairy Location will submit an annual report (spreadsheet) no later than March 1<sup>st</sup> of each calendar year detailing the quantity of water diverted under all wells combined, the total acres irrigated, the inches per acre, and the quantity of water remaining for each 5 year period.

Syracuse Dairy, LLC – Westside Dairy Location will agree to maintain a record of the quantity diverted under the approval at the first of each month of the period of authorization. Further, they agree to make such information available upon the request of the KDA, DWR, Chief Engineer or his/her authorized representative.

Backup measurements will be supported or an alternate measurement device in the event that the water flowmeter record is questionable or not reliable.

Water flowmeter will be sealed to the measurement chamber by the KDA-Division of Water Resources, during the duration of this management plan to ensure an accurate water use record.

Syracuse Dairy, LLC - Westside Dairy Location acknowledges that failure to abide by the terms of this agreement may result in the termination of the WCA. Failure to abide by the terms, conditions, and limitations of the individual water rights will be subject to the civil penalties outlined in K.A.R. 5-14-10.

# **Due Consideration for Past Conservation**

As described in the law, a Water Conservation Area (WCA) management plan shall give due consideration to water users who have previously implemented reductions in water use resulting from voluntary conservation measures.

Through effluent application at Syracuse Dairy, LLC - Westside Dairy Location, an average of 476 acre-feet of water has been reused according to agronomic practices outlined in the NMP. The effluent is used to supplement irrigation practices and is an efficient reuse of stockwater. This reuse of water shall be recognized to support the additional acres to be added in the Management Plan and to help support the rotation of acres with the Management Plan.

The corrective control provisions of the Syracuse Dairy, LLC - Westside Dairy Location WCA cannot conflict with the rules and regulations of GMD#3. If a Local Enhanced Management Plan (LEMA) or Intensive Groundwater Use Control Area (IGUCA) is formed after the initiation of Syracuse Dairy, LLC - Westside Dairy Location WCA, and the WCA is partially or wholly within the LEMA or IGUCA, the corrective control provisions that result in the greater overall

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conservation of water resources shall prevail. The Chief Engineer is authorized to amend the provisions of the WCA to conform to any rules, regulations or requirements that result in greater conservation of the water resource.

#### State Law

We acknowledge that the Syracuse Dairy, LLC - Westside Dairy Location WCA is subject to compliance with all other applicable state laws.

## Member addition, withdrawal, and removal

Water right owners and their associated water rights and geographic boundaries may be added to the Syracuse Dairy, LLC - Westside Dairy Location WCA through written notification to the Chief Engineer and all living members of the WCA, and amendment to the management plan laying out the water rights and legal descriptions of the areas to be added. A statement permitting the addition must be signed by all living participants in the WCA. If the terms and conditions of the newly enrolled water rights differ from the terms and conditions described in the original Syracuse Dairy, LLC - Westside Dairy Location WCA, the management plan and associated consent agreement shall be modified to describe the changes.

Members of the Syracuse Dairy, LLC - Westside Dairy Location WCA may withdraw from the consent agreement at any time through written notification to the Chief Engineer and all living members of the WCA. A statement permitting the withdrawal must be signed by all living participants in the WCA.

#### Termination

The Syracuse Dairy, LLC - Westside Dairy Location WCA agreement may be terminated by written notification, signed by all living members of the WCA, to the Chief Engineer of the intent to terminate.

#### Assurances

This management plan and any related orders will not permanently alter the authorized quantity, rate, ownership and places of use connected to any water right enrolled in the Syracuse Dairy, LLC - Westside Dairy Location WCA.

## **Review of Other Applicable Requirements**

Upon review, the Syracuse Dairy, LLC - Westside Dairy Location WCA management plan was found to effect equal or greater overall conservation than applicable GMD regulations, LEMA, and IGUCA requirements.

WATER RESOURCES RECEIVED We, the undersigned certify that we are the owners of the aforementioned water rights and hereby collectively approve and submit this management plan for approval by the Chief Engineer of the Kansas Department of Agriculture, Division of Water Resources.

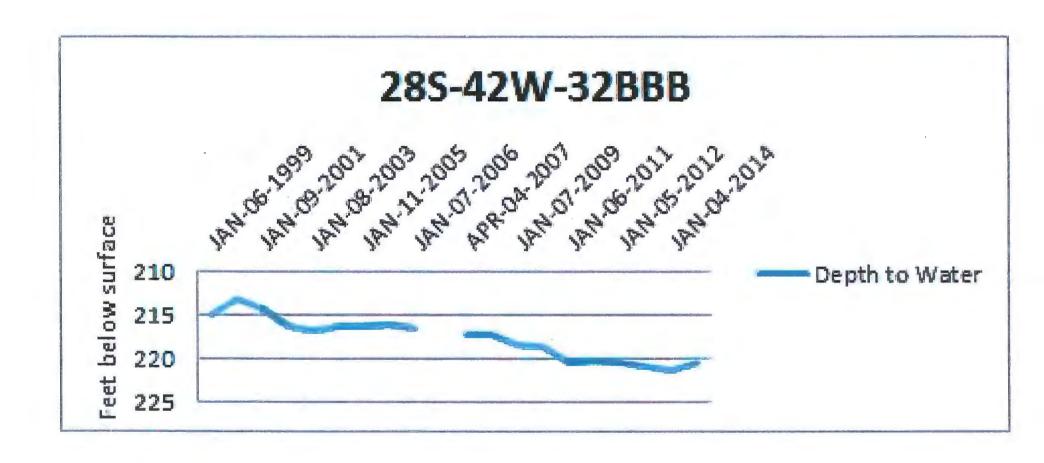
Water Right Owner

Jay Houtsma 11-24-2015

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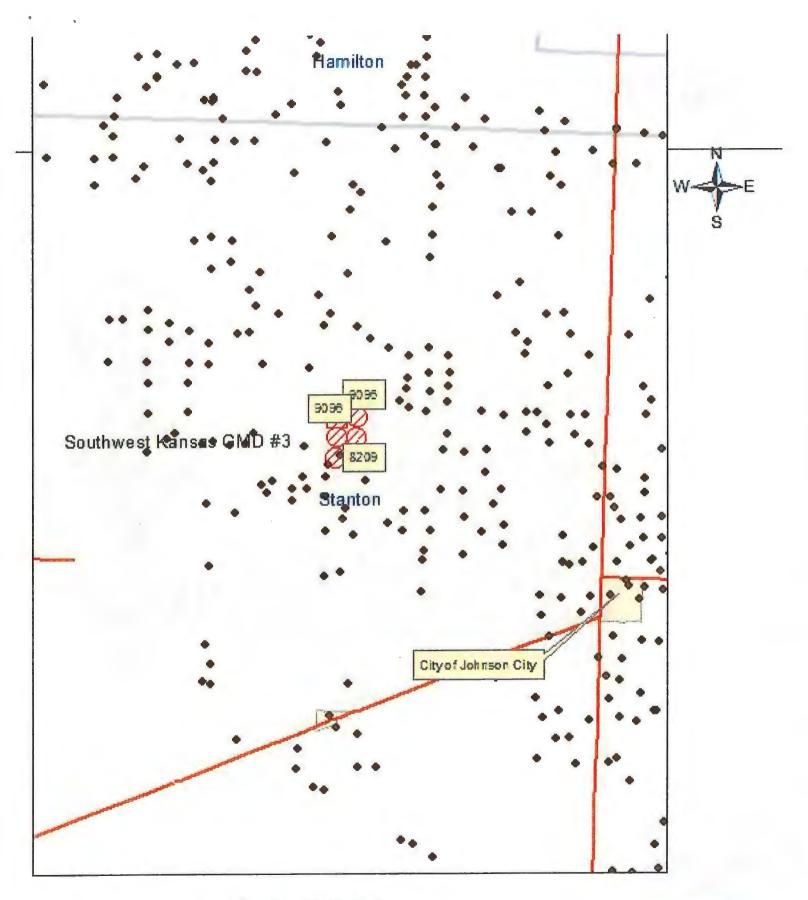
KS DEPT OF AGRICULTURE

**DEC 03 5012** HECEINED WATER RESOURCES Feet below surface 240 4 N 40 252 250 258 AUG-22-1984 JAN-07-1987 JAN-11-1989 JAN-22-1991 FEB-04-1993 JAN-11-1995 28S-42W-20BBC JAN-08-1997 JAN-06-1999 JAN-09-2001 JAN-08-2003 JAN-11-2005 JAN-25-2007 JAN-06-2008 JAN-05-2010 JAN-05-2012 JAN-04-2014 Depth to Water





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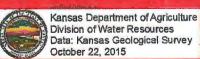
1 inch = 12,500 feet

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Estimated Usable Life Remaining in the High Plains Aquifer Township 28 S Range 42 W Sections 11 and 14 EUL is based on 2012-2014 section-level KGS data for Saturated Thickness (ST), revised minimum saturated thickness to support 400 gpm pumping (Minimum Threshold), USGS specific yield, recharge, and DWR average groundwater use (2009-2013). EUL Reductions are based on percentages of 2009-2013 average reported groundwater use. Groundwater level change is from KGS 2002-2014 measurements.



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09-13 GW Use Density: 229 AF/year Avg Precip Recharge: 0.5 inches/year 02-14 Groundwater Level Change: -7.6 ft/year 2014 Saturated Thickness (ST): 30 ft Minimum ST to support 400 apm: 47 ft Storage Remaining: 2,864 AF Estimated Usable Life (EUL): 14 years EUL with 10% reduction; 16 years EUL with 20% reduction; 18 years EUL with 30% reduction: 21 years

28S42W11 Parameters

**922596** 

ST below minimum threshold to support 400 gpm pumping

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