

# Source Water Protection, Syracuse, Kansas Style

Native vegetation provides a natural buffer in the Source Water Protection Area.

Terms like “wheelies, hang time, drag strips, and dunes” probably wouldn’t be found in your run-of-the-mill Source Water Protection handbook. Then again, the city of Syracuse doesn’t have your run-of-the-mill Source Water Protection Area, either. Oppose it or favor it, the 1300-acre Syracuse Sand Dunes Park may seem like nothing more than an off-roading good time. However, to the city of Syracuse, it is an opportunity to protect their water source and make a positive economic impact on the community at the same time.

Syracuse is located in Hamilton County, a border county to Colorado along the Arkansas River. With nearly 2,000 total county residents, the city of Syracuse currently provides water service to 850 customers within the city

limits. Drawing water from the Coolidge-Syracuse Buried Channel, Syracuse has always been fortunate to draw good quality water in good quantities as well. Relying on three wells south of the river was adequate for the city, but city Superintendent John Armstrong, along with a progressive city council, had the foresight to purchase property surrounding the well field in 1994 in order to drill and protect a fourth well.

“Originally we purchased the land simply for wellhead protection knowing we were upstream from our older wells and also to protect the two mile radius of the west well,” said John Armstrong. This 1300-acre property purchase allowed the city to test drill a fourth well in 1995 and complete the well in 2000, which is located 2.25 miles west of the three original wells. The quality of Syracuse’s water has always been good; the three older wells have had an increasing hardness over the last 25 years to 280 ppm, while the new well is at 220 ppm.

“Around 2004 the city council decided to look into the possibility of opening a recreational off-road vehicle park, and a large part of the thinking was to develop economic growth. This is hard to do in this county since we have very little water under most of the county. The Ogallala Aquifer is in only the southern part of our county with almost no water north of the Ark basin. Many wells in the northern part of the county are 1,000 feet deep producing two or three gpm, hindering economic development that takes very little water and is not directly tied to agriculture,” stated Armstrong.



John Armstrong, Syracuse, and Bert Zerr, KRWA, discuss the city wells located in the Sand Dunes Park.



With 1,300 acres of drifting sand, sage, and trails, the Syracuse Sand Dunes Park is a unique attraction for Kansas.

The park opened in spring of 2008, and Syracuse Sand Dunes Park has become a destination of choice for off-road vehicles goers. Open 24 hours a day, seven days a week, the minimal charge of \$5 per vehicle is a pretty inexpensive way for individuals and families to have a great outdoors experience. Nearly half of the acreage is drifted sand while the other half is sagebrush and trails. New amenities are continuously being added. Improvements have made the park more comfortable to visitors and aesthetically pleasing, and complimentary to the landscape. Last October the city planted 24 trees in the parking, camping, and RV hookup areas. With offering public restrooms, camping sites and a 40-acre stocked fishing pond, the annual average of 5,000 park users is sure to grow. “We would like to see that number grow to around 20,000 per year. We patterned our park after The Little Sahara in Waynoka, Oklahoma; we know they have 200,000 plus users at \$10 per user. We have also realized that they are located around a much bigger population, which would account for higher traffic,” said Armstrong.

So how does an ATV park with 5,000 recreational users equate to good Source Water Protection? This progressive step taken by the city has enabled them to dictate what actions are occurring within their Protection Area. While some may argue that ATV’s permitted within the 2,000-foot radius around the wells is not a good protection measure,

Syracuse has carefully thought that through. They have sand-loving emergency response vehicles on-site, fully equipped to handle not only medical emergencies, but spills and rollovers as well. Since all four wells are protected with well houses, no immediate danger threatens the wells

themselves, but John says they may put some future thought into “buffering” around the wells, possibly limiting ATV access within a few hundred feet of the wells. These ideas and issues may be addressed through the upcoming development of a Source Water Protection Plan.

When asked about the future economic impact of this park in relation to the community, Superintendent Armstrong is optimistic. “It is too early to tell what the future will bring but we are growing at a small pace which is

alright by us; it is much easier to keep up with camp sites and facilities growth.”

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*Katie Miller joined the KRWA staff in October 2009. She previously worked for Flint Hills Resource Conservation and Development as a Watershed Restoration and Protection Strategy Project Coordinator since 2003. She organized and coordinated the Twin Lakes Water Festival in 2005 – 2009; it has been attended by more than 6,000 participants.*

