# Facilities & Infrastructure

The Facilities & Infrastructure section acts as an inventory of current amenities available to the public. This is a good section to review and hopefully add upon, in the future, with growing facilities and a growing population. This section is also helpful for others to read to see what the community has to offer. This Facilities & Infrastructure section will cover the following components:

- Recreational Facilities
- Education System
- Transportation
- Community Events
- Community Services
- Energy
- Utilities

# Recreational Facilities

#### Country Club

Built in 1971, the Atkinson Stuart Country Club is a semi-private 9-hole golf course. The course is located adjacent to Mill Race Park on Highway 20, less than a mile outside of the Atkinson City limits. Membership is available for purchase, with pricing options listed on the website. The club house is also available to rent for private events. For more information, visit www.atkinsonstuartcountryclub.com or call (402) 925-5330.

#### Atkinson Rodeo Arena

The Atkinson Rodeo Arena is an outdoor arena built in 1972. Scheduling for the arena is handled by the High School Rodeo Association, the current lease holder. For more information on events held at the Atkinson Rodeo Arena, please contact the High School Rodeo Association or visit the website at www.hsrodeo-nebraska.com.

#### **Parks**

Atkinson Mill Race Park and Campground is home to Atkinson Lake, a 14-surface-acre lake located on the Elkhorn River as well as 53.55 acres of hunting and recreational ground. The dam for the lake was originally constructed in 1894 by the Atkinson Milling and Irrigation Company, but has been rebuilt multiple times since, most recently in 1991. During this reconstruction, the lake was deepened and expanded to its current size. Now, the recreation area offers many amenities for visitors.

Primitive camping with electrical hookups allow visitors the option of an overnight stay in the Park. Amenities also include vault toilets, drinking water, picnic table and grills, picnic shelters, playground equipment, and a Bluebird trail. For hunters, available game includes pheasant, rabbit, and waterfowl. The lake is open to non-powered vessels and those powered with conventional outboard electric motors only. The lake supplies fisherman with Bluegill, Channel Catfish, and Largemouth Bass. The Park is owned by the City of Atkinson and located at 47450 877th Rd. For more information call (402) 925-5313.

Atkinson City Park is located on the north side of Atkinson, next to West Holt High School. The park hosts playground equipment, picnic shelters with tables and benches, green space, three ballfields, and the Atkinson Swimming Pool. For more information, please call (402) 925-5745.



#### **Swimming Pool**

The 137,400 gallon Atkinson Swimming Pool was built in 1998 and has a capacity of 150 people. Average daily attendance ranges from 50 to 55 people. The summer hours of operation are from 1:00pm-6:00pm and 7:00pm-9:00pm. Swimming lessons are offered in the mornings from 9:00am-noon. In addition to the swimming area, the pool also boasts a mushroom, lemon drop, and slide with a 90-foot flume.

#### Public Green Space

There is public green space located throughout Atkinson's Downtown District. This adds to the aesthetics and increases the enjoyment of its users, especially for pedestrian traffic. These areas range from donated trees and curbside plantings, to a gazebo and grass space near the Senior Center. While enhancing the downtown aesthetic, they also act as a reprieve from the solid buildings and concrete typical of a downtown business district.

#### Trails

Cowboy Trail runs through northern Nebraska along Highway 275 and Highway 20 from Norfolk to Valentine, passing through Atkinson on its path. This is the nation's longest rails-to-trails path, spanning 195 miles. Activities enjoyed on the Cowboy Trail include walking, running, biking, and horseback riding.

#### **Private Grounds**

Holt Creek Ringnecks is a private hunting ground located at 86592 471st Avenue. Owners Stan and Betty Dobrovolny, provide the amenities to hunting guests, including a tree stand, guides, cleaning and/or packaging, electricity, hunting dogs, transportation, water, home-cooked meals, and lodging. The lodge's goal is to provide a memorable hunting experience to guests with game including turkey, varmint, whitetail deer, prairie chicken, grouse, duck, and American buffalo. More information can be found by visiting www.ringnecks.com.





A great school system is a leading amenity for communities of any size. Atkinson has a strong educational system as well as a strong tradition for their athletic programs. Community members seem to continually be supporters of their great school district, and leaders should continue to promote a strong relationship between the community and the school. Great school districts are one of the leading factors when looking at population growth; new families with young children want to live near a great school where their children can attend. The following section explores West Holt Public Schools and its existing presence in the community.

Education

I district, ween the leading

System

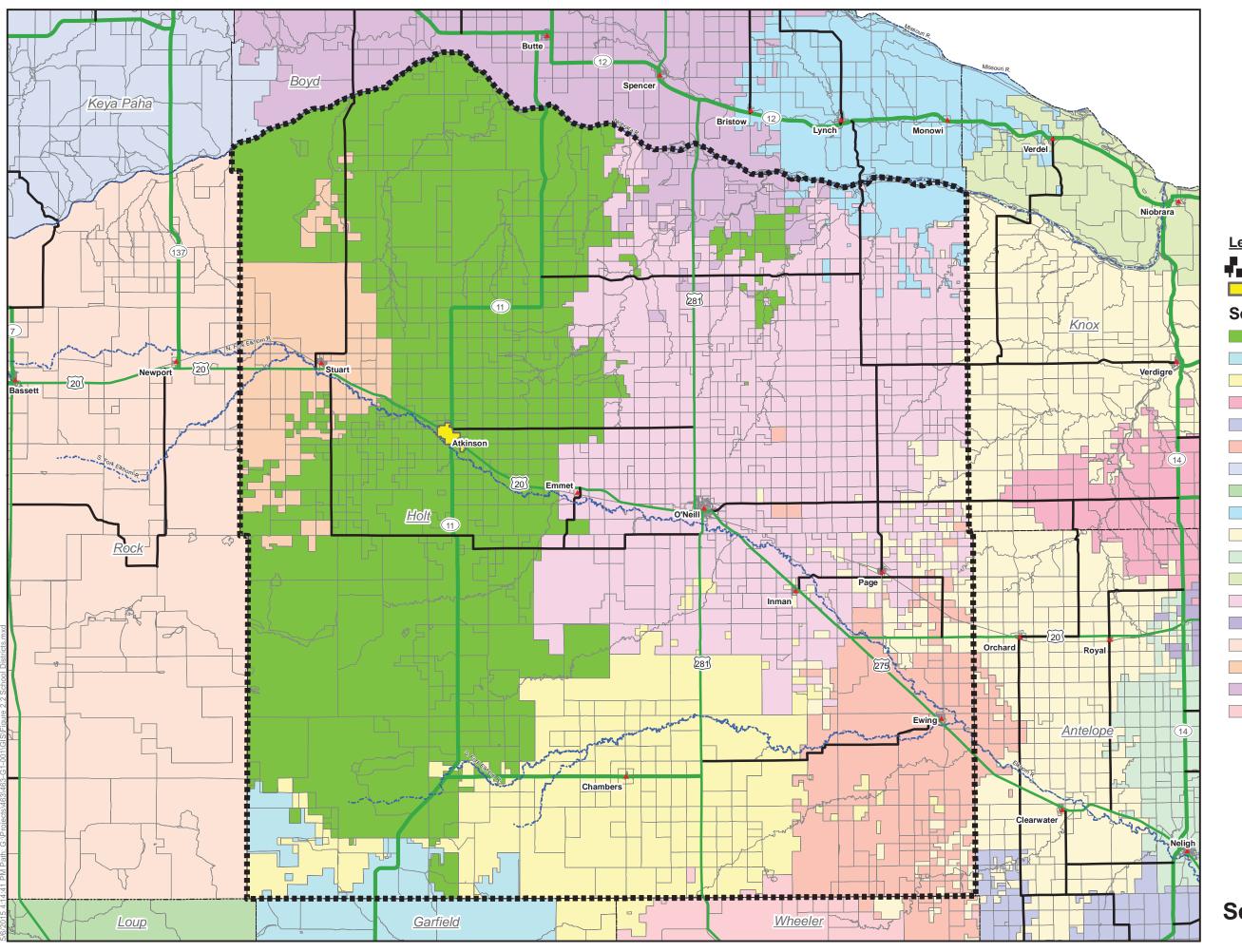
Many rural Nebraska communities and counties put a high value on maintaining and protecting their local schools, because they are vital in preserving community pride as well as supporting local residents and businesses. The following section analyzes West Holt Public Schools compared to other Nebraska school districts in surrounding counties as well as historic school enrollment data for West Holt Public Schools.

Nebraska State Statutes group schools into six different classifications. These classifications are defined by the following law:

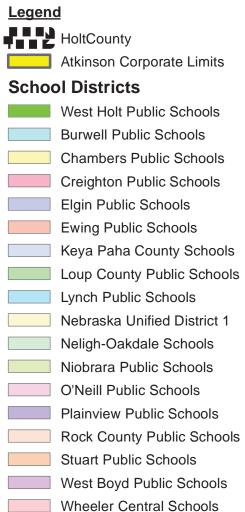
2009 Nebraska Code, Chapter 79 SCHOOLS - §79-102.

- (1) Class I includes any school district that maintains only elementary grades under the direction of a single school board;
- (2) Class II includes any school district embracing territory having a population of one thousand inhabitants or less that maintains both elementary and high school grades under the direction of a single school board;
- (3) Class III includes any school district embracing territory having a population of more than one thousand and less than one hundred fifty thousand inhabitants that maintains both elementary and high school grades under the direction of a single school board;
- (4) Class IV includes any school district embracing territory having a population of one hundred thousand or more inhabitants with a city of the primary class within the territory of the district that maintains both elementary and high school grades under the direction of a single school board;
- (5) Class V includes any school district whose employees participate in a retirement system established pursuant to the Class V School Employees Retirement Act and which embraces territory having a city of the metropolitan class within the territory of the district that maintains both elementary grades and high school grades under the direction of a single school board and any school district with territory in a city of the metropolitan class created pursuant to the Learning Community Reorganization Act and designated as a Class V school district in the reorganization plan; and
- (6) Class VI includes any school district in this state that maintains only a high school, or a high school and grades seven and eight or six through eight as provided in section 79-411, under the direction of a single school board.

West Holt Public Schools (45-0239-000) is classified as a Class III School because it maintains both elementary and high school grades, and because the school district territory has a population of more than 1,000 and less than 150,000. The District boundary for West Holt Public Schools, shown in **Figure 2.1**, encompasses a majority of the western half of Holt County, excluding the region surrounding the Village of Stuart, Nebraska.

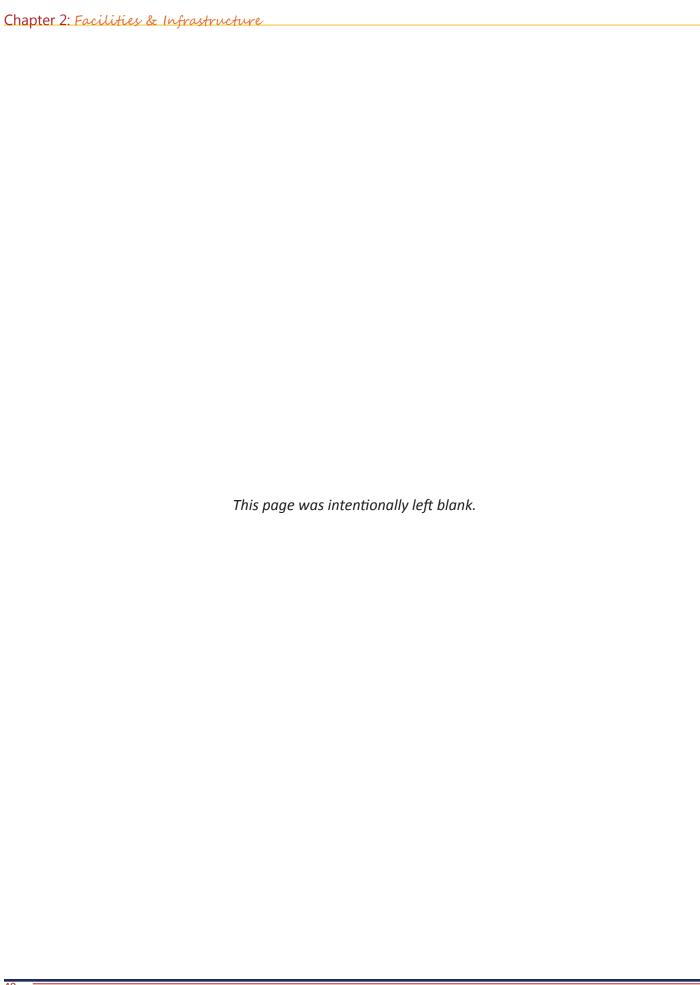






Source: US Census Bureau, Geography Division - 2013

Figure 2.1
School District Boundary
West Holt Public School District



#### **Public Schools**

West Holt Public Schools is part of the Educational Service Unit 8 (ESU 8). ESU 8's mission statement is, "to provide educational leadership and services that improve teaching and learning through quality partnerships." The main office for ESU 8 is located in Neligh, a one hour drive from Atkinson. Learning Centers for ESU 8 include the following locations:

Central Learning Center 402 P Street P.O. Box 89 Neligh, NE 68756 402.887.5559 Eastern Learning Center 300 West Eisenhower P.O. Box 1227 Norfolk, NE 68702 402.371.3454

Central Learning Center South 212 Main Street P.O. Box 89 Neligh, NE 68756 402.887.5041, ext. 1246 Western Learning Center 520 East Clay Street P.O. Box 508 O'Neill, NE 68763 402.336.3707

The West Holt Public Schools' facilities are located in Atkinson, including three Elementary Schools and one High School. Union Elementary School and Clover Cove Elementary School, located at 47572 87th Road and 86604 468th Avenue, respectively, both educate Pre-school through eighth grade students. Atkinson Elementary School and West Holt High School share a location at 1000 North Main; the Elementary serves student Pre-school through sixth grade and the High School includes grades seven through twelve. Headstart and St. Joseph's Little Critters Pre School are also located in Atkinson, providing families with preschool options.

West Holt Public Schools have pride in the schools' academic excellence and student performance. In addition to academics, the School also provides many options for extracurricular activities. These activities strengthen the community by encouraging students to stay involved, developing strong relationships with one another as well as learning to be an active participant and contributor to a community. Options available to students include many sports teams, scholastic competitions, FCCLA, Homecoming, and One-Acts to name a few. Not only do these activities provide students with a way to become involved, they also provide events outside of school-time for community members to attend and show support for the school system.



**Table 2.1** shows the number of students enrolled in West Holt Public Schools by grade, from Kindergarten to 12th; this table shows data from the 2004-2005 to the 2014-2015 school years. The 2014-2015 school year shows the largest total enrollment of 374 students. An increased school enrollment reflects more young families with school-age children living in the community. The average graduating class for West Holt Public High School is 39 students in the last 11 school years. While the 2015 graduating class was smaller than average, the District has seen an increase in Kindergarten enrollment and in total student enrollment. This growth must be continually supported by the community to create and maintain a more sustainable population base.

| Table 2.1 School Enrollment, West Holt Public Schools, Atkinson 2004-2015 |    |    |    |    |    |    |    |    |    |    |    |    |    |                     |
|---|----|----|----|----|----|----|----|----|----|----|----|----|----|---------------------|
| School<br>Year  | K  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | Total<br>Enrollment |
| 2004-2005   | 22 | 16 | 16 | 19 | 12 | 23 | 23 | 13 | 22 | 39 | 41 | 44 | 47 | 337                 |
| 2005-2006   | 10 | 21 | 17 | 19 | 16 | 14 | 24 | 26 | 14 | 37 | 38 | 42 | 49 | 327                 |
| 2006-2007   | 13 | 9  | 25 | 19 | 21 | 25 | 23 | 28 | 29 | 31 | 36 | 37 | 40 | 336                 |
| 2007-2008   | 17 | 14 | 9  | 26 | 16 | 20 | 22 | 22 | 27 | 45 | 30 | 37 | 37 | 322                 |
| 2008-2009   | 19 | 17 | 14 | 11 | 25 | 17 | 20 | 23 | 20 | 37 | 41 | 30 | 39 | 313                 |
| 2009-2010   | 13 | 20 | 20 | 14 | 15 | 26 | 18 | 24 | 26 | 31 | 39 | 41 | 35 | 322                 |
| 2010-2011   | 29 | 12 | 28 | 22 | 17 | 19 | 33 | 20 | 26 | 25 | 36 | 39 | 44 | 350                 |
| 2011-2012   | 29 | 31 | 14 | 23 | 23 | 18 | 21 | 31 | 22 | 35 | 25 | 37 | 41 | 350                 |
| 2012-2013   | 28 | 34 | 34 | 18 | 23 | 25 | 20 | 22 | 32 | 23 | 35 | 26 | 41 | 361                 |
| 2013-2014   | 25 | 26 | 37 | 35 | 16 | 25 | 25 | 21 | 25 | 35 | 22 | 32 | 25 | 349                 |
| 2014-2015   | 34 | 27 | 31 | 37 | 35 | 17 | 26 | 26 | 20 | 29 | 38 | 20 | 34 | 374                 |
| Source: Nebraska Department of Education                                  |    |    |    |    |    |    |    |    |    |    |    |    |    |                     |

Education is the largest public expense in local communities. Because the local School Board controls the budget, coordination of the plans between the School Board and City Council is essential for effective management of growth, annual budgets, and delivery of educational services. It is essential to have active participation from both sides of the relationship between the City of Atkinson and West Holt Public Schools. West Holt Public School District is vital to the sustainability of Atkinson and the region. It is important for residents to have a quality, productive school district in their community; therefore, community members' continual support of the school system is necessary for the success of the school and the community. School districts provide many qualities in a community that are immeasurable. However, it is important to know and understand school districts are evaluated on several different levels including test scores, graduation rates, and how their formula student population affects the amount of resources the district will receive as well as the operating expenditures per formula student.



**Table 2.2** depicts the adjusted general fund operating expenditures per formula student during the 2014-2015 school year. Formula students are based on the 2013-2014 average daily attendance and the 2014-2015 contracted students. The table highlights West Holt Public Schools compared to other school districts in surrounding counties. West Holt's formula student amount for 2014-2015 was 349.12; the total expenditure cost per student was \$12,889.25 for the same year. As seen in the table, West Holt Public Schools' adjusted general fund operating cost per formula student is in the upper, middle range compared to the school districts in the surrounding counties.

| Table 2.2 TEEOSA Formula Students, West Holt Public Schools, 2014-2015                 |                               |                             |                     |   |  |  |
|--|-------------------------------|-----------------------------|---------------------|---|--|--|
| Nebraska Department of Education School Finance and Organization Services, Model LB235 |                               |                             |                     |   |  |  |
| County   | County/<br>District<br>Number | District/System Name        | Formula<br>Students | Adjusted<br>General Fund<br>Operation<br>Expenditures | Adjusted General Fund Operating Expenditures per Formula Student |  |
| WHEELER  | 92-0045-000                   | WHEELER CENTRAL SCHOOLS     | 85.49               | \$1,830,910.44  | \$21,417.65  |  |
| BOYD   | 08-0036-000                   | LYNCH PUBLIC SCHOOLS        | 74.75               | \$1,444,227.25  | \$19,320.71  |  |
| ANTELOPE   | 02-0018-000                   | ELGIN PUBLIC SCHOOLS        | 168.08              | \$2,883,547.67  | \$17,156.21  |  |
| ROCK   | 75-0100-000                   | ROCK COUNTY PUBLIC SCHOOLS  | 191.27              | \$2,808,199.42  | \$14,681.59  |  |
| HOLT   | 45-0029-000                   | EWING PUBLIC SCHOOLS        | 125.13              | \$1,829,467.83  | \$14,620.69  |  |
| HOLT   | 45-0137-000                   | CHAMBERS PUBLIC SCHOOLS     | 128.26              | \$1,843,038.70  | \$14,369.81  |  |
| HOLT   | 45-0239-000                   | WEST HOLT PUBLIC SCHOOLS    | 349.12              | \$4,499,870.06  | \$12,889.25  |  |
| BOYD   | 08-0050-000                   | WEST BOYD SCHOOL DISTRICT   | 225.65              | \$2,821,102.54  | \$12,502.21  |  |
| KNOX   | 54-0501-000                   | NIOBRARA PUBLIC SCHOOLS     | 185.02              | \$2,176,262.92  | \$11,762.60  |  |
| KNOX   | 54-0096-000                   | CROFTON COMMUNITY SCHOOLS   | 327.15              | \$3,738,210.68  | \$11,426.64  |  |
| HOLT   | 45-0007-000                   | O'NEILL PUBLIC SCHOOLS      | 697.76              | \$7,802,540.74  | \$11,182.34  |  |
| HOLT   | 45-0044-000                   | STUART PUBLIC SCHOOLS       | 169.94              | \$1,885,917.26  | \$11,097.80  |  |
| KNOX   | 54-0586-000                   | BLOOMFIELD COMMUNITY SCHLS  | 236.97              | \$2,614,267.33  | \$11,032.11  |  |
| GARFIELD   | 36-0100-000                   | BURWELL PUBLIC SCHOOLS      | 324.51              | \$3,546,625.27  | \$10,929.29  |  |
| ANTELOPE   | 02-2001-000                   | NEBRASKA UNIFIED DISTRICT 1 | 465.99              | \$5,086,011.64  | \$10,914.31  |  |
| KNOX   | 54-0013-000                   | CREIGHTON COMMUNITY PUB SCH | 322.21              | \$3,464,050.71  | \$10,750.74  |  |
| ANTELOPE   | 02-0009-000                   | NELIGH-OAKDALE SCHOOLS      | 371.63              | \$399,463.19  | \$10,740.54  |  |
| KNOX   | 54-0576-000                   | WAUSA PUBLIC SCHOOLS        | 214.68              | \$2,287,659.24  | \$10,656.15  |  |
| KNOX   | 54-0505-000                   | SANTEE COMMUNITY SCHOOLS    | 158.99              | \$1,245,457.97  | \$7,833.34   |  |
| Source: Nebraska Department of Education   |                               |                             |                     |   |  |  |

#### Chapter 2: Facilities & Infrastructure

#### **Private School**

St. Joseph's School provides a quality education to children in preschool through eighth grade. The School strives to, "maintain high academic standards while fostering the development of Christian morals and beliefs." The six educators at St. Joseph's School teach in combined classrooms and each share blogs as a way to stay connected online with parents and students. The student body is co-ed with typical enrollment in the low fifties. St. Joseph's Catholic Grade School and St. Joseph's Junior High School are located at 102 N Tuller and 106 N Tuller in Atkinson. The St. Joseph's Little Critters Pre School is also located on this campus.

#### Post-Secondary

Northeast Community College Extended Campus in O'Neill is the closest community college to Atkinson and focuses its services in Atkinson and many other surrounding communities. Northeast Community College Extended Campus in O'Neill offers an opportunity for Atkinson's residents to further their education while maintaining their residency in the community. Classes and services offered in the O'Neill Extended Campus include advisement, COMPASS testing, computer lab usage for Northeast students, academic transfer, accounting, agriculture - college transfer, behavioral science, business administration, criminal justice – corrections option, law enforcement options, early childhood education, library information services, and social science. There are also several post-secondary education options within a three-hour drive of Atkinson including multiple community colleges, tech schools, Wayne State College, University of Nebraska – Kearney, and University of South Dakota. Atkinson's residents are offered a variety of post-secondary education paths a short distance from home.

It is important to support the local and regional education services in Atkinson; one method is to ensure there is a healthy connection between the community and the schools while promoting the community itself to attract new families to Atkinson. With the addition of new families to the community, there is potential of adding students to the total enrollment. Increasing community population and student enrollment will work hand-in-hand. This relationship inevitably ties back to employment and job availability as well as the local housing market in the community. Families are attracted to communities with quality school systems which in turn will help draw residents to Atkinson.

Transportation systems control interactions, or lack of interactions, between two places. Local roads, streets, and sidewalks should provide safe, reliable access to work, schools, shopping, parks, and back home. Transportation networks to the outside world are important to the economic growth of Atkinson. These networks provide access to markets, goods, and services not found in the community as well as to ship goods and products to outside markets. Transportation also provides a means by which employees commute to Atkinson for work, businesses succeed because of increased exporting opportunities, and Atkinson becomes more than just a "drive-through" community. An adequate system of highways, streets, and sidewalks provides a variety of options for accessibility to all

parts of the community and beyond.

**Transportation** 

Atkinson's transportation system creates many opportunities for growth because of the proximity and connectivity to the larger transportation network. U.S. Highway 20 runs southeast to northwest through Atkinson and Nebraska Highway 11 runs north to south on the east side of the community. These two highways connect many surrounding communities to Atkinson. The highway corridors create important access points for the community also creating gateways for all travelers going to and from Atkinson. These gateway entrances act as a "first impression" for visitors. It is important to understand how highway corridors are important features for the City providing opportunities for beautification, connections, wayfinding, and marketing. Gateway entrance development is discussed in the Future Land Use section of this Comprehensive Plan.

Atkinson shares a local municipal airport with Stuart which provides a different transportation option for the City. Pedestrian foot traffic is another form of transportation used to get around the community. There is sidewalk circulation throughout the community; however, several locations in town are lacking sidewalks. Also, some of the sidewalks are in need of repair and/or replacement just based on age and condition. The transportation section of a Comprehensive Plan is important because it is necessary to address the condition of both local road and street networks that tie the community together and the types of transportation that link Atkinson with the outside world. More than 70 percent of the Community Needs Assessment survey respondents rated the City's streets good or excellent while 40 percent of respondents rated the sidewalks as good or excellent. Almost 20 percent of surveyors ranked the sidewalks as poor.



#### **Airport**

Stuart-Atkinson Municipal Airport which is open to the public is located on approximately two miles northwest of Atkinson. From June 2011 to June 2012 there were an average of 52 aircraft operations per week, 67 percent were local general aviation and 33 percent were transient general aviation. The airport has two runways including a 60-foot wide, 3,900-foot long concrete runway and a 100-foot wide, 3,000-foot long turf runway. Eppley Airfield in Omaha, NE is located 203 miles southeast of Atkinson and Sioux Falls Regional Airport in Sioux Falls, SD is located 193 miles northeast of Atkinson. These are the two most accessible passenger service airports for Atkinson's residents.



#### Roads

As previously mentioned, transportation systems are vital to the sustainability of the community; especially in the automobile dependent society we live in today. There are three different categories of roads in Atkinson: local, collector, and arterial streets. Highways 20 and 11 are the main arterial roads carrying traffic into and out of town acting as the gateways to Atkinson. Development along arterial roads influences the perception drivers have to the overall appearance and priorities of the community. During our public input sessions, many residents discussed the desire to beautify these highway corridors in order to enhance the general appearance of the entire City. U.S. Highway 20, specifically will influence the economic growth potential for Atkinson.

The Nebraska Department of Roads (NDOR) annually reports surface aggregates for all of the roads in Atkinson. Updated in 2014, road types include concrete, asphalt, bituminous, gravel, and earth surfaces. The Lane-Mile Report for Atkinson detailed the following figures, 11.27 miles of concrete, 6.44 miles of asphalt, 0.77 miles of bituminous surfacing, 4.77 miles of gravel, and 0.12 miles of earth surface in Atkinson. Although there are roads in need of improvement, 48 percentage Atkinson's existing roads are paved with concrete. Concrete is not the only street surfacing option, but it has the longest life-span and requires less maintenance in comparison to other road surfacing types; therefore, concrete roads are a good investment for the future of the community. Successful street networks are dependent on the availability and condition of the roads throughout the community. Atkinson has a safe, efficient transportation system. This type of public infrastructure, like all others, requires continual maintenance and updates in order to maintain the high level of effectiveness.

NDOR also conducts traffic counts biannually; although 2014 traffic counts have been conducted, 2012 traffic counts are the most recent reported numbers available through the State. Figure 2.2 shows traffic counts for the U.S. Highway 20 and Nebraska Highway 11 near Atkinson. The top number represents the Average Daily Traffic (ADT) for all vehicles; the bottom number characterizes the number of heavy commercial vehicles. Highway 20 is the primary access for residents and visitors of Atkinson to utilize. Commercial businesses examine traffic counts when looking for new locations because commercial businesses want space with high visibility, good connectivity, and access to the larger transportation network. With ADT counts of 3,375 and 2,760 on either side of Atkinson on Highway 20, land along this highway is prime real estate for commercial and/or light industrial development. Both Highways provide the community with a link to the outside world which is an economic asset for the City. It is ideal for commercial development to happen along the Highway corridor because of the large number of vehicles that utilize the highways each day. Although many businesses are currently located along the Highway 20 corridor, there is still a large amount of land undeveloped, mainly on the outskirts and adjacent to the corporate limits.

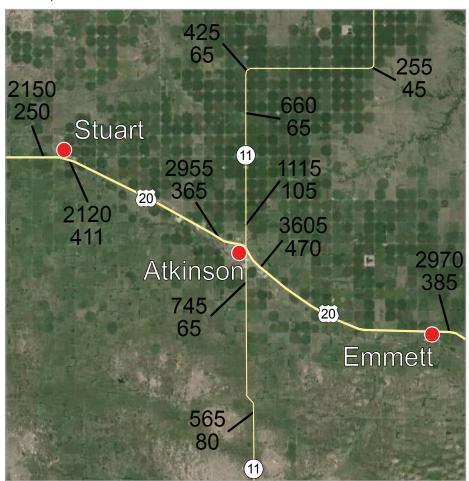
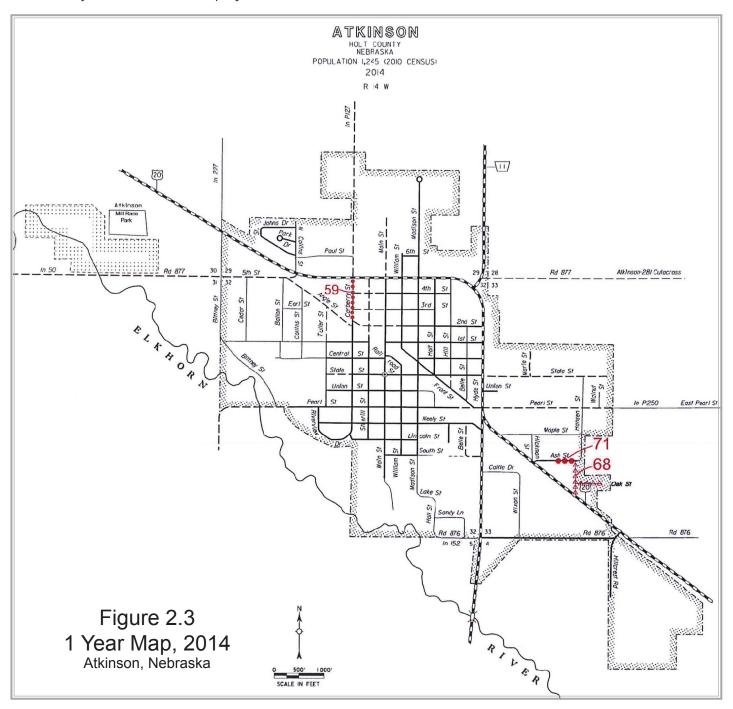
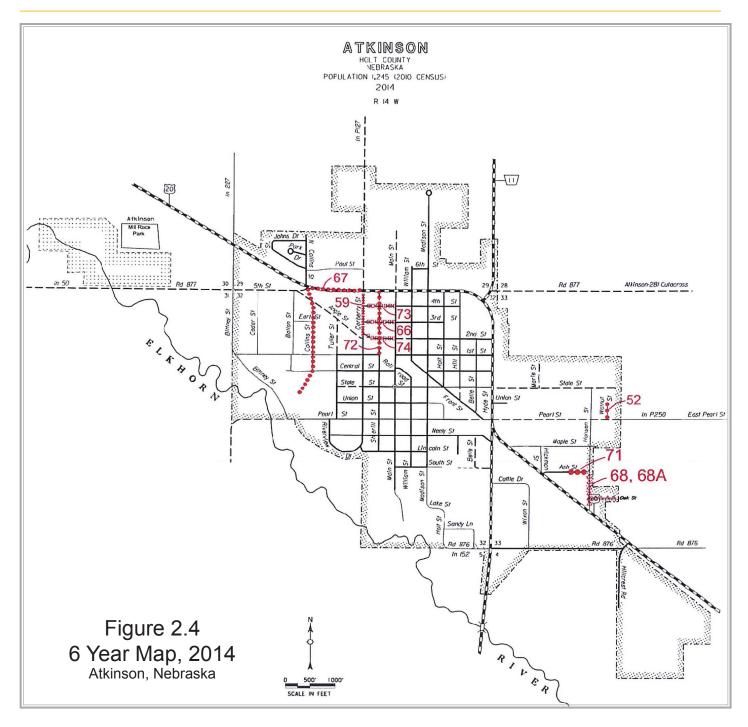


Figure 2.2 2014 NDOR Traffic Counts Atkinson, Nebraska

Atkinson completed its 2015 1 & 6 Year Road Plan in December of 2014. This plan is in place to help guide achievable transportation development for the first year and development goals for the remaining five years. As seen in **Figure 2.3**, three projects are depicted for the 1 year plan and **Figure 2.4**, shows seven additional projects for the 6-year plan. Atkinson's one-year road plan includes grading, concrete, curb and gutter on Carberry Street from Cowboy Trail north to Highway 20; grading and aggregate on Hansen Street from Highway 20 north to East Ash Street, on East Oak Street from Hansen Street east 600 feet; and concrete, curb and gutter, drainage structures, and utility adjustments on Ash Street from 300 feet west of Hansen Street to Hansen Street. The projects listed on the six-year road plan include concrete pavement, curb and gutter, and drainage structures for six of the seven projects. The total estimated cost of 2.8 million dollars for all projects within the City's 1 & 6 Year Road Plan. The six-year road plan goals will be updated annually and completed as the City has funds for each project.





#### STATE HIGHWAYS

Gravelor Crushed Rock

Asphalt/Bituminous Surface

Multiple Lane Undivided Highway Asphalt/Bituminous Surface

Concrete/Brick Surface

Multiple Lane Undivided Highway Concrete/Brick Surface

CITY STREETS AND COUNTY ROADS

\_\_\_\_ Primitiva or Unimproved

— Gravel or Crushed Rock

— — - Asphalt/Bituminous Surface
— Concrete/Brick Surface

80) Interstate Numbered Routes

83 U.S. Numbered Routes

38) State Numbered Routes

SI3D/ State Numbered Spurs

L34G State Numbered Links

Main St Street/Road Names

⊙ City Center

మామ్మ్ Corporate Limits

CORPORATE LIMITS AS OF 2014 STATE HIGHWAYS CORRECTED TO 2014



#### Sidewalks

Sidewalks are a way to walk to the neighbor's house, allow kids to ride their bikes and walk to school, and for families to enjoy the outdoors on the way to the park. Atkinson's community is also linked by sidewalks to provide pedestrian safety and access. Approximately 24 percent of the community has existing sidewalk infrastructure. Through the sidewalk assessment it was apparent that the central portion of the community is where many of the sidewalks are located creating interconnectivity around the Downtown District and the Library and then there are several sidewalks near the school, swimming pool, and park in the north-central portion of Atkinson. Continuous sidewalks from one block to the next are not very common throughout Atkinson which hinders pedestrian's ability to safely walk through the community. Completing continuous sidewalks is important to residents and their accessibility and safety.

Sidewalks promote foot traffic and provide a safe place for all residents to travel. Many people believe that busy sidewalks also lead to a safer community because when people are out and about it inherently deters crime and lowers the opportunity for criminal activity. With a chance of being seen by someone walking their dog or shopping downtown most criminals would be discouraged from attempting an unlawful activity.

Although sidewalks are an essential amenity in communities, they are also another form of public infrastructure that requires maintenance, ADA compliance, updates, and sometimes complete replacement. Areas of broken or cracked sidewalks coupled with incomplete connections make sidewalks challenging to use. Completing a sidewalk inventory and conditions analysis map including ADA-compliance review would assist City leaders with planning for sidewalk improvements. Approximately 76 percent of the platted community is lacking sidewalk infrastructure of any kind. The majority of the inconsistent sidewalk network exists outside the core of the community. Improving existing sidewalks is important as the City moves forward, but it is also important for decision-makers to determine if new sidewalks need to be constructed in order to close the existing gaps and improve pedestrian transportation, safety, and connectivity. A matching funds program could be established by the City to encourage residents to construct new sidewalks and/or repair existing sidewalks in order to improve accessibility throughout the entire community. The most recent ADA design guidelines should be followed when any new sidewalk project is undertaken. Completing a sidewalk inventory map depicting where sidewalks exist and do not exist, if sidewalks are in poor condition and need repaired, and whether or not there are existing ADA ramps would be an important visual tool for the City to utilize when determining improvement needs. The map may also help stakeholders visualize specific areas in need as well as determine practical pedestrian traffic patterns and determine where specific sidewalks need to be constructed to better serve the community.

# Community Events

Atkinson holds many community events throughout the year. These events are important to the City itself as well as residents and visitors of Atkinson. These festivals, races, and banquets are a great way to attract people to the community. It is also a way for community members to come together and celebrate living in Atkinson. These events help community spirit as well as boasting local business. Below is a list of Atkinson's annual community events.

Atkinson Chamber of Commerce Banquet - January

Chamber of Commerce Easter Egg Hunt - March/April

Spring Clean-Up - April

Bargain Buyway - April

Festival of Races - May

City-Wide Rummage Sale - **June** (1st Saturday)

Christmas in July Quilt Walk - July

Atkinson Hay Days - **August** (3rd weekend)

Every year, on the third weekend of August, the community of Atkinson celebrates Hay Days. A large variety of events are offered over the four-day span of the festival. Citizens of Atkinson and visitors to the area can enjoy a parade, children's theatre, Indy car racing simulator, cruise night, and much more. A sculpture contest is also held at the beginning of August in preparation for Hay Days. August 2015 will mark the festivals 75th year of celebration. For more information please visit the Hay Days website atkinsonhaydays.wix.com.

Health Year - September

Parade of Lights - **November** (Sunday after Thanksgiving)









Photos of the Parade of Lights are courtesy of the City of Atkinson.



are essential to the quality of life residents have come to know and enjoy while living in the City. The following list includes information about the amenities and services available in Atkinson.



#### **Library**

The Atkinson Public Library has a collection of over 19,000 volumes and periodicals. In addition, the library also houses large print books, audio CDs, Video and DVD movies, cake pans, microfilms, and much more. The library offers a delivery service for home-bound individuals as well as storytelling and classes concerning library and computer skills. Lamination, printing, and copying services are available to patrons for an additional charge. Sixteen computers provide free internet access along with wireless internet available for personal-use computers. Hours of operation are as follows:

> Monday 9:00 am - 5:00 pm 9:00 am - 6:00 pm Tuesday 12:00 pm - 6:00 pm Wednesday Thursday 9:00 am - 5:00 pm Friday 9:00 am - 3:00 pm Saturday 9:00 am - 3:00 pm Sunday Closed

The library is located at 210 West State Street. For more information, call (402) 925-2855 or visit the library's website at libraries.ne.gov/atkinson. More than 81 percent of the respondents to the Community Needs Assessment Survey rated the Atkinson Library as excellent. The Library was also chosen as one of the top five strengths of the community.

#### <u>Newspaper</u>

tkinsonGraphic

The Atkinson Graphic reports the news with both a print and an electronic edition. In addition to reporting the news, The Atkinson Graphic also

offers full-service printing. The newspaper produces weekly editions. Readers can submit news anytime by accessing the newspaper's website. The newspaper's business hours are Monday through Thursday 9:00 am to 5:00 pm. The Atkinson Graphic is located at 207 East State Street. Call (402) 925-5411 or visit www. atkinsongraphic.com for more information. The Holt County Independent, Omaha World Herald, and the Norfolk Daily News are also delivered in Atkinson through the U.S. Mail.



#### Post Office

The Atkinson Post Office is located at 202 N Main Street. The Post Office's retail hours are as follows:

Monday - Friday 9:30 am - 12:15 pm

1:15 pm - 4:00 pm

Saturday 10:30 am - 11:30 am

Sunday Closed

For more information on services and hours, please visit the USPS website www.uspspostoffices.com/ne/atkinson/atkinson/.

#### **Public Safety**

The Atkinson Volunteer Fire Department provides protection for the City as well as approximately 475 square miles of the surrounding area. The 33-member team includes 28 Certified Emergency Medical Technicians and 5 Paramedics. These volunteers also run the ALS/BLS Certified Ambulance Service, providing medical transport for the surrounding hospitals. The Volunteer Fire Department is located at 512 East Pearl Street and can be reached at (402) 340-5625 for non-emergency calls. Almost 100 percent of the Community Needs Assessment survey respondents



rated the City's fire protection/EMS services as good or excellent showing support and appreciation for the volunteer public safety programs that protect the residents of Atkinson.

The Atkinson Police Department is comprised of three officers, serving a population of almost 1,250 people. The department owns three patrol units and is located at 104 South Main Street and may be contacted by calling (402) 925-5313 for non-emergency purposes. Over 78 percent of survey respondents rated the City's law enforcement as good or excellent.

#### **Chamber of Commerce**

The Atkinson Area Chamber of Commerce is located at 1020 North Madison. The Chamber promotes business growth and development in the community by encouraging members to vote on decisions impacting local businesses, helping members attract more business, and increasing business exposure through a local directory. New members are given one free year of premium membership as an incentive for joining the Chamber of Commerce. More information can be found at www.atkinsonchamber.com or by calling (402) 925-5600.

The Atkinson Area Chamber of Commerce works with the Atkinson Development Corporation and the City of Atkinson to drive the community's economy. The Atkinson Development Corporation is a for-profit organization comprised of more than 40 stakeholders. Certificates of deposit and loans to local businesses are the principal assets. For more information, call (402) 925-2801.

#### Community Center

The Atkinson Community Center, at 206 West 5th Street, is connected to the American Legion Post 86. The facility's amenities include a commercial kitchen, a stage, large and small rooms that can be combined to one large space, and restrooms. The Center provides a place where citizens can gather for events, group activities, social support, or private celebrations. The Atkinson Community Center was selected, by residents, as one of the top five strengths of the community.





#### **Community Organizations**

The American Legion, Knights of Columbus, and Lions Club are three organizations citizens of Atkinson can join. These organizations help foster relationships throughout the City by developing a strong sense of community and uniting members behind common goals and objectives. Because Atkinson is host to multiple service-based organizations, residents enjoy a variety of options when looking to impact the community.







#### Churches

The City of Atkinson is home to seven different churches, practicing many different religions. The City's churches include Abundant Grace Assemblies of God, Faith Wesleyan Church, Immanuel Lutheran Church (LCMS), Presbyterian Church, St. John's Lutheran Church (ELCA), St. Joseph's Catholic Church, and United Methodist Church. A complete list of these churches and contact information for each is located on the City's website, atkinsonne.com, under the churches tab.



#### Cemetery

The Woodlawn Cemetery and St. Joseph Cemetery are located on either side of a gravel road on the northwest edge of Atkinson. Records of burial and gravestone pictures for both cemeteries can be found at nebraskagravestones.org.

#### **Funeral Home**

The Seger Funeral Home has been serving residents of Atkinson and the surrounding area since 1941. The funeral home offers services from funerals to cremations and has experience honoring many faiths and customs. The website for Seger Funeral Home, www.segerfuneralhome.net, provides visitors with the information needed to plan a funeral service as well as contact information for any additional questions.



#### Healthcare

West Holt Medical Services follows compassion, integrity, community involvement, growth, and quality as fundamental values to effectively serve the City of Atkinson and surrounding areas. As a 17-bed critical access hospital and rural health clinic, West Holt Medical Services offers 24-hour access to inpatient and emergency services as well as on-site comprehensive diagnostic services and outpatient care. The hospital's mission is the following:

West Holt Medical Services provides well-rounded family healthcare with respect and understanding for the physical and emotional needs of our North Central Nebraska communities.

The approximately 90 people employed by West Holt Medical Services, make this mission a reality. In addition to healthcare services, the hospital also supports many events for the City of Atkinson, including, but not limited to annual races, various health screenings, and multiple community fundraisers. More information can be found on West Holt Medical Services website - www.westholtmed.org.

More than 90 percent of Community Needs Assessment survey respondents rated the City's healthcare as good or excellent. The medical facilities in Atkinson were also selected as one of the residents' top five strengths of the community.

#### **Specialty Healthcare**

The Atkinson branch of Greater Sandhills Family Healthcare and West Holt Medical Clinic provide family practice health care to the citizens of Atkinson. Additional medical services in Atkinson include Atkinson Family Chiropractic, Atkinson Family Dental, and Ketteler Eyecare.

#### **Pharmacy**

The West Holt Pharmacy is located at 313 West Pearl Street and is open from 9:00 am to 6:00 pm Monday thru Friday with additional hours on Saturday from 9:00 am to 12:00 pm. The pharmacy offers delivery service, drive-thru service, generic prescriptions, online refills, over the counter products, and the Pharmacy Health Connect Smartphone App. For more information or to complete online refills, customers can visit West Holt Pharmacy's website - www.westholtpharmacy.com. Customers can also call the pharmacy at (402) 925-2651.







#### Senior Center

The Atkinson Senior Citizens Center, located at 109 West State Street, provides senior services for the Atkinson area. Some of the programming for the Center includes monthly card parties, weekly exercises, and other social activities. The Center also offers noon meals and delivers meals on wheels daily. The Senior Center was also selected, by residents, as one of the top five strengths in the community.

#### **Regional Services**

Central Nebraska Community Services (CNCS) was created in 1965 as a non-profit community action agency. The organization's mission is "Partnering

individuals and families to end poverty through community-based solutions." CNCS offers aid to citizens within a 2,300 square mile area; the aid ranges from housing rehabilitation and weatherization to healthcare, nutrition assistance, education, and case management. Central Nebraska Community Services benefits persons ranging from infants to the elderly. Visit www.welcome2cncs.com for more information.

#### **Housing Authority**

The Atkinson Housing Authority oversees Elkhorn Meadows, a 20-unit apartment complex for low income families. These units are more affordable for renters with the help of Federal programs like Section 8 and RD 515, which outline renter qualifications including income limits based on family size. Elkhorn Meadows is located at 510 Pearl Street and can be contacted by calling (402) 925-5059.

#### City Offices

The City of Atkinson's government is made up of a mayor and six council members, all serving four-year terms. In addition to the City Council, there are five annually-appointed positions, including the City Clerk/Treasurer, Superintendent, Utility Police Chief, City Engineer, and City Attorney. The Atkinson Municipal Building is located at 104 South Main Street and houses the City Offices, Council Chambers, and the Economic Development Office. The City Clerk can be contacted by calling (402) 925-5313.



#### Senior Living

Elkhorn Meadows provides senior living options through the Atkinson Housing Authority. Contact Elkhorn Meadows Senior Living at (402) 925-5059 for low rent, senior housing apartments with subsidized government low income rates.

Prairie Winds Assisted Living is a 10-unit, 12-bed facility ran by the Good Samaritan Society of Atkinson. It provides a home for senior citizens who may need a little help with daily activities. Housekeeping, bathing, medication, and laundry assistance are a few of the services offered by the round-the-clock staff. Prairie Winds Assisted Living is located at 409 East Neely Street and can be contacted by calling (402) 925-2099.

The Atkinson Good Samaritan Center is an extended-stay Nursing Home facility at 315 East Neeley Street HC68, Box 1. Seniors with varying levels of disabilities are provided personal assistance and medical care at this facility. More information can be obtained by calling (402) 925-2875.

Senior housing was ranked as fair-good at 2.72 on a scale of 1 to 4, with 4 being the highest by Community Needs Assessment survey respondents.

Photo courtesy of tripadvisor.com.

#### Lodging

Sandhills Guest House Motel 119 South Hyde Street (402) 925-5600 atkinsonmotel.gwestoffice.net

Eagle Springs Lodge 47953 882nd Road (402) 925-2381 www.eaglespringslodgellc.com Holt Creek Ringnecks 86632 471st Avenue (402) 925-2528 www.ringnecks.com

Mill Race Campground 47450 877th Road (402) 925-5313

#### <u>Airport</u>

The Stuart-Atkinson Municipal Airport is a publicly-owned facility located two miles northwest of Atkinson on Highway 20. The airport is open to the public and has two runways, one concrete and one turf. Hours of operation are from sunrise to sunset.

#### Museums/Historical Markers

The Sturdevant-McKee Foundation Museum was placed on the National Historic Register in 1999 as a period home. The home is located at 308 South Main Street and models life in the 19th and 20th centuries with Queen Anne architectural details and items owned by the original families of the home - the Sturdevants and McKees. The home is open during community events and by appointment. For more information or to make an appointment, please call (402) 340-6628.



#### Water

The City of Atkinson currently maintains Nebraska Public Water Supply No. NE3108905. The current system supplies water to its residents and businesses with four active groundwater wells, a 100,000 gallon storage facility, 638 metered services and approximately 16.78 miles of distribution main. Water is distributed from the elevated storage facility into cast iron and PVC water lines, which range from 2 to 10 inches in diameter. The linear feet of each diameter water line is the following: 4,042ft of 10-inch; 12,358ft of 8-inch; 35,574ft of 6-inch; 35,598ft of 4-inch; and 1,027ft of 2-inch diameter pipe, totaling over 88,000 linear feet. The four active wells were constructed in 1955, 1974, 1976, and 1998. Average daily water use in 2014 was approximately 218,000 gallons per day with an average of 615 billed users per month.

Recent work on the system has included the installation of Variable Frequency Drives on two wells. A water extension through the Gaylen-Seger Subdivision will be completed in 2015. **Figure 2.5** shows the City's water infrastructure, this map was prepared by the City's engineer.

Atkinson's water distribution system has adequate pressure and fire flows although the City should continually work to replace the 4-inch water mains with a minimum of 6-inch pipe for better fire protection. The City has a good maintenance program and continues to maintain and improve the system as funds allow. Based on the Community Needs Assessment Survey, 79.1% of respondents believe the City's water infrastructure is in good to excellent condition.

#### **Sanitary Sewer**

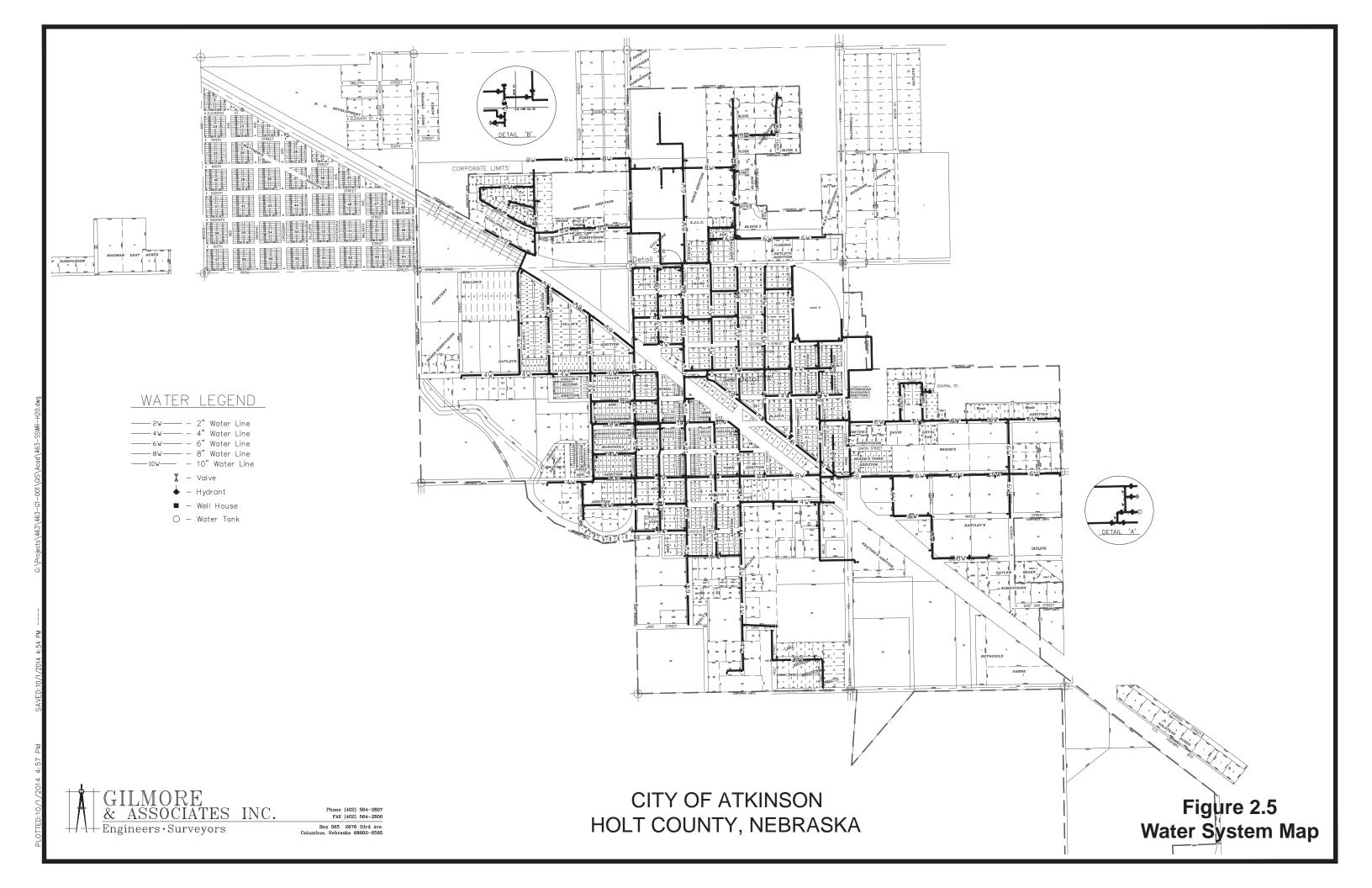
The City owns and operates a sanitary sewer collection system consisting of two lift stations and a mechanical wastewater treatment plant. The collection system is approximately 12 miles of vitrified clay pipe in diameters of 4-inch to 12-inch. The collection mains consist of the following linear feet per diameter of pipe: 3,681ft 12-inch; 2,350ft of 10-inch; 50,722ft of 8-inch; 6,561ft of 6-inch; and 198ft of 4-inch; totaling over 63,000 linear feet.

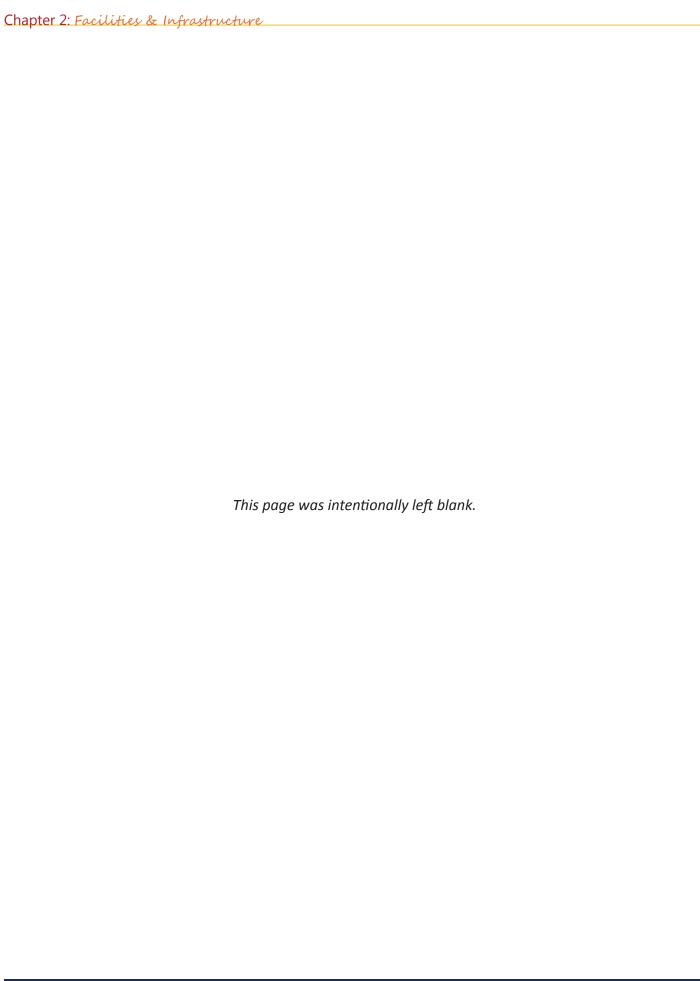
The wastewater collected throughout the City flows by gravity though a common sewer line to the main lift station located at the existing treatment facility. There is a single satellite lift station located within the collection system on Riverview Drive by the hospital.

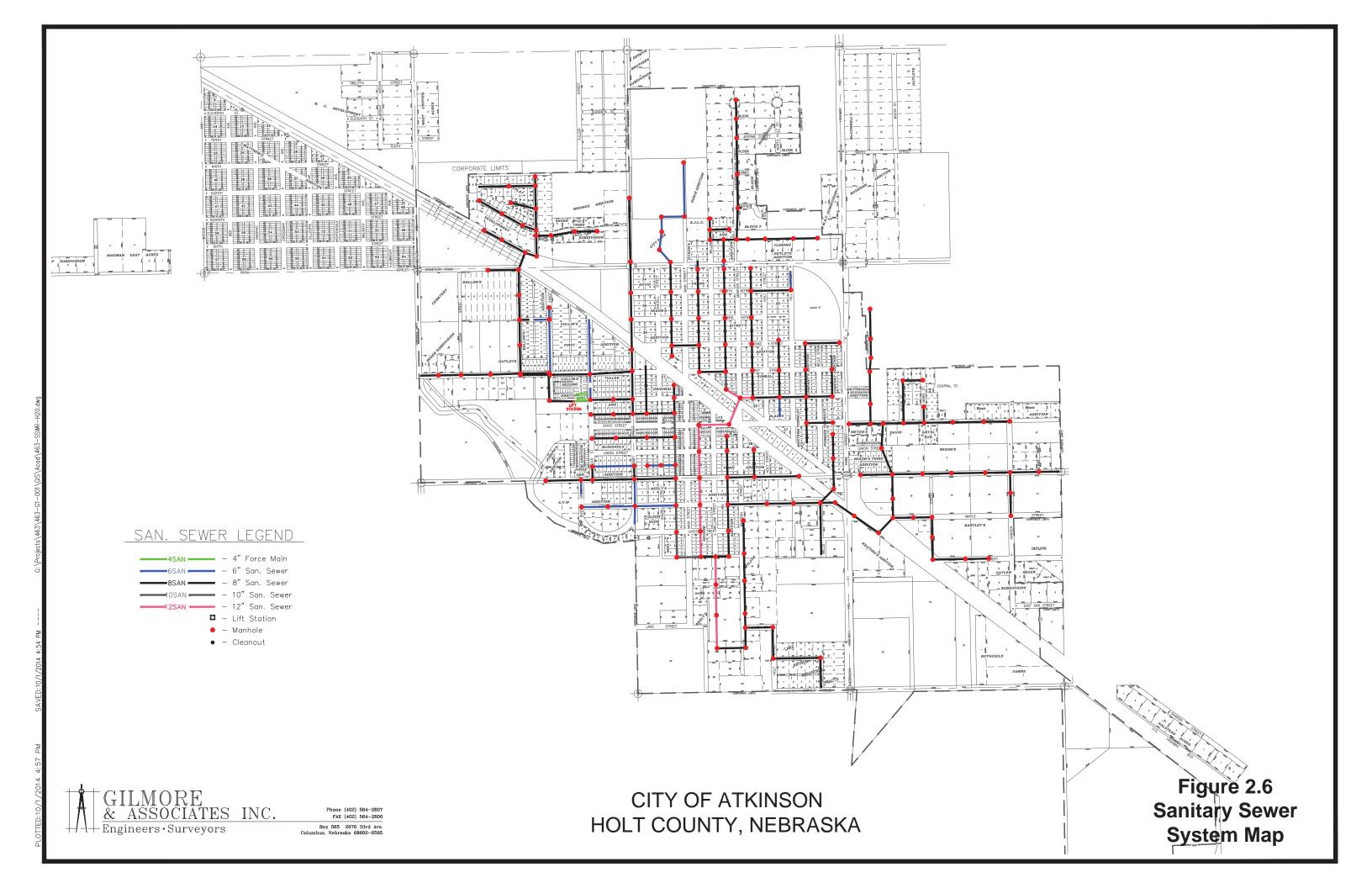
Recent sanitary sewer improvements include a brand new Wastewater Treatment Plant and lift station, funded though USDA-Rural Development at a cost of \$3.6 million dollars, a 500-foot sewer extension on North Carberry Street, and a sewer extension project to be completed in June 2015, through the Gaylen-Seger Subdivision. **Figure 2.6** shows the City's sanitary sewer infrastructure, this map was prepared by the City's engineer. Based on the Community Needs Assessment Survey, 88.6% of respondents believe the City's sanitary sewer infrastructure is in good to excellent condition.

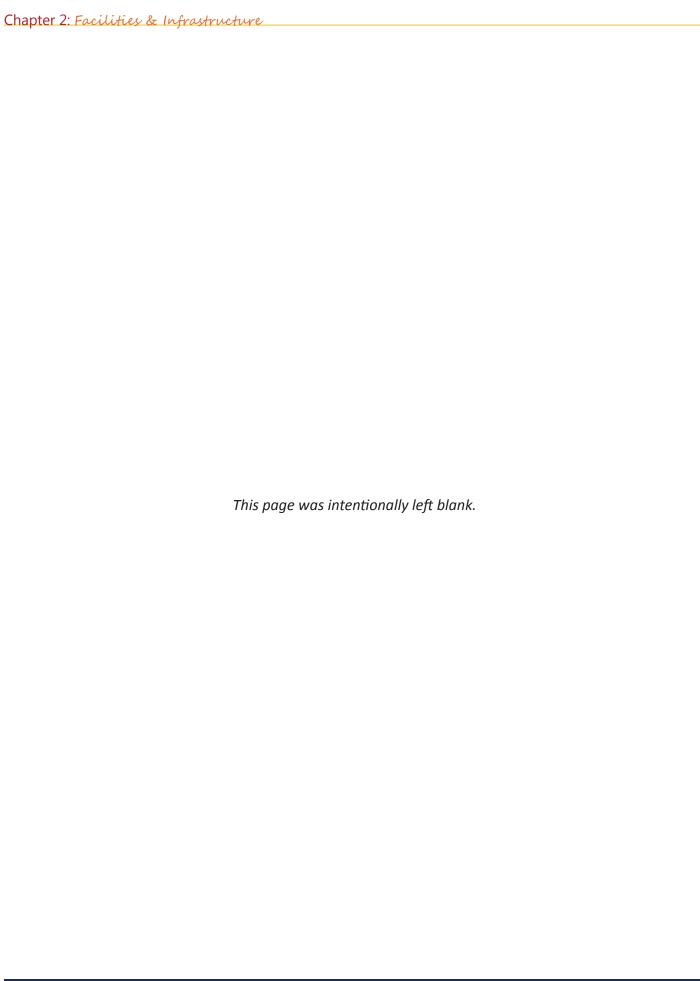
## **Utilities**











#### Stormwater Drainage

The City of Atkinson has relativity good elevation changes which allows for surface drainage of precipitation in the City. Surface drainage can pose potential flooding concerns because water can overflow the curb and gutters if there is too much rain in too short of a time period. Surface drainage systems at lower elevations can cause flooding in the low-lying areas. Drainage projects are expensive and with other infrastructure concerns, the drainage issues are the easiest to neglect as water and sanitary sewer are regulated by both the State and Federal governments and street conditions are more noticeable to all constituents. Based on the Community Needs Assessment Survey, 50 percent of respondents believe the City's stormwater drainage system is in good condition.

#### **Electrical and Natural Gas**

The City of Atkinson purchases electricity from the Nebraska Public Power District, whom also operates and maintains the infrastructure to provide electricity to individual homes and businesses. The Atkinson distribution system is fed by a 69 kilovolt Sub Transmission system. There are two substations located in the community. One of the substations is a 6.25 megavolt and the other substation is a 12.5 megavolt substation. Electrical usage data can be found in the energy section of the Comprehensive Plan.

The City of Atkinson participates in the Nebraska Choice Gas Program, which allows consumers to select their natural gas supplier each year. Natural gas infrastructure is owned by SourceGas Energy Services. SourceGas conducts meter readings and provides billing and maintenance services, regardless of the natural gas supplier.

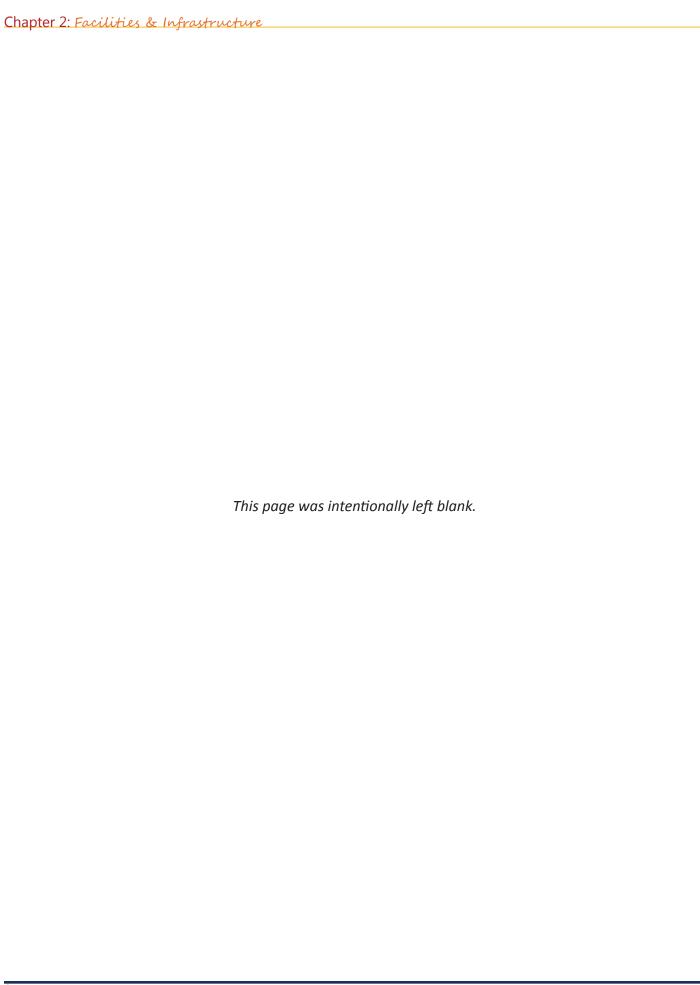
#### **Telecommunications**

Nebraska Telephone & Telecommunications and CenturyLink provide telephone and internet service to Atkinson. Other Internet providers are Elkhorn Networks, Fort Randall Cable, HughesNet, Telebeep, and Exede Satellite Internet.

#### Solid Waste/Recycling

The City of Atkinson has a progressive City solid-waste program. The City provides a nuisance clean-up dumpster and an area for grass clippings and small branch disposal. In addition, a recycling drop-off site and collection point is available for residents.





# Energy Natural Resources

Formulating a truly "comprehensive" plan for Atkinson requires research and analysis for the community's natural resources and energy options. Looking at land, soil, and water specifications will assist decision-makers when planning for future development and infrastructure. In order for any type of built environment to be developed, there must be an understanding of the natural resources existing and available in the area, how the development will impact the natural environment, and the development constraints existing on the site because of the natural environment. This Energy & Natural Resources section has the following components:

- —Energy
- —Land
- —Soils
- —Water

# **Energy**

1. <u>Energy infrastructure and energy use by sector, including residential, commercial, and industrial sectors:</u> The Nebraska Energy Office compiles statistics on energy consumption in the State by sector. The latest statistics are from 2012.

Residential: In 2012, 43.3% of the residential sector's energy usage was from natural gas, 44.9% was electricity, 8.0% was from propane, and 3.7% was renewable energy (wood 2.9%, geothermal 0.7%, and solar 0.1%). [Source: Nebraska Energy Office, "Net Energy Consumption by Fuel Type, Residential Sector, Nebraska, 2012," http://www.neo.ne.gov/statshtml/09.html]

Commercial: In 2012, 51.09% of the commercial sector's energy usage was from electricity and 43.79% from natural gas. In 2012, 1.94% of the State's total energy consumption for the commercial sector came from diesel fuel, 1.12% was from geothermal, and 0.88% from propane. [Source: Nebraska Energy Office, "Net Energy Consumption by Fuel Type, Commercial Sector, Nebraska, 2012," http://www.neo.ne.gov/statshtml/12.html]

<u>Industrial</u>: In 2012, 29.63% of the industrial sector energy usage was from natural gas, 10.89% from diesel fuel, 13.81% from electricity, 6.42% from coal, and 33.89% from biofuels. [Source: Nebraska Energy Office, "Net Energy Consumption by Fuel Type, Industrial Sector, Nebraska, 2012," http://www.neo.ne.gov/statshtml/15.html]

**Table 3.1** shows the electric power consumption for the residential, commercial, and industrial sectors in Atkinson. This data was provided by the City of Atkinson for 2011, 2012, 2013, and 2014. Energy infrastructure data is not available for the City of Atkinson.

| Table 3.1 Electric Consumption Totals, Atkinson, 2011-2014 |               |               |                |                |  |  |  |
|--|---------------|---------------|----------------|----------------|--|--|--|
| Year   | Residential   | Commercial    | Industrial     | Total          |  |  |  |
| 2011   | 9,390,092 kwh | 7,289,616 kwh | 33,702,076 kwh | 50,381,784 kwh |  |  |  |
| 2012   | 8,486,102 kwh | 7,215,430 kwh | 19,639,334 kwh | 35,340,866 kwh |  |  |  |
| 2013   | 8,847,705 kwh | 7,290,959 kwh | 15,578,836 kwh | 31,717,500 kwh |  |  |  |
| 2014   | 9,122,485 kwh | 8,440,420 kwh | 39,279,219 kwh | 56,842,124 kwh |  |  |  |
| Source: The City of Atkinson                               |               |               |                |                |  |  |  |

2. <u>Utilization of renewable energy sources:</u> The Nebraska Energy Office reports that in 2012, 15.79% of Nebraska's energy consumption was met by renewable resources. The renewable energy sources in 2012, for Nebraska were wind (1.4%), geothermal (0.139%), hydro power (1.37%), biomass (0.818%), and biofuels (12.04%). The sources of energy for Nebraska in 2012 were petroleum (27%), coal (31%), natural gas (19%), nuclear power (7%) and renewable energy (16%). [Source: Nebraska Energy Office, "Nebraska's Energy Consumption, 2012," http://www.neo.ne.gov/statshtml/92.htm]

The nation as a whole used a higher percentage of renewable energy than Nebraska. Data from 2012 shows that Nebraska is 7th in the nation for energy consumption per capita. The United States renewable energy consumption grew by six percent between 2009 and 2010, and the relative share of renewable energy to total energy consumption has grown to eight percent in 2010 from seven percent in 2008. In 2010, the sources of energy for the nation were petroleum (37%), natural gas (25%), coal (21%), nuclear electric power (9%), and renewable energy (8%). The sources of renewable energy were solar (2%), geothermal (3%), wind (11%), hydroelectric (31%), and biomass (53%). [Source: U.S. Energy Information Administration, "Trends in Renewable Energy Consumption and Electricity," http://www.eia.gov/renewable/annual/trends/]

Renewable energy source statistics are not available for the City of Atkinson. **Figure 3.1** shows the 50 meter wind power potential for the State of Nebraska. A majority of Holt County, including the area surrounding Atkinson, has large areas with "good" wind potential. The first wind farm in Nebraska was constructed around one hour northwest of Atkinson, near Springview, Nebraska.

#### 3. <u>Energy conservation measures that benefit the community:</u>

a. <u>Energy Codes</u> – Under §81-1608 to §81-1616, the State of Nebraska has adopted the International Energy Conservation Code as the Nebraska Energy Code. Any City may adopt and enforce the Nebraska Energy Code or an equivalent energy code. If a City does not adopt an energy code, the Nebraska Energy Office will enforce the Nebraska Energy Code in the jurisdiction.

The purpose of the code, under §81-1608, is to ensure that newly built houses or buildings meet uniform energy efficiency standards. The statute finds:

that there is a need to adopt the...International Energy Conservation Code in order (1) to ensure that a minimum energy efficiency standard is maintained throughout the state, (2) to harmonize and clarify energy building code statutory references, (3) to ensure compliance with the National Energy Policy Act of 1992, (4) to increase energy savings for all Nebraska consumers, especially low-income Nebraskans, (5) to reduce the cost of the state programs that provide assistance to low-income Nebraskans, (6) to reduce the amount of money expended to import energy, (7) to reduce the growth of energy consumption, (8) to lessen the need for new power plants, and (9) to provide training for local code officials and residential and commercial builders who implement the...International Energy Conservation Code.

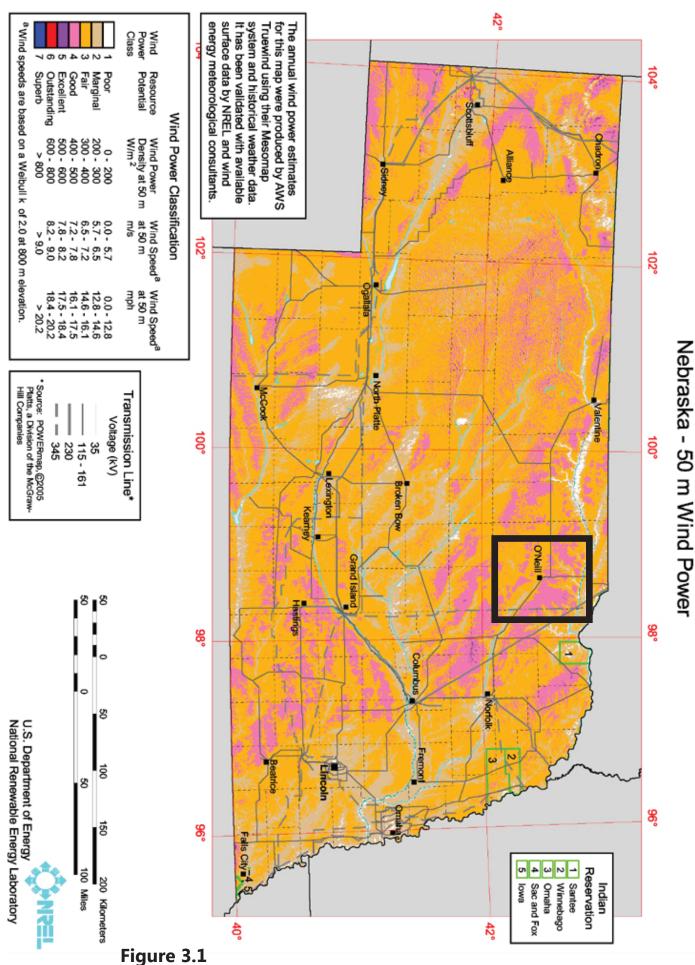
The Code applies to all new buildings, or renovations of or additions to any existing buildings. Only those renovations that will cost more than 50 percent of the replacement cost of the building must comply with the code.

The City of Atkinson has not adopted an energy code. If a City or County does not adopt an energy code, the Nebraska Energy Office will enforce the Nebraska Energy Code in the jurisdiction.

b. <u>Energy Efficiency Programs</u> – The City will work with utility companies that supply energy to the residents and businesses of the City to promote and implement energy efficiency programs that can be utilized by these customers to improve conservation and utilization of electricity, natural gas, and other energy sources.

Residents and businesses are encouraged to work with utility companies and take advantage of the companies' energy efficiency programs to improve conservation and use of electricity, natural gas, and other energy sources.

- c. <u>"Energy Saving Tips"</u> The Nebraska Energy Office has listed ways to save money on energy bills for the home, farm, business, or vehicle. Options for energy savings are listed on the Office's web site at http://www.neo.ne.gov/tips/tips.htm. The City and residents and businesses in the City are encouraged to take advantage of the conversation measures.
- d. Cities may add other conservation measures. One suggestion is to include planting trees by communities. Cities that have been designated as a Tree City USA community provide energy efficiency/conservation options by planting trees. Atkinson has been designated as a Tree City USA community for over 15 years.



Nebraska 50M Wind Power Map Atkinson, Nebraska

### Land

Atkinson is located in Holt County, Nebraska. Holt County is in the Great Plains physiographic region and consists of four general landforms: Niobrara Valley, Holt Table, sub-irrigated valleys, sand hills.

Atkinson straddles two of the landforms: the sub-irrigated valley of the Elkhorn River and the Holt Table at the City's upper elevations. The Elkhorn River valley is approximately one mile wide, flowing from northwest to southeast across the center of Holt County. The Elkhorn River, along with the Niobrara River on the County's north border, are the major water features of the county. The Elkhorn River valley and adjacent Holt Table are the land features of major influence on Atkinson and the surrounding area.

Topographic elevations for Atkinson and the vicinity range from 2,080 to 2,130 feet above Mean Sea Level (MSL). The climate of the City of Atkinson is typical for Nebraska, which is characterized by cold winters, warm summers, high winds, and frequent changes in weather conditions. This results in average daily maximum temperatures with a high of 88° in July to the lowest average daily minimum temperature of 14° in January. Temperature extremes range from a record low of -17° to a record high of 112° for the Atkinson vicinity. The rainfall is typical of a continental, subhumid climate. The average annual precipitation is approximately 22-inches, mostly occurring in April through September. Snowfall averages 31-inches annually.

Proper land use practices can protect an area's natural resources while complementing the built environment; therefore, understanding the topography of Atkinson and Holt County is important to determine the community's best areas for potential development. The natural topography of the community provides both opportunities and constraints for existing and future development. In Atkinson, like most communities, the major development constraints and opportunities are associated with the existing soils, the condition of these soils, and the topography.

The soils in Atkinson and the vicinity are classified into soil groups, or associations, and have a broad range of characteristics. The United States



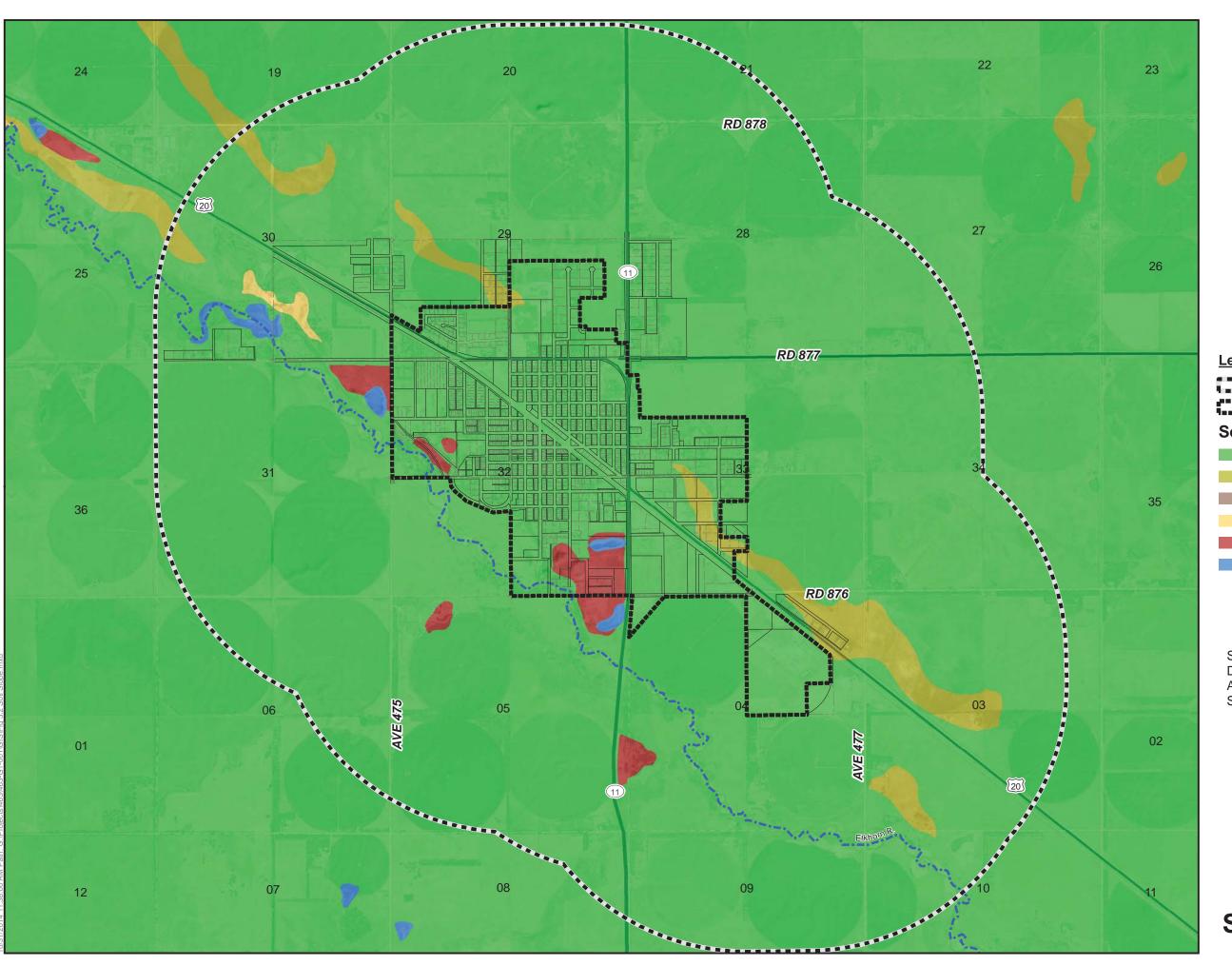
Department of Agriculture, Natural Resources Conservation Service (USDA – NRCS) conducted the Field Soils Survey and determined the boundaries of the soil types found in the region. The study area, including Atkinson's corporate limits and one-mile ETJ, is comprised of six soil associations, listed in decreasing order of the percent of the study area shown in parentheses: (1) Dunday-Pivot-Dunn (50); (2) Lex-Cass-Lute (17.6); (3) Elsmere-Ipage-Loup (14.4); (4) Inavale-Barney-Boel (9); (5) Dunday-Valentine-Boelus (3); (6) O'Neill-Meadin-Jansen (2.8).

The Dunday-Pivot-Dunn association is the principal soil association and is described in more detail in **Table 3.2**. The soils are deep, nearly level to gently sloping, moderately drained, and somewhat excessively drained, sandy soils; on tablelands and stream terraces. The detailed soil map units that make up this association are described in **Table 3.2** and are listed in order of decreasing prevalence.

| Table 3.2 Dunday-Pivot-Dunn Association, Atkinson         |   |   |  |  |  |  |
|---|---|---|--|--|--|--|
| Detailed Soil<br>Composition Units                        | Characteristics   | Use and Vegetation  |  |  |  |  |
| Pivot Loamy Sand, 0 to 3% Slopes (4721)                   | This composition unit consists of deep, somewhat excessively drained loamy sand formed in sandy outwash or windblown sands overlying deposits of coarse sand. This soil is present in stream terraces and table-land. | Suited for center-pivot irrigated and dryland crops, rangeland and hay. |  |  |  |  |
| Dunn Loamy Sand, 0<br>to 3% Slopes (4512)                 | This composition unit consists deep, moderately well drained loamy sand formed in wind-blown sand over loamy alluvium. This soil is present in stream terraces and tableland.   | Suited for center-pivot irrigated and dryland crops, rangeland and hay. |  |  |  |  |
| Dunday Loamy Sand,<br>0 to 3% Slopes (4498)               | This composition unit consists of deep, somewhat excessively drained loamy sand formed in windblown sands. This soil is present in stream terraces and tableland.   | Suited for center-pivot irrigated and dryland crops, rangeland and hay. |  |  |  |  |
| Source: Soil Survey of Holt County, Nebraska, USDA – NRCS |   |   |  |  |  |  |

Information and knowledge on soils is an important factor when discussing future development options. The built environment is dependent upon the natural environment, and proper development practices must be followed in order to protect the natural environment. There are 22 detailed soil map units in the study area. These have been broken down into classifications based on slope, percentage of soil type, major and minor types of soil, and degree of drainage. In order to make land use recommendations, decision makers need to understand how different soil types and slopes can affect future land uses, the environment, current residents, and farming practices. The following maps in this section depict slope, soil suitability, and dryland or irrigated capability by soil associations for the planning jurisdiction of this Comprehensive Plan; soils data and classifications were gathered by the NRCS.

| Slope by Soil Association Map       | (Figure 3.2) |
|-------------------------------------|--------------|
| Soil Suitability for Septic Tanks   | (Figure 3.3) |
| Soil Suitability for Sewage Lagoons | (Figure 3.4) |
| Dryland Capability Classification   | (Figure 3.5) |
| Soil Suitability for Prime Farmland | (Figure 3.6) |





## <u>Legend</u>

1-Mile ETJ

Atkinson Corporate Limits

## **Soil Slope Association**

Level to nearly Level (0-2 Percent)

Gently Sloping (1-6 Percent)

Moderately Sloping (6-11 Percent)

Strongly Sloping (9-30 Percent)

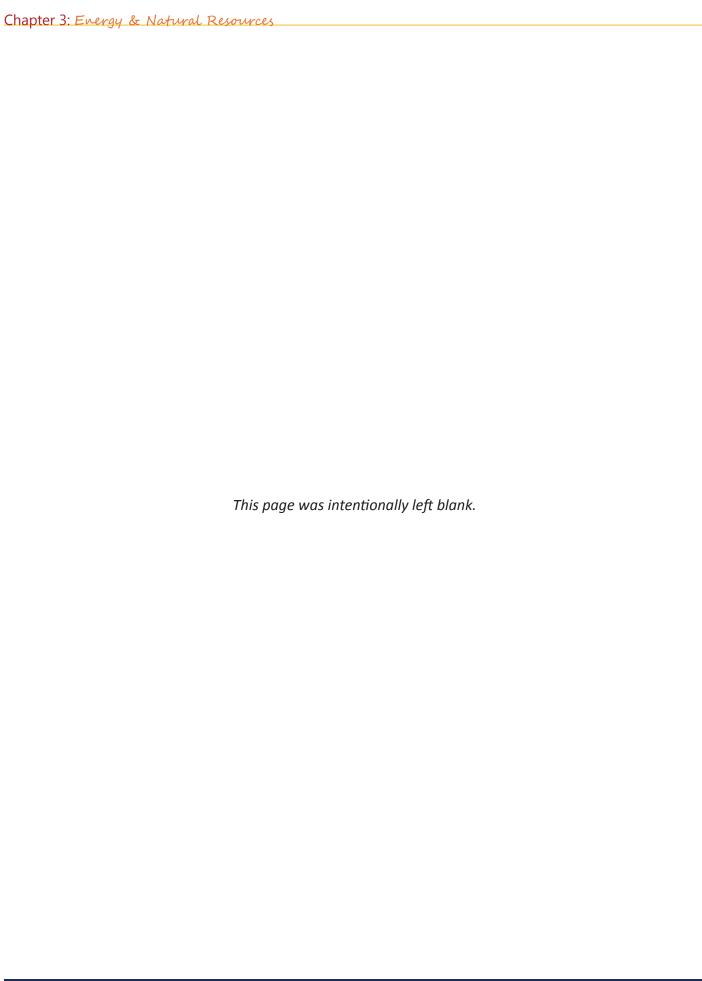
Very Steep (30-60 Percent)

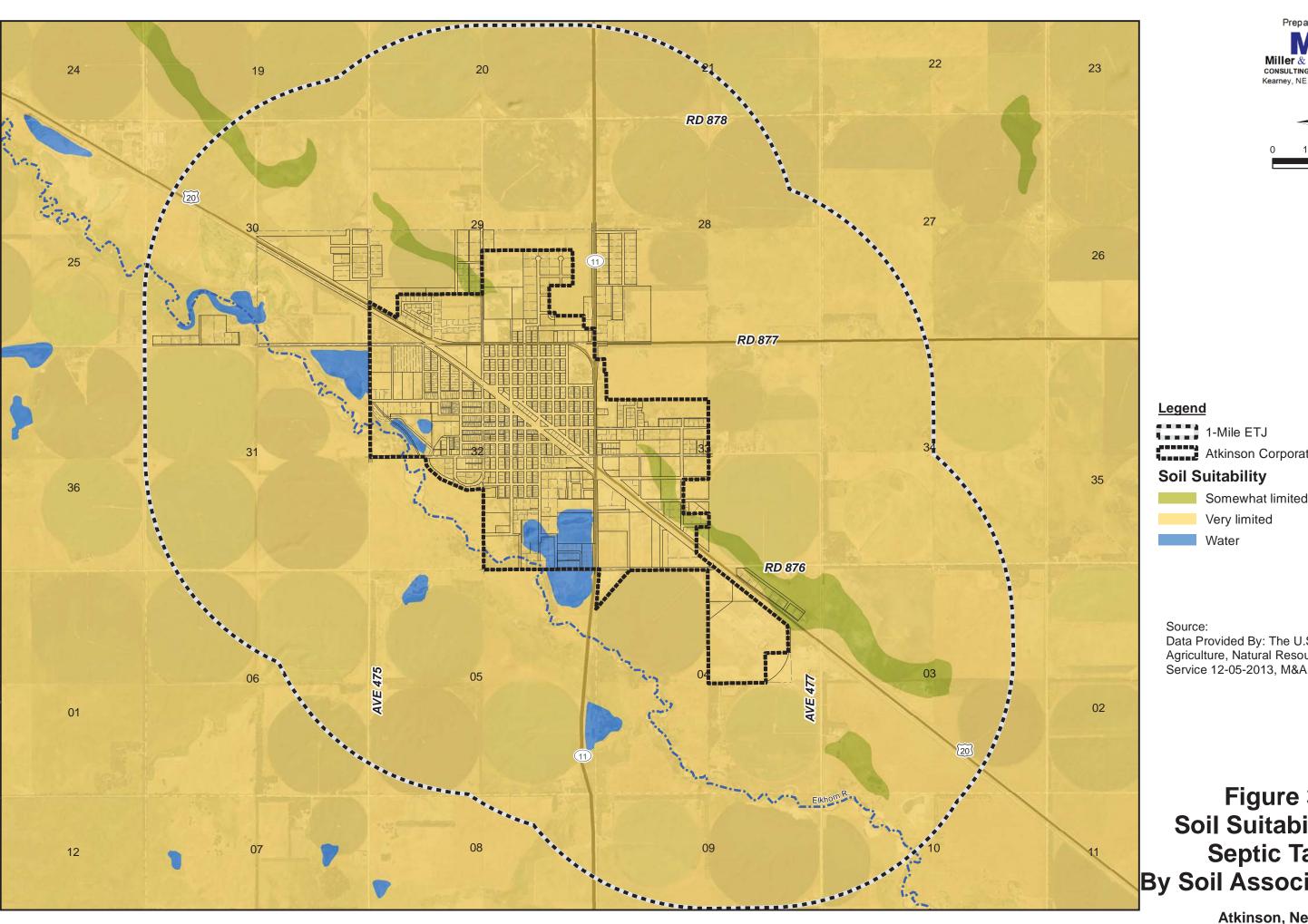
Water

#### Source:

Data Provided By: The U.S. Department of Agriculture, Natural Resources Conservation Service 12-05-2013, M&A

## Figure 3.2 Slope By Soil Association Map



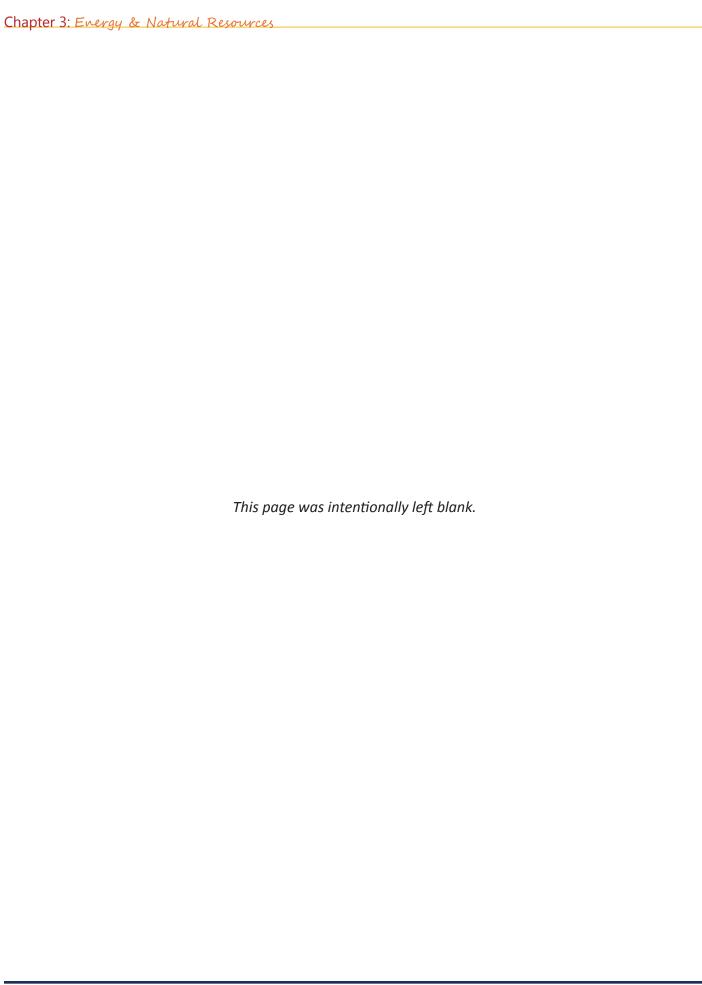


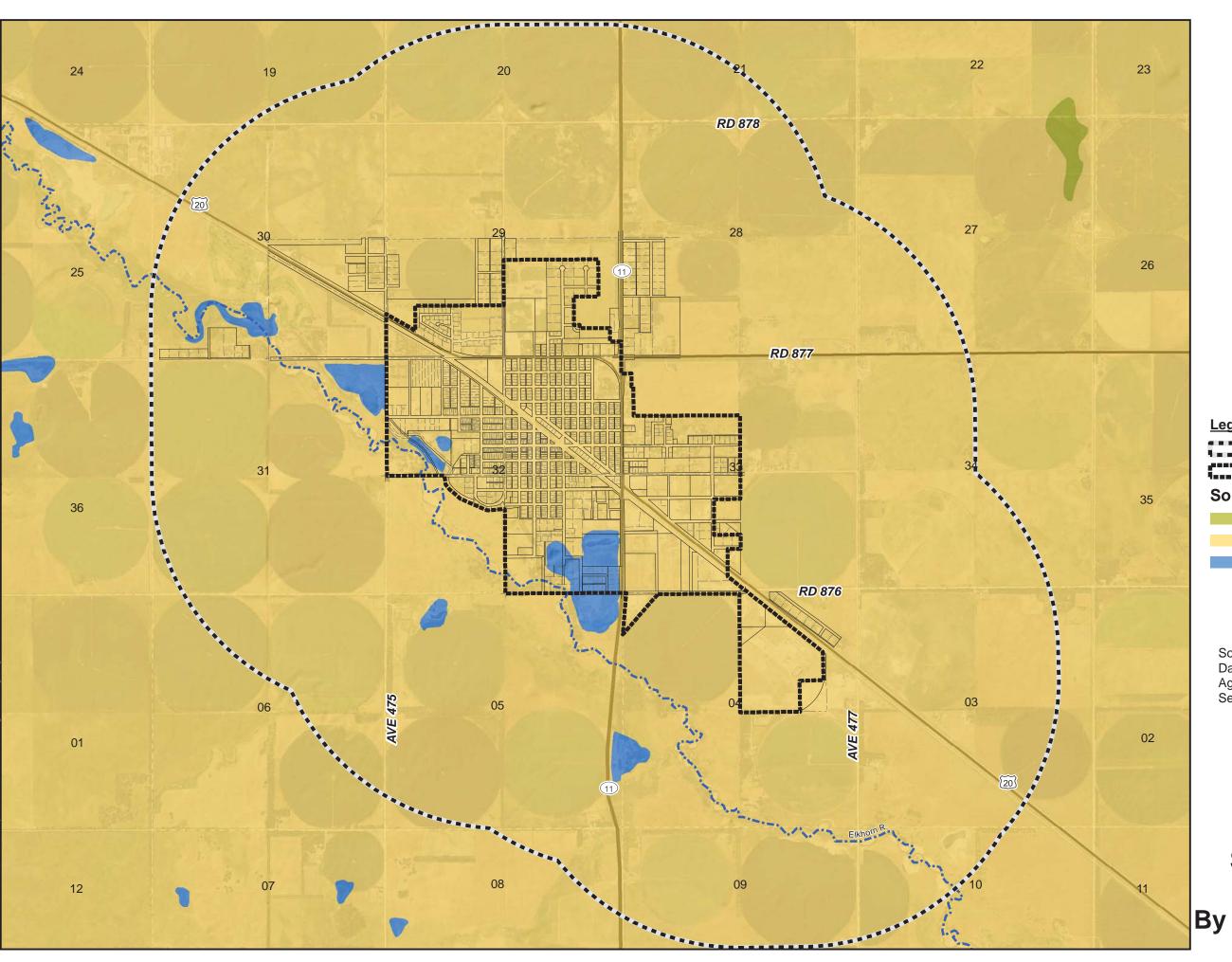




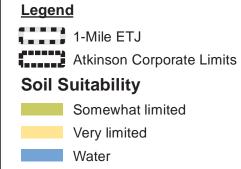
Data Provided By: The U.S. Department of Agriculture, Natural Resources Conservation

Figure 3.3 **Soil Suitability For Septic Tanks** By Soil Association Map







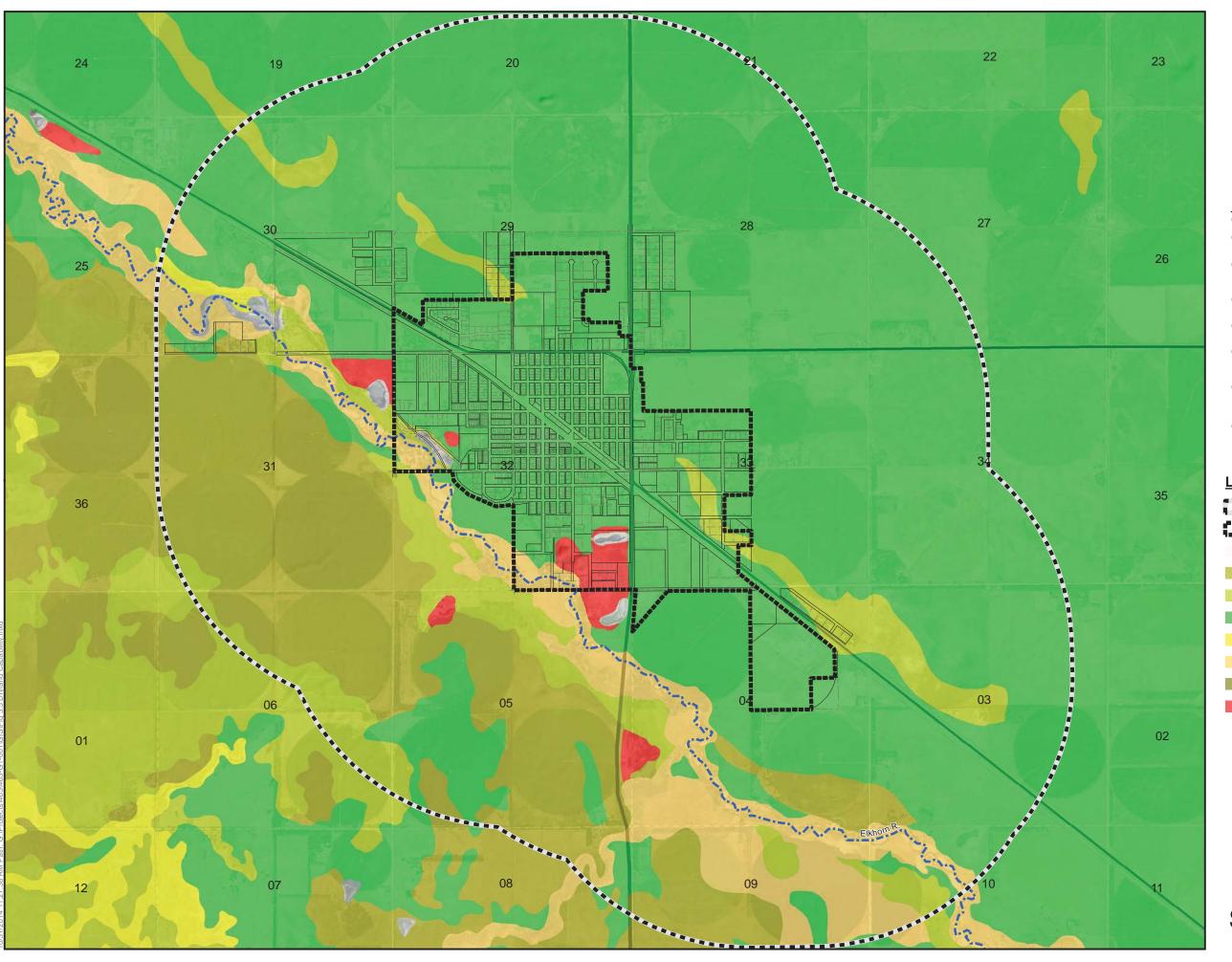


#### Source:

Data Provided By: The U.S. Department of Agriculture, Natural Resources Conservation Service 12-05-2013, M&A

Figure 3.4
Soil Suitability For
Sewage Lagoons
By Soil Association Map

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#### Class Description

Class 1 Soils have few limitations that restrict their use.

Class 2 Soils have some limitations that reduce the choice of plants or require moderate conservation practices.

Class 3 Soils have some limitations that reduce the choice of plants or require moderate conservation practices

Class 4 Soils have very severe limitations that restrict the choice of plants, require very careful management, or both.

Class 5 Soils have little or no erosion hazard, but have other limitations impractical to remove that limit their use.

Class 6 Soils have very severe limitations that make them generally unsuited to cultivation and limit their use largely to pasture, etc.

Class 7 Soils have very severe limitations that make them unsuited to cultivation and that restrict their use to grazing etc.

Class 8 Soils/landforms have limitations that preclude their use for commercial plant production and restrict their use.

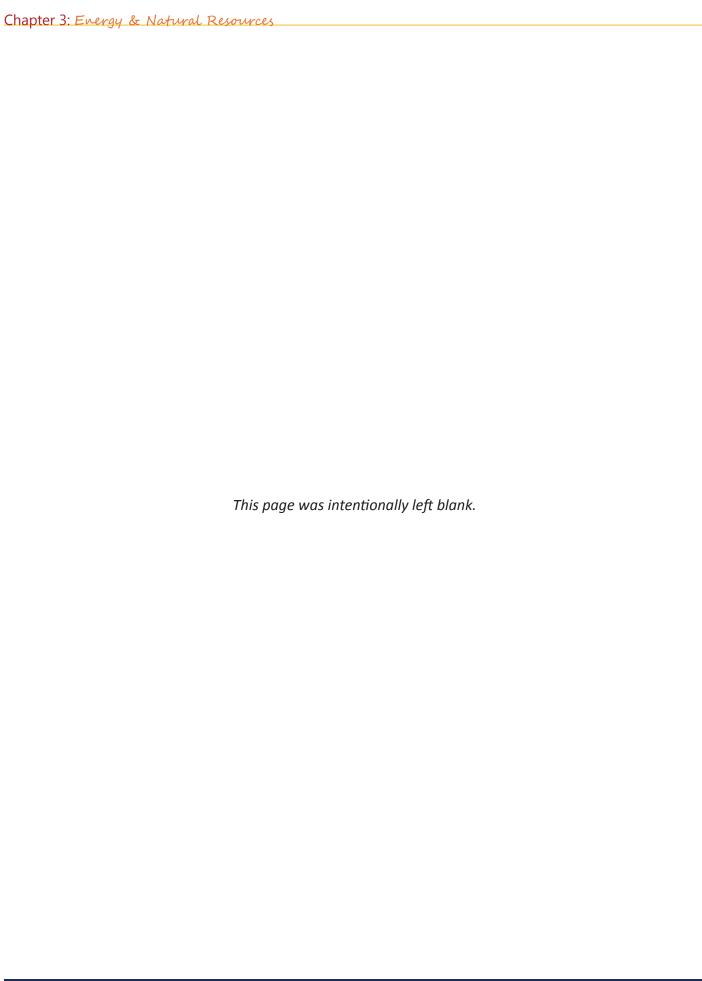
#### Legend

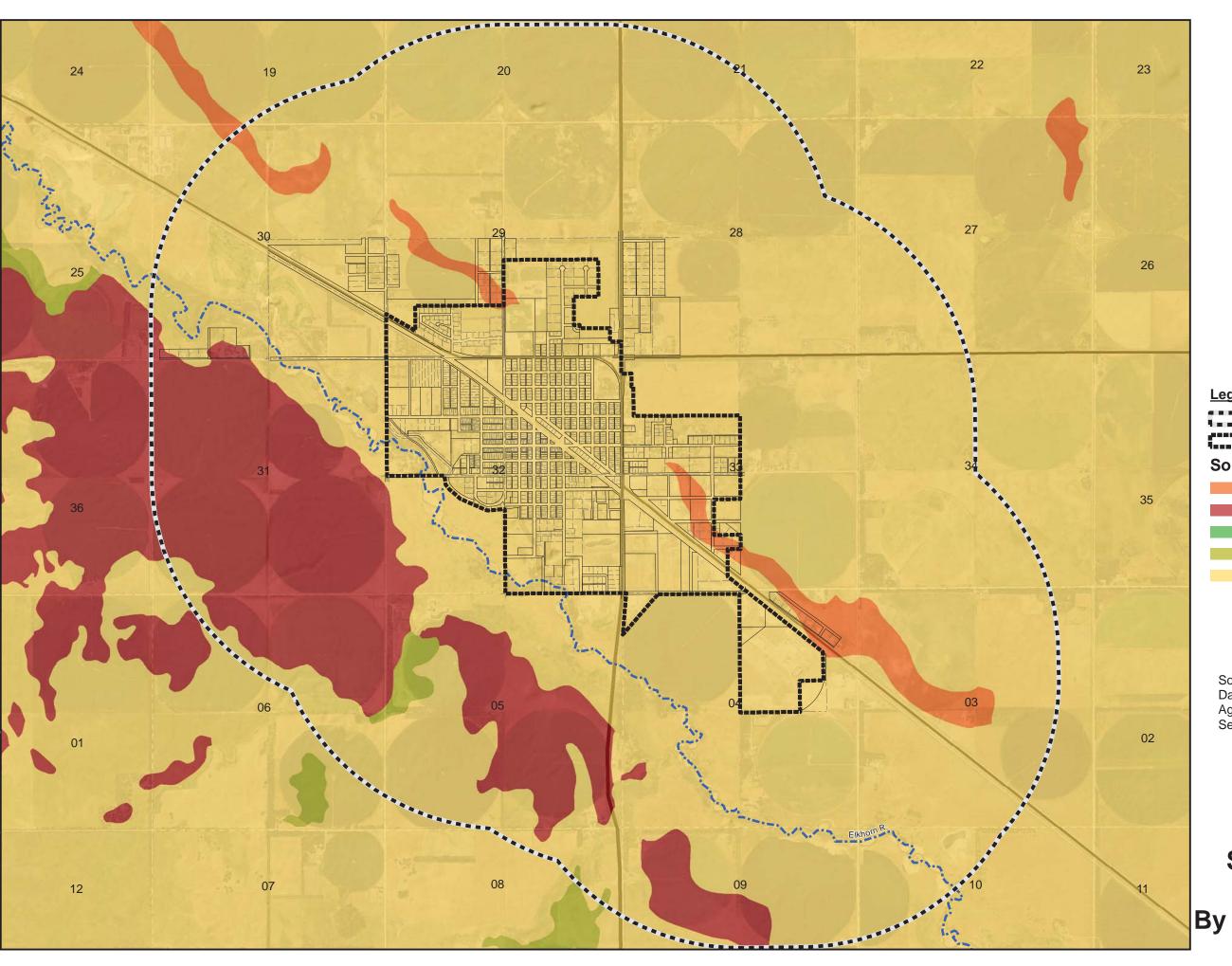


#### Source

Data Provided By: The U.S. Department of Agriculture, Natural Resources Conservation Service 12-05-2013, M&A

# Figure 3.5 Dryland Capability Classification By Soil Association Map







#### <u>Legend</u>

1-Mile ETJ

Atkinson Corporate Limits

## **Soil Suitability**

Farmland of statewide importance

All areas are prime farmland

Prime farmland if irrigated

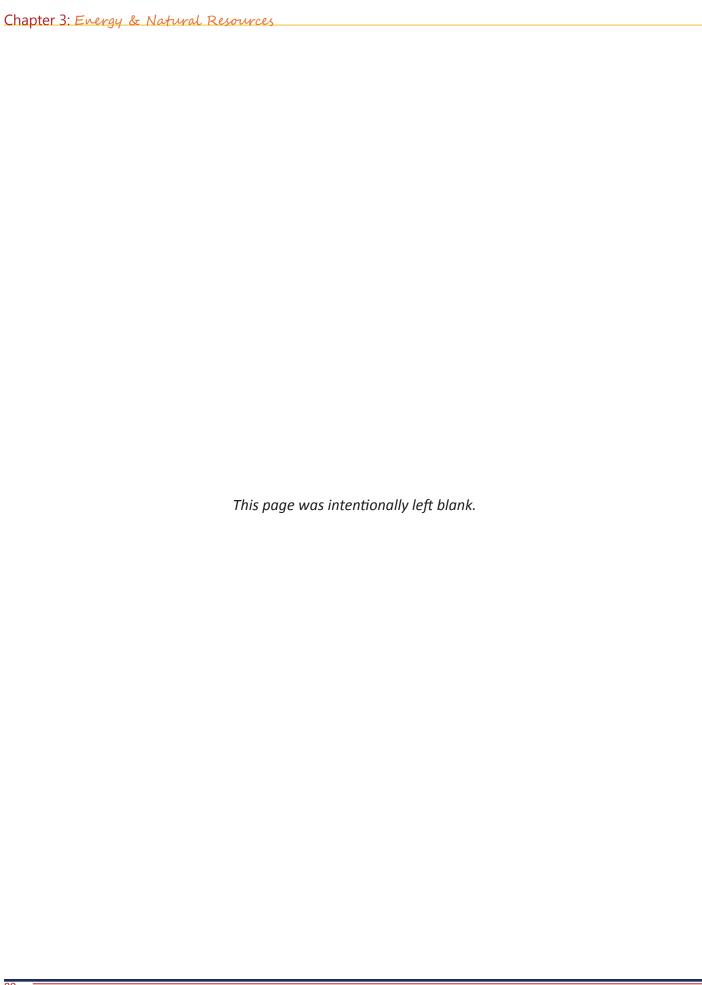
Prime farmland if drained

Not prime farmland

#### Source:

Data Provided By: The U.S. Department of Agriculture, Natural Resources Conservation Service 12-05-2013, M&A

Figure 3.6
Soil Suitablility For
Prime Farmland
By Soil Association Map



# Water

Nebraska, including Holt County, has an abundance of groundwater supply from the Ogallala Aquifer. Residents within Holt County get their drinking and agricultural water from wells utilizing the bed of porous rocks that form the Ogallala Aquifer. It is a great natural resource for the State of Nebraska, and in turn for Holt County and Atkinson, but conservation and potential contamination need to be constantly analyzed.

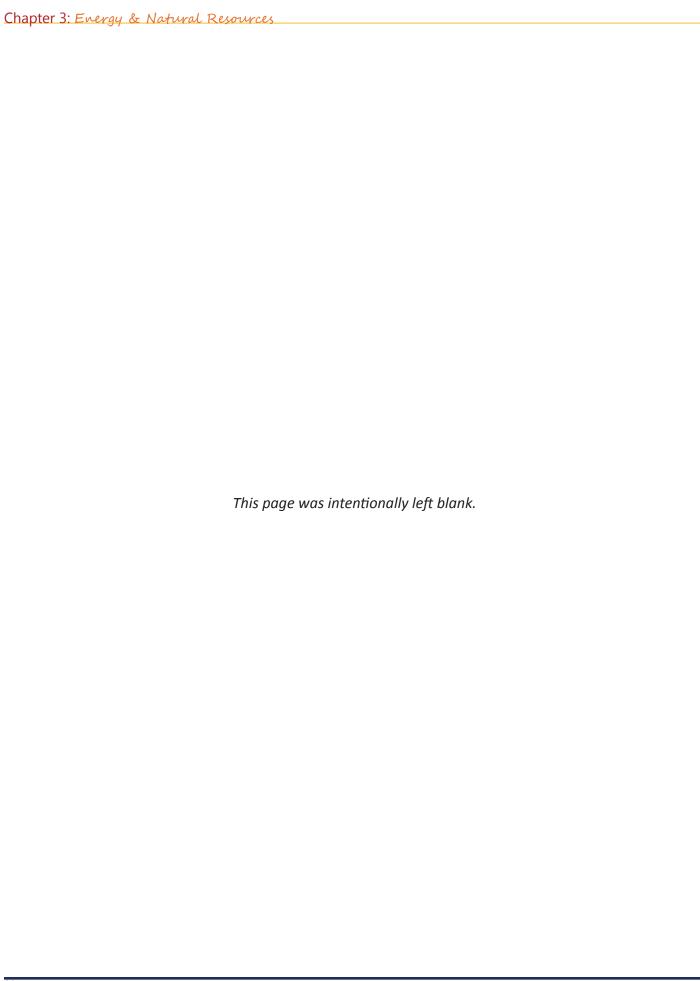
**Figure 3.7** shows all of the registered wells within the City's jurisdiction. The Ogallala Aquifer is the source of water for many irrigation systems and registered wells around Atkinson in order to supply water to residents, cropland, pastureland, and livestock. The State of Nebraska receives about 80 percent of its public drinking water and nearly 100 percent of its private water supply from groundwater sources. The agriculture economy, upon which most of Nebraska's communities are dependent, is directly tied to these aforementioned water sources, proving contamination to be a major concern. Due to the dependence on groundwater supply, the cost of contamination runs high. The State of Nebraska understands the vital importance of the groundwater supply, and therefore utilizes Natural Resources Districts (NRD). The Upper Elkhorn NRD plays an important part in protecting this natural resource for Atkinson and the surrounding areas.

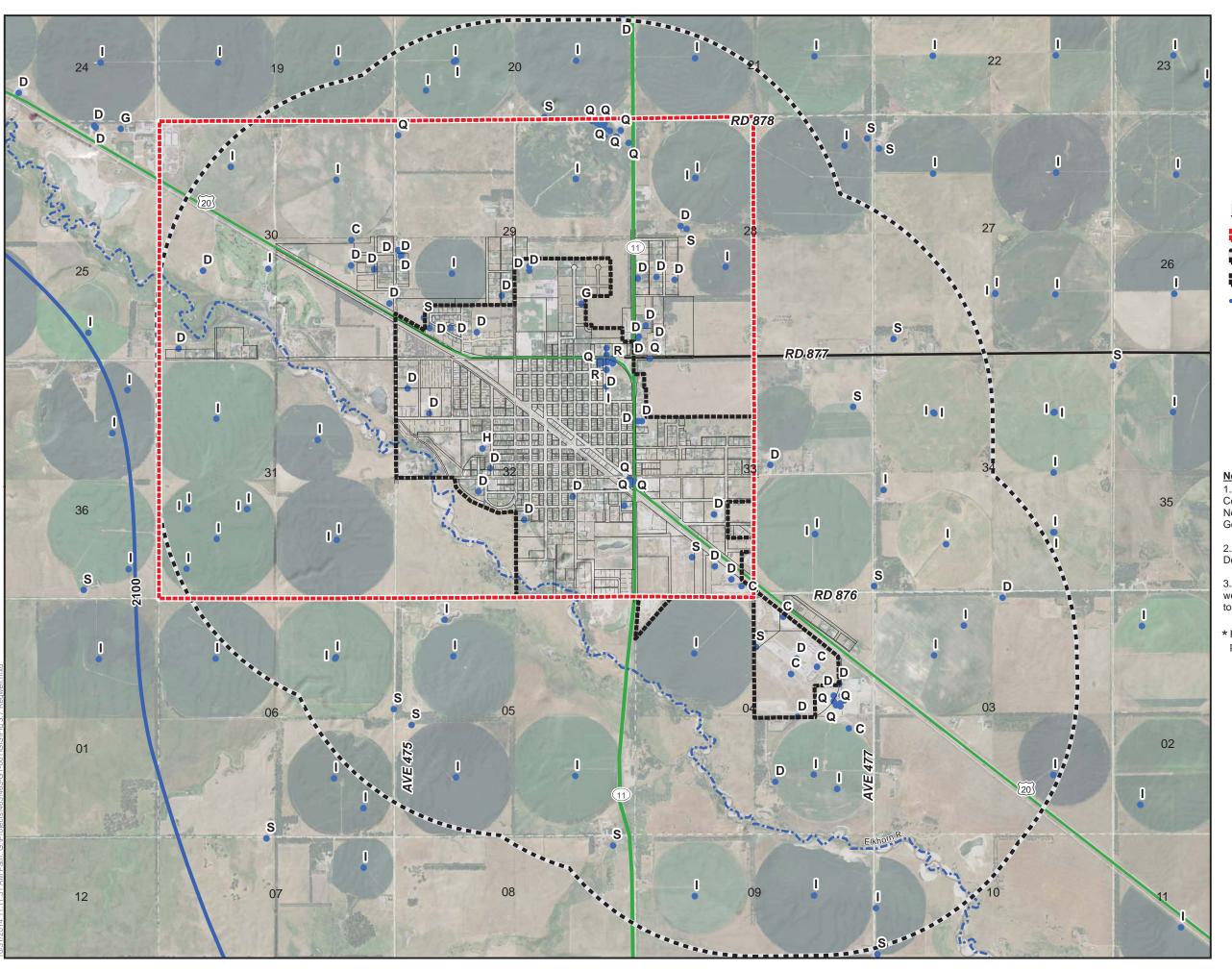
It is also part of Atkinson's responsibility to protect the quality and availability of drinking water for the region. **Figure 3.7** shows Atkinson's Well-Head Protection Area as covering a large majority of the City's corporate limits and the north and west portions of the City's Extra-Territorial Jurisdiction (ETJ). The goal of the Wellhead Protection Area is to protect the land and groundwater surrounding the public drinking water supply wells from contamination. Any endangerment to the supply threatens the public's health as well as the vital farming economy of the region.

Besides the Ogallala Aquifer, there is one major surface waterbody in the Atkinson vicinity, the Elkhorn River which flows through the southwest part of Atkinson.

All sources of water can create challenges for development because of the possibility of a high water table, and floodways and floodplains present with surface water. **Figure 3.8** is the floodplain map for Atkinson's corporate limits as reported by the Nebraska Department of Natural Resource REST service. This map shows the 1.0 percent annual flood chance, or the 100-year flood. Floodplains are designated by the Federal Emergency Management Agency (FEMA); however, FEMA floodplain mapping boundaries were not available for Holt County.

The 100-year floodplain is only mapped for the corporate limits of the City of Atkinson and does not include the ETJ. The mapped 100-year floodplain of the Elkhorn River includes parts of southwest Atkinson and will impact development within this area. The high water table in the floodplain is also a constraint for development. The water table ranges from 1.5 feet in wet years to 2.5 feet in dry years. As the community continues to grow, future development within the floodplain should only be allowed through the supervision of local, state, and federal regulations.







#### Legend

Wellhead Protection Area

1-Mile ETJ

Atkinson Corporate Limits

**Groundwater Contour** 

Reg. Well (Use Type)

"C" = Commercial/Industrial

"D" = Domestic

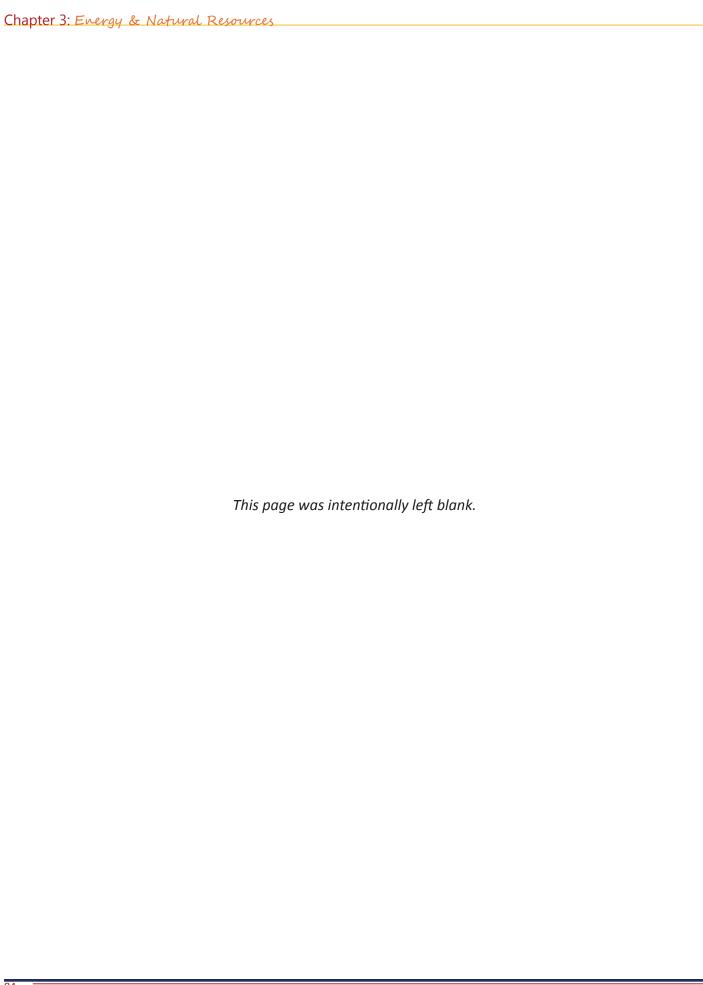
"G"= Ground Heat Exchanger
"H"= Heat Pump (Ground Water Source)

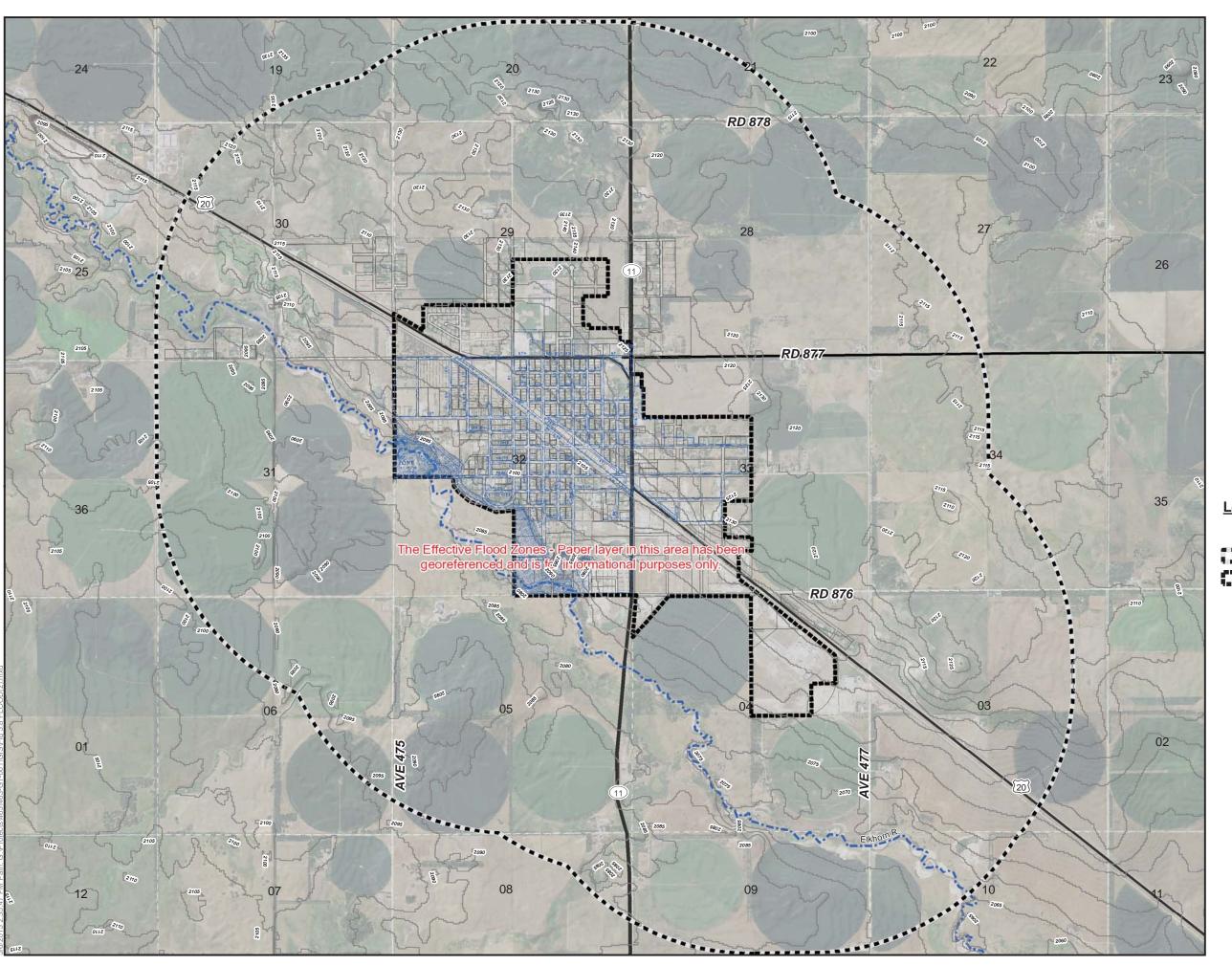
"L" = Observation (Ground Water Levels)

"Q" = Monitoring (Ground Water Quality)

- 1. 1995 groundwater contours were digitized by the Conservation and Survey Division, University of Nebraska-Lincoln, from Maps developed by the U.S. Geological Survey.
- 2. Registered well information provided by the Nebraska Department of Natural Resources, September, 2013.
- 3. Registered well locations are positioned from well registration forms. Some errors may exist due to data input and inaccuracies within registration records.
- \* Public wells are not depicted on this map for safety

## Figure 3.7 **Registered Well & Wellhead Protection Area Map**







#### **Legend**

1PCT Annual Flood Chance (100 Year) 1-Mile ETJ Atkinson Corporate Limits

Source: Nebraska Department of Natural Resource REST Service.

Note:
Data provided by Nebraska Department of Natural Resources is only available in the corporate limits of Atkinson and is not the . official firmette map as reported by FEMA.

# Figure 3.8 Floodplain Map

