### **CHAPTER SIX**

Community facilities and services is a collective term used to describe a variety of essential activities that sustain and enhance the quality of life for residents within a community. The provision of utility services, public safety programs and facilities for public health, education and recreation are all issues that increasingly challenge local governments. Planning is essential to ensure that the provision of these services and facilities meet the future needs within the community.

Community facilities and services can also be used to guide future development within the community. One example of this might be the decision to extend water and sewer service to an area targeted for development. As an economic development tool, the adequacy of facilities and services is also an important consideration. Industrial prospects making a decision to locate in a specific community will examine the quality of resources and services in the community.

Planning for the future development of facilities and services must incorporate all of the aforementioned elements. Prioritizing community facilities and services can only be accomplished by careful analysis of the existing levels of provision and projecting future needs. The issues of who gets what, when and where are among the most critical issues facing service providers with limited revenue and increasing costs.

This chapter addresses the following community facilities and services within the Alexandria planning area: education (schools and libraries), recreation (parks, schools, and public buildings), public health and safety (fire, police, emergency management), and utilities (water, wastewater, storm water and solid waste management).

#### **EDUCATION**

The residents of unincorporated Campbell County, and cities of Alexandria, California, Cold Spring, Highland Heights, Melbourne, Wilder and Woodlawn are served by the Campbell County School District as shown in Figure 6-1. The Campbell County School District is the third largest in Northern Kentucky. There are six (6) elementary schools in the district: Alexandria, A.J. Jolly, Cline, Grant's Lick, Highland Heights, and Reiley. The Campbell County Middle School serves over 1,100



students in 6th to 8th grade and Campbell County High School serves over 1,400 students in grades 9th through 12th. Each school is managed by site based decision-making councils (SBDM). The school district employs over 700 people and has a working budget in excess of \$22 million. Building renovations are completed on a continual basis. Table 6-1 provides an inventory of the existing public school facilities serving Campbell County and the City of Alexandria. Four (4) of the schools within the Campbell County School District are located within the City of Alexandria Planning Area; two (2) elementary schools, one (1) middle school and one (1) high school. In addition to the schools within the public school district, St. Mary's Elementary, Bishop Brossart High School and C.E. McCormick Area Technology Center are also located in the city. Figure 6-4 in the recreation section of this chapter shows the locations of these schools. It is important to note that A.J. Jolly and Alexandria Elementary Schools will be consolidated in August of 2005. Students from these schools will attend the Campbell County Elementary School to be built to the south of Grandview Drive adjacent to the "AA" Highway. This property has recently been annexed into the City of Alexandria.

Figure 6-2 details the enrollment rates for the Campbell County School district for the past five years (98-99, 99-00, 00-01, 01-02, 02-03). Typically this information is presented by showing enrollment rates and percentage of change by school. Overall, the school district has experienced a 2.08% decrease in enrollment over the past five (5) years. Cline Elementary School had the largest numeric increase (33 students) in enrollment, while the Campbell County Day Treatment Center had the largest percentage increase (91.67%).

The Campbell County High School dropout rate for the 2002-2003 school year was 1.6% which was lower than the state overall (2.6%) for this same period. Of the high school graduates of the 2002-2003 school year, 55% went to college, 0.9% went into the military, 21.4% went into the workforce, 10.6% students went to Vocational/Technical Training, and 6.5% into work and part time school. Only 5.6% of students graduating in 2002-2003 were considered to be "not successful". The school district average pupil/teacher ratio was 17 to 1. The State average for the same time period was slightly lower at 16 to 1.

In addition to those schools within the Campbell County School District there are fourteen (14) parochial or private schools within the community. Of these schools, two (2) are located within Alexandria City limits. St. Mary's Elementary School is located on Jefferson Street and Bishop Brossart High School is located on Grove and Jefferson Streets. Table 6-2 provides general information about these

schools. It is important to note that the two (2) schools are currently in the process of making improvements or planned expansions. Bishop Brossart is currently in the process of obtaining permits to begin construction of Phase IV of their improvement plan which includes construction of a gym, three (3) additional classrooms, fine arts center, library, chapel, media center and auditorium. In conjunction with Bishop Brossart, St. Mary's is also in the process developing an outdoor sports complex which will add two (2) soccer fields, a track, and grand stand area.

# AREA COLLEGES AND UNIVERSITIES

Although there are not any colleges or universities in the City of Alexandria, there are twenty-six (26) places of higher education within sixty (60) miles. In addition, Vocational-Technical Training is available at seven (7) locations convenient to residents of the city and county. These Kentucky Tech secondary schools (Sec), called Area Technology Centers (ATC), are operated by the Cabinet for Workforce Development. Other secondary schools are operated by public school districts. The post-secondary (P/S) schools, called technical colleges, are governed by the Kentucky Community and Technical College System (KCTCS). Tables 6-3 and 6-4 list the area colleges, universities and Kentucky Tech Schools.

#### PUBLIC LIBRARY SERVICE IN CAMPBELL COUNTY

Campbell County and the City of Alexandria are served by three (3) branches of the Campbell County Public Library System. The libraries are located in Cold Spring, Ft. Thomas and Newport. An updated inventory of these facilities is presented in Table 6-5. Several changes have occurred in the Campbell County Library System since the 1999 update of the Comprehensive Plan. The most notable of these changes was the relocation of the Newport Branch of the library from 4th Street to 901 East 6th Street in May 2004.

All branches of the library observe the following hours:

Monday-Thursday 9am-9pm Friday 9am-6pm Saturday 9am-5pm Sunday Closed



Book drops are located at all branches and are open twenty-four (24) hours per day. Any materials borrowed at one branch may be returned at any other branch of the Campbell County Public Library. However, all materials borrowed from the Campbell County Public Library are subject to daily fines as follows:

Adult books, Audiobooks, Music CDs
Children's Books
Software and Videos

\$ .10 per day
\$ .05 per day
\$ 1.00 per day

It is important to note that Campbell County Library patrons have access to 1,400 libraries participating in the Southeast Library Network through the Interlibrary Loan Department. Free internet service is also available at all branches with basic technology classes also being offered. In addition, each branch of the Campbell County Public Library has a Kentucky section of books, the majority of which focus upon local history. In addition, each branch of the library collects materials specific to the communities it serves. For example, the Newport Branch houses a collection of Newport City Directories dating from 1845 to the present.

The Campbell County Public Library Outreach Department offers a variety of services to enable Campbell County residents access to the library's resources. The library operates a Home Delivery Service where books are delivered to residents who are unable to visit the library due to permanent or temporary illness and/or disability. Deposit collections are delivered on a rotating schedule to nursing home and adult day care facilities in the county. In addition, a large variety of Bifolkal kits are available through the Kentucky Department of Libraries and Archives for nursing homes and retirement groups for programming with older adults. Eligible patrons of the Campbell County Public Library are also registered for the Talking Books Program through the Northern Kentucky Talking Book Library. The library outreach department also coordinates the Book Buddy Program which provides volunteer opportunities for those willing to give four (4) hours per month helping others gain access to library materials.

As detailed in the 1999 Comprehensive Plan, the Campbell County Library has been successful in improving facilities and services. However, based upon the projected population growth and potential future residential development, it may be necessary for the library system to consider the reestablishment of a branch library within the Alexandria planning area to better serve residents in the city and southern portion of Campbell County. The five (5) year plan for the Campbell County Li-

brary currently includes the construction of a new facility in Alexandria in order to serve southern Campbell County in the Spring of 2009. In the short term, the library has plans to renovate the Cold Spring Facility beginning January 2005.

In addition to the library facilities available to residents from the previously described sources, the W. Frank Steeley Library at Northern Kentucky University is also open to the public. The original building, completed in 1975 and renovated in 1995, was named for the first President of Northern Kentucky University. The library, located in the center of the campus, permits the use of its facilities by the general public with a Campbell County Library card. The library houses general reference, media, periodicals, and microform collections, Special Collections & Archives, and the Learning Resource Collection which contains materials in support of the teacher education program. It is also a large government depository for many federal and Kentucky state documents. Departments include Research and Instructional Services, Interlibrary Loan and Document Delivery, Systems, and Technical Services. Staff for the NKU facility includes 16 librarians, 21 support staff and 50 student employees. Collection information for the 2002-2003 year is as follows:

Volumes	285,029
Bound Periodicals	18,797
Current Periodicals	1,488
Computer Files	744
Microforms	1,482,984
Scores	8,430
Sound Recordings	1,321
Videos	902
Visual Materials	4,512
<b>Total Circulation</b>	101,746

It is important to note that the library's databases are automated, which enables cataloging and searching for data by computer.



#### RECREATION

Leisure and recreation are increasingly important elements contributing to the overall quality of life in a community. Unlike other community facilities discussed in this chapter, the provision of recreational facilities and programs is not always viewed as essential. Therefore, securing public funds can often be difficult. However, planning for parks, recreation and open space is important for the following reasons:

- 1. It encourages multi-modal activities through the development of low impact, non-consumptive use transportation patterns (i.e. walking, bicycling).
- 2. Open/Green spaces enhance the aesthetic appearance and value of a community.
- 3. Encourages wellness activities and provides a means for these activities.
- 4. To provide uninterrupted and safe pedestrian movement between parks, neighborhoods, schools, etc.
- 5. Protection of the integrity and quality of disappearing resources (significant open spaces, natural habitats, natural drainage, views and vistas).
- 6. To link recreational components together (through greenways and multi-modal transportation systems) to form a cohesive park, recreation and open space system.
- 7. Improves the quality of development by emphasizing harmony with the natural environment.
- 8. Increases the city's appeal as a tourist destination.
- 9. Encourages greater community involvement and other forms of volunteering.
- 10. Enhancement of a community's quality of life (and property values).

In February 2002, Brandstetter Carroll Inc. completed the *Campbell County Parks and Recreation Master Plan*. The purpose of the plan is to provide direction to the Fiscal Court, County Administration and staff, Planning Commission,

Park and Recreation Department and others in managing the improvement and growth of parks, recreation, open space, and leisure opportunities for all Campbell County Residents. The plan states that Campbell County currently has 999 acres of park land that is developed for park use at five (5) parks. In addition, twelve (12) school sites and forty-seven (47) city parks also provide recreational opportunities. These facilities are shown on Figure 6-3 which depicts existing and proposed parks for the county and also listed in Table 6-7. This table provides an inventory of all public and private recreational facilities including those located at county schools.

As can be seen by reviewing Table 6-7 and Figure 6-3, the residents of the City of Alexandria have three (3) major recreational facilities available to them within city limits in addition to those that the school district provides and the Calvin Perry Family Life Center. The Alexandria Community Park located on Alexandria Drive is the only public park in city limits. It is owned by the City of Alexandria and is currently the focus of improvement efforts by the Alexandria Park Committee who are currently implementing their five (5) year improvement plan. The two (2) other recreational areas in the city are the Alexandria Fairgrounds and the VFW Ballfield. Both are privately owned. The Alexandria Fairgrounds, located on Alexandria-Four Mile Road, is the site of the Alexandria Fair and Horse Show. The fair and horse show has been an annual event in the city for 142 years. The official birthday of the fair is June 7, 1856. This date also corresponds with the day that the Agricultural Society organized itself into a corporation. Finally, the third recreational facility located within the city is the VFW Ballfield which is located between U.S. 27 and Spillman Road.

Other recreational facilities identified in the planning area are the Bob White Club located in the county on Licking Pike, Knights of Columbus, Campbell County Game and Fish, and Tri-City Sportsman Club. The Bob White Club is a privately owned facility that encompasses approximately 94 acres. Activities available are archery, camping, fishing, swimming and trap shooting. It is also important to note that the Campbell County Extension District entered into a lease agreement with the Campbell County Fiscal Court for use of approximately fifty (50) acres of A.J. Jolly Park property for the study of air, soil, water, wildlife, forestry, and agriculture. This area, known as the Campbell County Environmental Education Center, is operated by the Campbell County Extension Service and administered through the University



- of Kentucky for scheduling and conducting environmental educations programs for youth and adults in order to further environmental literacy in:
- -the inter-relationship between natural and social systems
- -the unity of human kind with nature
- -technology and the making of choices
- -developmental learning throughout the human lifecycle.

The Campbell County Environmental Education Center is open Monday through Friday from the beginning of October to April (7:00 am to 3:30 pm Monday through Friday) and Monday through Sunday from the beginning of May to end of September (7:00 pm to dusk).

As part of the development of the county's recreational plan, a comparison of park needs was conducted and a comparison made between cities. The comparison indicated that Newport, Bellevue, Highland Heights, and the unincorporated areas have the largest deficit in park space. The cities of Ft. Thomas, Cold Spring, and Alexandria are the best served communities. However, the plan estimates that an additional 70.2 acres of park land will be needed by the City of Alexandria in the year 2020. Identified gaps in the park system were in the area between Cold Spring and Alexandria, Highland Heights, the northern area of Wilder, and all of the unincorporated area of the Campbell County. There were three (3) areas adjacent to the City of Alexandria planning area where the plan recommends the construction of three (3) new county parks as shown on Figure 6-3. The first area is located between Cold Spring and Alexandria. Based upon the needs analysis conducted as part of the planning process, it was recommended by the Campbell County Parks and Recreation Master Plan that this park contain Soccer and Baseball/Softball Complexes. In addition, two (2) areas south of city limits were identified by future county parks. It is recommended by the county's plan that a Community Recreation Center and Family Aquatic Center be developed to attract residents from Alexandria as well as the expected growth areas of the county located to the southwest of the city. The plan also recommends that bike paths be developed from U.S. 27 from the Cold Spring and Alexandria area to Route 8 and the proposed River Path and suggests that the route of the proposed sewage line along Twelve Mile Road be investigated as an option for the route of the bike path.

In addition, the plan recommends that Neighborhood and Community Parks are developed as new subdivisions are planned in the city. Recommended locations that should be targeted are northeast and southwest of Alexandria.

As part of the comprehensive planning process completed in 1999, the planning commission held several parks and recreation workshops where existing and future recreational facilities and open spaces were identified. These areas were then connected to other public facilities via sidewalks or other pedestrian/bikeway systems. Figure 6-3 shows the location of all existing and proposed recreational facilities and public buildings, as well as the proposed locations of county parks and bikeways identified during the *Campbell County Parks and Recreation Master Plan*.

Future recreational facilities within the City of Alexandria include the development of Tribute Park. The city has initiated the development of this park in order to honor men and women who have served in the armed forces, as firefighters, police officers, paramedics, and EMTs. Tribute Park will be located U.S. Highway 27 and KY 10 on property donated by the UHL&P/Cinergy. The park, located on a asymmetrically shaped piece of property, has a fountain and is surrounded by a marble pentagon. Commemorative bricks will pave the walkway around the fountain and marble benches.

# ALEXANDRIA PARK COMMITTEE

The current Alexandria Park Committee was formed on February 19, 1998 in order to plan for and implement improvements to the Alexandria Community Park located on Alexandria Drive. The committee has eight (8) members who meet on the first Wednesday of each month at the city park or shelter. The implementation of the park committee's latest five (5) year plan began in fiscal year 2002 and includes a variety of projects to enhance Alexandria Park



#### PUBLIC PROTECTION

#### LAW ENFORCEMENT

Police protection is provided by fifteen (15) law enforcement agencies within Campbell County. Twelve (12) of these agencies are city or county police departments with two (2) being state agencies and one (1) belonging to Northern Kentucky University. Table 6-9 provides a listing of these agencies and details the number of personnel and equipment available to each. Of the fifteen (15) agencies, there are three (3) primary agencies that provide police protection for the City of Alexandria planning area: the City of Alexandria Police Department, Campbell County Police and Kentucky State Police. The City of Alexandria Police Department and the Campbell County Police Stations are located within the planning area. The Kentucky State Police also serving this area is based in Dry Ridge, Kentucky.

Of the twelve (12) local agencies providing police protection, there are a total of 178 full-time sworn officers, 10 part-time sworn officers, 18 dispatch personnel, and 30 clerical personnel. The total number and type of law enforcement vehicles available to the local agencies are: 117 marked cruisers, 39 unmarked cruisers, 6 all-terrain vehicles and 10 "other" police vehicles. In addition to numerous vehicles, these agencies also have communications equipment. The following communications equipment is currently being used by the local agencies: 118 mobile UHF or VHF radios, 148 portable UHF or VHF radios, and 48 cellular phones . A breakdown of this equipment is also provided on the previous pages in Table 6-9.

Based on generally accepted standards, 1.5 to 2.0 police officers are recommended for every 1,000 persons in the population. According to the 1995 Municipal Book, the nationwide average of police department personnel for municipalities is 2.59 employees per 1,000 population. This includes both uniformed and civilian employees. Larger urban areas tend to have more employees per capita. Smaller, more rural or suburban areas tend to have somewhat fewer police department employees per capita.

Campbell County currently has a total of 178 full-time sworn officers and 10 part-time sworn officers (counted as 5 full-time officers). Based on the 2000 population of 88,616 there are approximately 2.06 officers per 1,000 of the population. This ratio is well within the recommended standards. As the population con-

tinues to increase, the number of officers available to the county should be monitored and supplemented where possible.

The City of Alexandria currently has twelve (12) uniformed officers. Based on a 2000 population of 8,286 there are approximately 1.48 officers per 1,000 in the population. This ratio is slightly lower than the recommended standards and national averages. As growth continues, the number of officers should be increased to correspond to the population trends within the city.

As shown in Table 6-9, the City of Alexandria has ten (10) marked cruisers, two (2) unmarked cruisers, one (1) mobile command vehicle, one (1) K-9 officer and vehicle, twelve (12) mobile radios, thirteen (13) portable radios and four (4) cellular phones. In addition, all cruisers have computer systems. Seven (7) of the twelve (12) officers are members of the Special Weapons And Tactic (SWAT) team which was formed in 1998. In addition, two (2) officers are trained hostage negotiators. Each member of this team must train a minimum of ten (10) hours per month. Since formed, the SWAT team has been called upon for four (4) to five (5) major investigations with the police department typically averaging 7,500 calls per year. It is important to note that the Alexandria Police Department received full accreditation status from the Kentucky Association of Chief's of Police in 2002. Accreditation reflects that the police department has met or exceeded professional accepted practices in law enforcement.

As a community service the Alexandria Police Department implements the "Vacation Home Watch" and the "Neighborhood Watch" programs. The "Vacation Home Watch" program is available for residents who go out of town and would like additional patrolling of their home and neighborhood. To participate in this program, the vacationing residents notify the police department that they will be out of town. Once every shift, a police officer drives by the home and checks the doors and windows. Upon the resident's return, a report of patrolling times and findings is available for their review. The Alexandria Police Department also assists neighborhoods to establish and implement the "Neighborhood Watch" Program as requested. In addition, the police department has a School Resource Officer. The School Resource Officer Program is a joint cooperative effort between the Campbell County Board of Education and the City of Alexandria and is implemented to enhance security and minimize day-to-day incidents at the Campbell County Middle School and assists with Alexandria Elementary School as well.



Beginning with the 2002-2003 school year, the Alexandria Police Department also teaches the "Character Counts" program for 1st to 8th grades at St. Mary's School.

Future plans for expansion of the Alexandria Police Department will only occur once city hall has been moved to the newly acquired church. It is estimated that this move will occur in the year 2005.

#### FIRE PROTECTION

Fire protection is an essential service within any community, often saving lives and property. Planning for adequate manpower, equipment and a good emergency response system are important considerations, not only for city and county residents but also for prospective residents and businesses. Fire insurance ratings and the associated insurance premiums are calculated according to the level of operation of each fire department.

Fire services in Campbell County are provided by fourteen (14) separate fire departments, including; Alexandria, Bellevue, Camp Springs, Central Campbell County, Dayton, Eastern Campbell County, Fort Thomas, Highland Heights, Melbourne, Newport, Silver Grove, Southern Campbell County, Southgate, Wilder and Woodlawn. All fire service agencies in the county share a common radio communications system incorporating three (3) primary channels and (1) one regional mutual aid channel. In addition, most of these agencies have access to the regional emergency medical services radio system.

Fires in the county usually range from small rural grass and brush fires in rural areas to major fires in the highly urbanized areas of Bellevue, Dayton, and Newport. Fires in these areas can occur at any time as the result of manmade, technological incidents or natural disasters. Incidents, which may constitute a countywide emergency or multiple jurisdictions within the county, may require mutual aid assistance from either within or outside the county. During large-scale emergencies, all county fire service organizations cooperatively function as a single emergency response organization.

The Alexandria Fire Department was organized in 1937 in a garage at the rear of the Alexandria Courthouse. On June 1, 1959, the fire department was moved to 5 Pete Neiser Drive. In the following years, modern equipment was

purchased and in 1976, Fire District #5 was organized. The first paid fire chief was hired in 1997. On December 17, 1999 the fire department was moved to its present location at 7951 Alexandria Pike. The Alexandria Fire/EMS/Fire District #5 is a special fire taxing district that encompasses a twenty-five (25) square mile area, including the City of Alexandria and surrounding Campbell County area. The population served by the District is approximately 20,000 persons and includes a mixture of commercial, residential, and educational facilities. The fire protection Insurance Services Office (ISO) rating is a class four (4) for the City of Alexandria and nine (9) for Campbell County. The Fire District has a staff of nine (9) personnel and maintains a volunteer staff of approximately thirty-five (35) individuals. The district responds to approximately 750 EMS responses and 350 fire responses per year. The district's equipment includes two (2) Engine Companies,

one (1) Truck Company, one (1) Heavy Rescue Company, and one (1) basic life support ambulance with plans to add another ambulance in 2004.

As the Alexandria area continues to grow in population, the fire district will continue to grow as demand for Fire/EMS protection increases. Long range goals of the fire department include a second fire station in the eastern section of the fire district, Advanced Life Support, and a new rescue unit.

#### OFFICE OF EMERGENCY MANAGEMENT (OEM)

The Campbell County Office of Emergency Management (OEM) is the agency of the county government having primary responsibility and authority for the following:

- 1. Planning and execution of disaster and emergency mitigation;
- 2. Preparedness, response and recovery for Campbell County;
- 3. Coordination of disaster and emergency response by and between county agencies and political subdivisions;
- 4. Coordination and liaison with related agencies of the state and federal governments:
- 5. Coordination of recovery operations subsequent to disaster and emergencies; and,
- 6. Coordination of hazard mitigation planning activities.



The Office of Emergency Management is further responsible for the preparation and maintenance of the Campbell County Emergency Operations Plan (EOP) which serves as the comprehensive plan for the disaster and emergency response system for the county. The EOP was originally completed in April 1987, completely revised in 1995, and is updated annually. The EOP establishes policies and procedures for coordination of local, county, state and federal response to natural, technological and attack related disasters or other emergencies. The most recent update of the plan, adopted in July 2003, has been reviewed and approved by the Campbell County Fiscal Court and by the Director of the Office of Emergency Management. The EOP has also been adopted as an ordinance of the county pursuant to Chapter 91 of the Campbell County Code of Ordinances. This plan, once approved by the county, is integrated into the disaster and emergency response plans of the state and federal governments. The Office of Emergency Management is authorized by both Chapter 39 of the Kentucky Revised Statutes and Chapter 91 of the Campbell County, Kentucky Code of Ordinances. The OEM is also the agency of county government responsible for the administration and enforcement of the Campbell County Hazardous Material Control Ordinance. This ordinance was originally adopted by the Fiscal Court in 1986 and revised in 1995.

The Hazardous Materials Spill Prevention Countermeasures (SPCC) Program is another responsibility of the OEM. The program, established in 1988, is designed to obtain detailed information from those facilities within Campbell County that use, store or process hazardous materials. One component of the SPCC Program is the inspection of certain facilities by OEM personnel. To date, the OEM has a database of four hundred and twenty-eight (428) facilities handling hazardous materials.

The Office of Emergency Management is staffed by two (2) full-time emergency managers and one (1) full time assistant staff person. Current personnel have extensive experience in the fields of emergency management, fire and rescue services, emergency medical services, hazardous materials response and public relations. Combined, personnel employed with the OEM have over seventy (70) years of public safety experience.

Resources of the Office of Emergency Management include the Emergency Operations Center (EOC), located in the Campbell County Police/OEM Building in Alexandria. County vehicles assigned to OEM personnel are equipped with two-way radio, mobile telephones and computer equipment in order to serve as command

units at the scene of a localized emergency. Another important resource for the OEM is an office computer system which is connected with neighboring counties, state and federal OEM agencies, and the internet.

#### UTILITIES

#### NORTHERN KENTUCKY WATER DISTRICT

Early in 1996, plans were made to merge the Kenton County Water District and Campbell County Water District. While a merger had been discussed for years, a legal dispute between the two districts was the catalyst to complete the merger. By May of 1996, agreements were made on how the transition would be handled. Authorization for the merger was granted to the Northern Kentucky Water District by the Kentucky Public Service Commission in August of 1996 and by the end of the year the merger was complete. The Northern Kentucky Water District has stated that the merger had five (5) main advantages:

- 1. Elimination of wasteful water-purchasing lawsuits
- 2. More efficient operations slow rate increases
- 3. Coordinated planning will better prepare the district for future demand
- 4. The combined district is able to draw upon the strengths of each existing system
- 5. The merger increases customer service resources

Joining the two districts also added 31,00 people to Northern Kentucky Water District's (NKWD) customer base and increased the annual demand for water by 5-10 million gallons. In addition, NKWD constructed the Ft. Thomas Pump Station and replaced of a total of 1.3 miles of water mains in Kenton and Campbell Counties. Many of these mains were between 60 and 80 years old. The projects ranged from 300 feet of main on some area streets to 1,500 feet of main replacement on other roadways. As a result of these projects, NKWD has implemented a formal program to replace aging water mains within the district as well as make other improvements. In the year 2000, NKWD estimated that the total population served by the district was 212,381 persons or 90% of those covered by the NKWD service study area, with 23,429 persons or 10% being unserved. By the year 2020, NKWD estimates that a total of 230,272 or 94% of the service study area will be served with water. The service area of the Northern Kentucky Water



District is shown in Figure 6-6. Most areas within Campbell County, with the exception of southern Campbell County, are currently served by the district. It is important to note that the service area map does not depict service to the City of Newport which was acquired by NKWD in June 2002.

Prior to the purchase of the Newport system, the District owned and operated two (2) water treatment plants, the Fort Thomas Water Treatment Plant and the Taylor Mill Water Treatment Plant. Combined the plants produced approximately 54 mgd. Now, the Fort Thomas Water Treatment Plant is the primary source of finished water for the District. The Fort Thomas WTP is a conventional settling/filtration plant that treats surface water from the Ohio River. The Taylor Mill Water Treatment Plant is also a conventional settling/filtration facility with a capacity of 10 mgd. Unlike the Fort Thomas WTP, source water for the Taylor Mill Plant is the Licking River. In addition, the Taylor Mill Plant serves as a critical pumping facility for NKWD, taking water produced at both Taylor Mill and Fort Thomas (which flows by gravity to Taylor Mill) and transferring it to the distribution system. When NKWD acquired the system owned by the City of Newport in June 2002, it also obtained the Memorial Parkway Treatment Plant. The Memorial Parkway Treatment Plant is a non-conventional plant that uses a process of ballasted flocculation to treat water from the Ohio River.

The Northern Kentucky Water District last updated their Water Distribution System Master Plan in July 2001. The purpose of the plan, written by Black and Veatch, is to provide NKWD with a long range plan for improvement and expansion of its water transmission and distribution system in Kenton and Campbell Counties. The recommended improvements identified in the plan serve as a basis for the design, construction, and financing of facilities to meet NKWD's anticipated population growth, commercial development, and expanding service area. The completion of the recommended system improvements contained in the plan will be necessary during the period covered by the study in order to provide an adequate and dependable supply of water to existing and future customers. It is important to note that an addendum to the plan was completed by Black and Veatch in June 2003. The purpose of this addendum was to provide an assessment of reliability and redundancy in the NKWD distribution system and make recommendations for

system improvements through the year 2020 for the service area recently acquired from the City of Newport. Both the Water Distribution Master Plan and addendum contain recommended system improvements for the Alexandria Planning Area. In addition to the existing water lines in the City of Alexandria shown in Figure 6-7, proposed water system improvements are listed below and shown on Figure 6-8:

#### 2003-2009 NKWD SYSTEM IMPROVEMENTS

#### 2003

- Construction of a new 1.0 MG water tower in southern Campbell County along Bob Huber Drive.
- Installation of a 12" line on Upper Tug Fork Road, approximately 8,800 in length.

#### 2004

- Installation of 12" lines on Licking Pike from Trapp Road to Rifle Range approximately 9,000 feet in length.
- Installation of 12" lines on Licking Pike from Rifle Range to Sub-D approximately 13,000 feet in length
- -Installation of 12" line along Upper Tug Fork to Four Mile Pike approximately 3,000 feet
- -Installation of 12" line along Four Mile Pike (Poplar Ridge to Nelson Road) approximately 3,200 feet
- -Installation of 12" line along Nelson Road (Four Mile to Four & Twelve Mile Road) approximately 6,500 feet
- -Installation of 12" line along Four & Twelve Mile Road (Nelson to Hwy 1566) approximately 7,700 feet
- -Installation of 12" line along Washington Trace Road (Twelve Mile Road to Hwy 1996) approximately 14,300 feet

#### 2005

- Installation of 8" line on Lower Tug Fork Road approximately 10,500 feet

#### 2007

- Installation of 12" line KY 10 KY 547 From Washington Street to Nelson Road approximately 10,600 feet.
- -Installation of 12" line on Four Mile Pike (Poplar Ridge to Upper Eight Mile) approximately 5.600 feet

#### 2008

- Installation of 12" line on Twelve Mile Road From KY 10 to KY 1566 approximately 8,200 feet

#### 2009

- Installation of 12" line on KY 536 from U.S. 27 to Pond Creek Road approximately 17,300 feet
- -- Installation of 12" line on interconnect 1010/1017



#### SANITATION DISTRICT NO. 1 WASTEWATER TREAT-MENT

The City of Alexandria is located in the proposed Eastern Regional Service Area as designated by Sanitation District No. 1 in their "Facilities Plan for the Eastern Regional Wastewater Treatment Plant" completed in August of 2001. Figure 6-9 shows the location of this area as well as proposed future service areas. In addition, the map shows the location of existing sewers, proposed sewers, package treatment plants, wastewater treatment plants and pump stations. Septic tank problem areas are also shown with several being located in the Alexandria Planning Area.

The majority of customers to be served by the proposed Eastern Regional WWTP are presently served by the three (3) local wastewater treatment plants: Alexandria WWTP, Kahn's WWTP, and Pond Creek WWTP. The Kahn's WWTP primarily receives the industrial wastewater of the Hillshire-Kahn's meat processing plant. Approximately 97% of the WWTP's influent flow originates from the industry with approximately 3% from the twenty-five (25) houses and a small commercial area. Pond Creek WWTP was constructed to treat the wastewater generated by Pond Creek Subdivision which consists of approximately 250 residents and the flow of the Campbell County High School.

The Alexandria WWTP serves residents and businesses located in Alexandria were land uses are primarily residential and commercial with no industrial development. Two (2) gravity lines, one 18" from the Eastern section and one 12" from the West, bring the wastewater to the WWTP. The WWTP, constructed in 1973 and upgraded in 1993, was originally designed to treat:

Average Daily Flow .725 mgd

Peak Daily Flow 2.18 mgd

Influent BOD 200 mg/l

Influent TSS 200 mg/l

Influent Ammonia-Nitrogen 25 mg/l

Although the WWTP was originally designed to meet the appropriate design criteria at the time, the Alexandria treatment system has experienced high volumes of flow in both the Collection System and at the WWTP. Overflows have occurred at both

treatment components. In general, the sanitary system within the city simply cannot handle the large amounts of storm water that improperly enters the system during rain events causing overflows throughout the system. In 1996, the Kentucky Division of Water placed a moratorium on new development within the city because of overflows that occurred during rain events at the existing Alexandria Wastewater Treatment Plant

As of August 2001 when Sanitation District No. 1 drafted their facilities plan, the three (3) local WWTP's were operating within compliance of their respective KPDES permits. However, the Alexandria treatment system continued to remain under regulatory sanctions related to problems encountered with high inflow/ infiltration with continued sanctions to restrict new sewer tap-ons despite extensive efforts by Sanitation District No. 1 to rehabilitate the sewer system. In an effort to treat the waste flows and overloading conditions of the Alexandria area, facilitate regionalization, and the eliminate local package WWTP's that are potentially detrimental to the environment SD 1 initiated plans to construct the Eastern Regional WWTP. The Eastern Regional WWTP will be a secondary treatment plant to initially serve the southern Campbell County until 2024, when it is expected to treat an average daily flow of six (6) mgd from residential, commercial, industrial and institutional customers in its service area. The plant will discharge to the Ohio River in compliance with a permit issued by the Kentucky Division of Water. By 2014, a review of future treatment requirements will again be needed to determine the timing and capacity of additional treatment measures.

The site selected for the Eastern Regional WWTP is an irregularly shaped parcel approximately 75 acres in size and is located on State Route 10 approximately 1.3 south and east of the intersection of SR 10 and US 27 in Alexandria, KY. as shown on Figure 6-10. Collection improvements to the system initiated by Sanitation District No. 1, which are projected to cost \$70 million, include the following:

- 1. Installation of approximately 11 miles of sewer line, 60% of which is existing sewer line that will be replaced. Pipe sizes will range from 8" to 42" in diameter. The depths of the pipes will range from 5' to 21' deep.
- 2. Replacement of three (3) pumping stations including: Sunset Pumping Station (located off Sunset Drive), Alex-Licking Pump Station (located on the south side of Alex-Licking Pike, east of Breckenridge Drive), and Riley Road No. 2 Pump Station (located southwest of the



intersection of SR 547 and the AA Highway).

- 3. Elimination of two (2) pumping stations: Kahn's Pump Station (located just off of US 27 on Bob Huber Drive, 5 miles south of Alexandria in the Southern Campbell County Industrial Park), Riley Road No. 1 Pump Station (located on the north side of SR 547 near the eastern city limit of Alexandria).
- 4. Construction of one (1) new Pond Creek Pump Station (located on the county side of Pond Creek Road, just west of South Licking Pike).
- 5. Elimination of two (2) wastewater treatment plants: Pond Creek Wastewater Treatment Plant (located off SR 915, just north of Lickert Road) and Kahn's Wastewater Treatment Plant (located southeast of the intersection of US 27 and SR 824).

It is important to note that the Kentucky Division of Water issued a permit to Sanitation District No. 1 on May 14, 2004 to build a new sewage treatment plant. The permit was issued after being challenged by Cincinnati Water Works officials who argue that the plant's flow eleven (11) miles upstream from the Cincinnati Waterworks intake would harm water quality. On July 29, 2004, Sanitation District No. 1's Board of Directors awarded a \$29 million construction contract to Judy Construction for construction of the new sewer plant which will treat 4 million gallons of sewage per day (3 million more that the current plant can treat). It is anticipated that construction of the plant will begin next year and be completed in late 2006 or early 2007. Completion of the plant will allow the sewer moratorium to be lifted for the City of Alexandria.

#### STORM WATER SYSTEMS

Municipal storm sewers are a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs gutters, ditches, man-made channels or storm drains), designed or used for collecting or conveying stormwater. These systems, if dedicated and accepted, are owned or operated by the legislative body. Therefore, the City of Alexandria is responsible for the operation and maintenance of the public storm sewer system within the corporate limits. At the present time, the U.S. Environmental Protection Agency (EPA) has implemented Phase II rules to the National Pollutant Discharge Elimination System (NPDES). In March 1999, NPDES Phase II extended stormwater permitting regulations to small municipalities not covered by the existing program.

In 1998, the Kentucky legislature enabled Sanitation District No. 1 to begin

management of stormwater systems for those cities voting to transfer control to that agency. At the present time, Sanitation District No. 1 (SD1) provides storm water management services for new developments and redevelopments for portions of Boone, Kenton, and Campbell Counties and the municipalities in those counties with the exception of the City of Florence. The jurisdiction of Sanitation District No.1 in Campbell County is shown on Figure 6-11. As can be seen from the map, all incorporated areas in Campbell County, including the City of Alexandria, are included in SD1's Storm Water Service Area.

In June 2003, SD1 promulgated the District's *Storm Water Rules and Regulations* which became effective August 1, 2003. The purpose of these regulations are to establish a "Land Disturbance Permit" to be administered by Sanitation District No. 1 to control storm water runoff from construction sites and post-construction storm water management for new developments and re-developments of areas within it's jurisdiction. These areas are covered by the KPDES SMS4 Storm Water Permit. In general, the regulations require the implementation of proper erosion control practices; controls for other wastes, and the implementation of post-construction runoff controls in areas undergoing development or re-development. These regulations require review of improvement plans for new developments and redevelopments; site inspections and enforcement activities of control measures; long term operation and maintenance of post-construction controls; and sanctions to ensure compliance. The regulations establish the criteria, methodology, and minimum standards for the design of all components of storm water conveyance systems. Such systems may include:

- 1. Open systems (i.e. rivers, streams, creeks, channels, linings, side ditches, inlets, street curb and gutter, etc.).
- 2. Closed systems (i.e. bridges, box culverts, sewer pipe manholes, junction boxes, etc.).
- 3. Impoundments (i.e. lakes, ponds, detention/retention basins, underground vaults, etc.).
- 4. Combinations of open and closed systems or impoundments as an internal part of the storm drainage system.
  - 5. Water quality best management practices.



Sanitation District No. 1's requirements apply to all land disturbing activities and all development or redevelopment activities that disturb an area greater than or equal to one (1) acre. Sites that are smaller than one (1) acre may also be covered by these regulations if they are a part of a larger common plan of development or sale. These regulations also apply to land disturbing activities in the area designated by the Kentucky Division of Water for coverage under the KPDES Phase II MS4 Permit.

There are four (4) types of activities specifically exempted from SD1's regulations. They are as follows:

- 1. Land disturbance activities on properties used for agricultural, horticultural, or botanical production of plants and animals (must fall within the listing of activities).
- 2. Land disturbing activities undertaken on forest land for the production and harvesting of timber and timber products.
- 3. Minor land disturbing activities such as residential gardens, individual residential or commercial landscaping, minor home repairs or maintenance work, and construction or maintenance of individual underground utility connections.
- 4. Activities undertaken by local governments, special purpose or public service districts relating to the emergency repair and maintenance of existing facilities and structures. However, these activities should be carried out using appropriate best management practices to minimize the impact on the environment and surrounding properties.

Land Disturbance Permits must be obtained by the persons responsible for a land disturbing activity, prior to initiating the activity. These permits can be obtained by making a complete application with SD1. Once approved the permit remains in effect until construction is complete. If no grading or construction has begun within two (2) years after the permit is issued then the permit is void.

It is important to note that Sanitation District No. 1's storm water requirements supercede any previous regulations promulgated by the Alexandria City Council and Planning Commission. Therefore, the city's Zoning Ordinance and Subdivision Regulations must be revised to include and/or refer to SD1's storm water regulations, permitting, review, and enforcement process.

#### SOLID WASTE MANAGEMENT

An effective system of solid waste management is imperative to protect the public health and environment in Campbell County and the City of Alexandria. Solid waste is generated by households, businesses, industries and institutions. As the number of generators increases, the task of planning for pickup and disposal becomes more difficult. In consideration of the potential growth and development of Campbell County and the City of Alexandria, careful proactive planning on solid waste issues must come to the forefront. Much legislation, namely Senate House Bill 2 and HB 174, has passed in the past several years and has influenced regional and local solid waste management techniques.

Senate Bill 2 was enacted in the 1990 General Assembly and significantly impacted the collection of solid waste in the following ways:

- 1. Encouraged a regional approach to solid waste planning and management.
- 2. Required reduction by a minimum of 25% on a per capita basis the amount of solid waste by weight that is landfilled by July 1, 1997.
- 3. Required that all waste management districts submit solid waste management plans to the cabinet.

More recently, House Bill 174 which amends KRS 224.43-010 was signed into law on April 23, 2002. This bill requires: (1) the closure and characterization of municipal solid waste facilities that ceased operations before July 12, 1992; (2) establishes priority funding initiatives to encourage solid waste management districts to conduct educational outreach efforts regarding the proper disposal of solid waste; (3) permits and reporting to ensure the proper collection and disposal of solid waste; (4) elimination of all illegal open dumps; and (5) litter abatement on state and county rights-of-way. The bill also established \$1.75 per ton environmental remediation fee to be collected beginning January 1, 2003 to be paid quarterly by owners and operators of transfer stations or municipal solid waste facilities. In addition, all solid waste collectors are required to register and report annually to the counties in which they provide service. The bill also establishes the Kentucky Pride Fund to be distributed to counties for litter abatement and elimination of open dumps. Finally, the



bill officially authorizes solid waste coordinators to enforce criminal littering laws and gives the county 60% of the fines imposed.

NORTHERN KENTUCKY SOLID WASTE MANAGEMENT AREA (NKSWM)

The Northern Kentucky Solid Waste Management Area (NKSWM) was created by an action of the Natural Resources and Environmental Protection Cabinet in 1991 and was empowered to create a waste management district in accordance with KRS 109.115. The NKSWM District includes the counties of Boone, Kenton and Campbell. This program was formulated through an interlocal agreement and funded through the Boone, Kenton and Campbell Fiscal Courts. One of the objectives of the NKSWM is to implement the Northern Kentucky Solid Waste Management Plan. The NKSWM is also provides a centralized point of contact for people, businesses and organizations in Northern Kentucky to get information on various solid waste issues.

The NKSWM has a governing body made up of six (6) voting members, the three (3) Judge/Executives from Boone, Kenton and Campbell Counties and one (1) Fiscal Court member from each county. There are also four (4) non-voting members of the governing body consisting of the Solid Waste Coordinators from each of the counties and the Chair of the Technical Advisory Committee.

The NKSWM recently completed and received approval (2003) of the 2003-2007 Northern Kentucky Solid Waste Plan which was an update to the 1998-2002 solid waste plan. These plan updates are prepared in order to comply with the Natural Resources and Environmental Protection Cabinet, Division of Solid Waste Management Guidelines. In addition to the 2003-2007 Solid Waste Management Plan, each Waste Management District is required to submit an annual report to the Division of Waste Management for approval. The latest report for the district covered the reporting period from January to December 2003.

According to the report, counties in the Waste Management District utilize four (4) disposal facilities for solid waste:

Bavarian Trucking Landfill (Boone County, KY) Rumpke of Kentucky (Pendleton County, KY)

Rumpke (Colerain, Ohio)
Epperson Waste Disposal (Grant County, KY)

Only Kenton County has mandatory garage collection (where every household is required to subscribe), with Boone and Campbell Counties having Universal Collection Services meaning that garage collection is available to every household but participation is not mandatory. Rumpke, out of Cincinnati, provides garbage collection services in the City of Alexandria through a franchise agreement and in 2003 served approximately 2,595 households with a monthly cost per household of \$10.00.

In addition, there were thirty-one (31) chipping and mulching operations and twenty-six (26) recycling operations for use by those located in the NKWMD. Two (2) chipping and mulching operations were listed for Alexandria; A&M Tree Service and Golden Rule Tree Service. In addition, to Rumpke providing door-to-door recycling opportunities in Alexandria, additional recycling facilities there is a drop-off recycling center in Campbell County and the following:

Campbell County Road Department (located on Race Track Road, Alexandria)-accepts appliances and scrap metal. Hazardous waste is also collected at the road department.

Campbell County Police Department (located on US 27 in Alexandria)-accepts cardboard, aluminum and steel cans, glass, plastics and newspaper.

Newport Public Works Garage (located in 6th and Wildcat in Newport)-accepts cardboard, aluminum and steel cans, glass, plastics and newspaper.

There are also four (4) auto salvage yards/scrap metal dealers listed for Campbell County as follows:

Pike 27 Auto Parts at 4546 Alexandria Pike, Alexandria Reitman Auto Parts on Four Mile Pike in Camp Springs Newport Recycling at 527 West 10th in Newport River Metals Recycling at 1220 Licking Pike in Newport

In addition, it has been noted by the planning commission there are two (2) additional salvage yards in the county: Hennard's Auto Salvage and Bessler Auto Parts.



As part of the NKSWM annual report, open dumps are to be documented and characterized. The total number of dumps reported for the three (3) county solid waste management area in 2003 were 176, 101 of these were cleaned with 75 remaining to be cleaned. Four (4) of these sites were identified in Campbell County. Of the four (4), one (1) was identified in the Alexandria Planning Area on Low Gap Road. In addition to eliminating open dumps, it is also important to note that Campbell County also spent \$111,986.42 on litter abatement activities in 2003.

With the recent changes in state law regarding solid waste management it is important that Campbell County, with the participation and assistance of the City of Alexandria, continued to meet the state's requirements on public education, collector registration and reporting, litter abatement, and open dump clean up activities.