

CHAPTER 4
Utilities and Community Facilities

Section 4.1 Public Utilities Inventory

The physical well-being of the Village of Franklin Grove is dependent upon the adequacy of its public utilities and services. A safe and ample source of water, an adequate means of disposing of solid and liquid waste, and adequate supplies of energy are essential in maintaining the public health, economy and natural resource base of the Village.

A. Wastewater Treatment Plant

The Village of Franklin Grove's wastewater treatment facility was put into service in 1959-60 with a daily maximum design flow of 0.180 MGD. The sewage treatment facility was upgraded in 1980 and 1988, and the design life expectancy was 20 years. The primary components of the wastewater treatment facility include: primary clarifier, trickling filter, intermediate clarifier, ammonia nitrogen removal, final clarifier, sand filter, chlorination, dechlorination, and aerobic digester. The current wastewater treatment plant is designed for an average hydraulic flow of 0.160 MGD, a maximum hydraulic flow of 0.180 MGD, and biological oxygen demand (BOD) of 204 pounds per day. The 2005 and 2006 wastewater treatment plant flows are shown below in Table 4.1.

Table 4.1
Village of Franklin Grove Wastewater Treatment Plant Flows in 2005 and 2006

Month	2006 Monthly Average MGD	2006 Monthly Maximum MGD / % of Design Maximum	2005 Monthly Average MGD	2005 Monthly Maximum MGD / % of Design Maximum
January	0.104	0.175 /97%	0.240	0.371 / 206%
February	0.172	0.237 /132%	0.256	0.290 / 161%
March	0.119	0.201 /112%	0.220	0.243 / 135%
April	0.124	0.267 / 148%	0.184	0.262 / 146%
May	0.150	0.296 / 164%	0.206	0.247 / 137%
June	0.094	0.249 / 138%	0.182	0.235 /131%
July	0.109	0.204 / 113%	0.136	0.224 / 124%
August	0.084	0.129 / 72%	0.150	0.209 / 116%
September	0.142	0.173 / 96%	0.150	0.196 / 109%
October	0.117	Not available	0.084	0.145 / 81%
November	0.107	Not available	0.126	0.179 /99%
December	0.270	Not available	0.124	0.202 / 112%

Source: Village of Franklin Grove

The monthly average BOD loading in 2005 was 60 pounds per day, and in 2006 was 60 pounds per day based on monthly sampling. The highest monthly average BOD loading for 2005 was 90 pounds recorded in March, which was 44% percent of the designed BOD loading. The highest monthly BOD loading for

2006 was 75 pounds recorded in October, which was 37% percent of the designed BOD loading. Treated effluent is discharged to a tributary of the Franklin Creek. The Village is presently considering upgrading the trickling filter. No major capital improvements/repairs are required for the sewage treatment facility and/or the sanitary sewage collection system in the immediate future. The wastewater treatment facility currently has that capacity to serve an additional 80 households (based on 3 persons per household) before being placed on the State watch list.

B. Sewage Collection System

The Village of Franklin Grove sanitary sewer collection system was installed around 1958 - 1960, and consists of approximately 30,942' of tile and pipe (27,886' vitreous tile 8" to 12" in diameter and 3,051' of PVC pipe from 12" to 24" in diameter). Approximately 10,500' of the Village vitreous tile were lined in 2005 in order to reduce the inflow of rainwater that reduced the efficiency of the sewage treatment facility. The sewage collection system contains a lift station located 2 blocks north of the railroad tracks west of State Street.

C. Municipal Water

1. Municipal Water Supply and Water Distribution System

The Village of Franklin Grove obtains its water from two active community wells. A third community well is inactive. The Village water system also includes an elevated storage tank. The Village does not have a wellhead protection program in place.

The Village's water distribution system was installed in the 1902. In 1923 or 1924 a new well was drilled 50' north of the original well. Well No. 3 was drilled in 1954. There is currently approximately 22,950 linear feet of water main within the Village of Franklin Grove and a total of 387 water meters. The Village of Franklin Grove also maintains a total of 42 fire hydrants.

The Village is considering increasing the pumping capacity at Well #3; there are no additional capital improvements/repairs required of planned for the water supply and/or water distribution facilities in the immediate future.

The Illinois Environmental Protection Agency's "Source Water Assessment Summary" for the Village of Franklin Grove (dated August 16, 2001) provides information about the Village of Franklin Grove's water supply as follows:

Importance of Source Water

The Village of Franklin Grove (Facility Number 1030250) obtains its water from two active community water supply wells. Wells #1 and #3 (Illinois EPA #11560 and #11562, respectively) provide an average of 102,000 gallons per day to 370 services or a population of 950.

Source Water Quality

Franklin Grove Wells #1 and #3 were sampled as part of the Statewide Groundwater Monitoring Program beginning in 1983. The well samples were analyzed for inorganic chemicals (IOC), volatile organic compounds (VOC), and synthetic organic compounds (SOC).

Review of the IOC data collected for these sampling efforts indicated that the parameters were consistent with other bedrock aquifers in Illinois. The IOC results were below groundwater quality standards established in 35 Illinois Administrative Code Part 620.410,

with the exception of the manganese concentrations. Concentrations of manganese in the source water of the wells were above the 150 parts per billion (ppb) numerical groundwater standard. The observed manganese concentrations for Wells #1 and #3 varied between 160 and 210 pp. The Illinois EPA considers these elevated levels the result of natural mineralization in the sand and gravel aquifer. Hence, the levels of manganese are not considered violations because of the stipulation in Part 620.410 that no violation occurs as a result of the natural occurrence of an IOC.

VOC analyses did not detect quantifiable levels of any organic compounds. SOC analyses did not detect the presence of any pesticides/herbicides.

Susceptibility To Contamination

To determine the Village of Franklin Grove's susceptibility to groundwater contamination, a Well Site Survey, published in 1992 by the Illinois EPA, was reviewed. Based on the information contained in this document, six potential sources of groundwater contamination are present that could pose a hazard to groundwater pumped by the Franklin Grove community water supply wells. These include Spangler Auto Service, Bob Logan Tractor & Implement, Pfautz Electric Service, Herbst Grain Co., Erisman Garage, and Casey's General Store. Inactive Well #2 is also considered a potential route of contamination.

The community's source water is susceptible to VOC and SOC contamination, although no detection of any quantifiable levels were detected in the finished water. The basis for this determination is the location of the potential sources within the recharge areas of the Village's wells. However, as a result of monitoring conducted at the wells and entry point to the distribution system, the land-use activities and source water protection initiatives of the Village, the Franklin Grove Community Water Supply's source water is not susceptible to IOC contamination.

Source Water Protection Efforts

The Illinois Environmental Protection Act provides minimum protection zones of 400 feet from the Village of Franklin Grove's wells. These minimum protection zones are regulated by the Illinois EPA. To further reduce the risk to the source water, the facility has implemented a well head protection program that includes a management and education committee, source water protection management strategies, and contingency planning.

To further minimize the risk to the facility's groundwater supply, the Illinois EPA recommends that five additional activities be considered. First, the water-supply staff may wish to revisit their contingency planning documents. Contingency planning documents are a primary means to ensure that, through emergency preparedness, a community will minimize the risk of being without safe and adequate drinking water. Second, the community should explore the options of either properly abandoning inactive Well #2 or retrofitting it for active use as a source of water supply. Inactive wells that are not properly abandoned can act as direct conduits for surficial contaminants into the aquifer and are considered "routes" under the Environmental Protection Act. Third, the water-supply staff is encouraged to review and sustain their cross-connection control program to ensure that it remains current and viable. Cross connections to either the water-treatment plant (for example, at bulk water loading stations) or in the distribution system may negate all source water protection initiatives provided by the community. Fourth, the water-supply staff should consider enacting a maximum setback zone ordinance. This enactment would allow county and municipal officials the opportunity to provide additional

potential source prohibitions up to 1,000 feet from these wells. Finally, the Illinois EPA recommends that the Village investigate additional source water protection management options to address the land-use activities within the community well's recharge area.

D. Storm Water Drainage Facilities

There are storm sewers in the Village on portions of Elm Street, Middle Street, South Street and Hughes Street.

There are no known surface drainage problems within the Village.

E. Solid Waste Disposal - The Village of Franklin Grove currently has a municipal contract for solid waste disposal (twice-weekly pickup) with Northern Illinois Disposal. A drop-off recycling container is located next to Village Hall for the use of Village residents.

F. Corporate Utilities

1. Natural gas is available throughout the Village from NiCor Gas.
2. Electric Power - Electricity is provided by ComEd/Exelon Corporation.
3. Telephone Service - Local telephone service, long distance, cellular and other specialized phone services are available from a number of private firms.
4. Cable television service is provided by Insight Communications.
5. Satellite television service is available from a number of private firms.
6. Internet service is available to Village residents through a variety of sources.

Section 4.2 Analysis of Public Utilities Needs

To maintain the public health, economy and natural resource base of the Village, public utilities and services must be adequate for existing and planned development. Franklin Grove's public utilities and services were analyzed and the following recommendations were developed to ensure that the Village has the continuing capacity to serve existing and new development and that public utilities are provided in areas where they can be most efficiently and economically extended:

A. Wastewater Treatment Plant and Sewage Collection System

The current wastewater treatment plant has limited capacity to serve future development. The wastewater treatment plant is operating beyond its design life expectancy. Provisions should be made for repairs and /or upgrades, as well as an expansion to facilitate future Village growth. The current sewage collection system maintenance program should be continued and expanded in the future if necessary.

C. Municipal Water System

The Village's municipal water system consists of the drinking water supply, which is obtained from a confined bedrock aquifer, a water distribution system and a water storage facility. The municipal water system is adequate to serve existing needs, but provisions for repairs and increased pumping capacity to serve future development. Provisions should be made for the rehabilitation of the existing Well #2 that is inactive.

D. Storm Water Drainage Facilities

The Village should work toward identifying the location, type and condition of existing storm sewers within the Village. A maintenance program should be put in place, and storm sewer maintenance/improvements included in a Capital Improvements Program.

E. Solid Waste Disposal

The Village should continue its municipal contract for waste disposal. The drop-off recycling container is cost effective and adequate.

F. Corporate Utilities

The Village should keep the lines of communication open with corporate utility provider, and request to be informed of future projects (e.g. line upgrades or new facilities) that may impact the Village.

Section 4.3 Community Facilities Inventory

A. Village Facilities and Services

1. Village Hall - Franklin Grove Village Hall is a single story building located at 107 W. South Street within the central business district of the Village. The village hall consists of an office for the Village Clerk and President, an office for the Chief of Police and police officers, a unisex restroom, a utility room, and a meeting room. The meeting room serves as the board room where the Village Board meets monthly and various committees meet frequently throughout the month.
2. Police Protection – The Village police force consists of a Chief of Police and an ordinance office.
3. Fire Protection - The Franklin Grove Fire Protection District provides fire and ambulance service to the Village and surrounding area encompassing approximately 70 square miles. The Franklin Grove Fire Protection District main facility is located in the Village of Franklin Grove at 128 Whitney Street and consists of the following:

- 2 - Ambulances
- 1 - Engine company
- 1 - 3,000 gallon tanker truck
- 1 - Rescue truck
- 1 - Engine-rescue truck
- 1 - Grass fire truck
- 1 - Polaris Ranger ATV

The Franklin Grove Fire Protection District also maintains a sub-station in Ogle County on Flagg Road near the Lost Nation development, which consists of the following:

- 1 - Ambulance
- 1 - 1,250 gallon tanker truck
- 1 - Grass fire truck.

The District staff includes a total of 34 firefighters. Of the 34 firefighters, there are 5 first responders, 14 EMT-Basics, and 3 EMT-Paramedics. All fire protection district personnel are volunteers.

4. Library - The Franklin Grove Public Library, located at 223 N. Elm Street, serves the Village of Franklin Grove and surrounding area. A new library building, the Winifred Knox Memorial Library Building, is currently under construction at the southeast corner of Elm and South Streets. The new library building will have over 2.5 times the square footage of the existing library building, including twice the current shelf space, twice the number of public computers, a children's activity room, a young adult nook, a local history and genealogy room, more staff workspace, and a community room.

B. Public School Facilities

Residents of the Village of Franklin Grove and surrounding area are served by the Ashton-Franklin Center Community Unit School District (AFC). AFC consists of a high school (located in Ashton), a middle school and a grade school (both located in Franklin Grove).

C. Junior College Facilities

Residents of the Village of Franklin Grove and the immediate surrounding area are served by Sauk Valley Community College, located in Dixon, IL. As a community college, its mission is to be an institution of higher education that provides quality learning opportunities to meet the diverse needs of its students and community, with its vision to be recognized as a benchmark institution of higher education that provides exceptional learning opportunities in response to the diverse needs of its students and community. Sauk Valley Community College is a two-year community college offering associate degrees in 34 disciplines for transfer to four-year colleges; career-oriented associate degrees in 19 areas, and one liberal studies degree.

D. Parks, Recreation and Open Space

1. Village Parks - The Village of Franklin Grove owns and maintains two parks - a memorial park and a recreational park. The memorial park is bounded by Middle Street, Spring Street, Elm Street, and the railroad. The recreational park (Atlasta Park) is located on the west side of State Street south of Brown Street.
2. Franklin Creek State Natural Area - Franklin Creek State Natural Area is located northwest of the village of Franklin Grove. Franklin Creek flows throughout the 664-acre park. Several large natural springs, hardwood forests, bedrock outcroppings, and a large variety of flora and fauna comprise a pristine ecosystem. Facilities include picnic areas, hiking trails, an operational grist mill that also serves as a visitor center, hiking, cross-country ski, equestrian and snowmobile trails, fishing in Franklin Creek, and 180 acres of public hunting area.
3. Chaplin Creek - Chaplin Creek Historic Village, a project of the Franklin Grove Area Historical Society, is an evolving prairie settlement typical of the middle 19th century. It is located southwest of Franklin Grove on Whitney Road. The village is developing around a crossroads as many small communities did at that time. The crossroads is the intersection of Timothy and Taylor, Timothy being the east-west road and Taylor the north-south road. The name for the village, "Chaplin", comes from the first settlement in the area which was just north of here at the intersection of Lahman and State streets in Franklin Grove. As of today, several buildings have been relocated here from the surrounding area as a core for the development. First was a Blacksmith Shop moved in from Ashton. Next came a Saltbox Style house that was built in the middle 1800's from west of Rochelle. This was followed by a typical Country School from north of Ashton. Several smaller buildings have been added since with the latest addition being an English Style Barn which was relocated from Kane County. It was torn down in the fall of 1999, repaired, and raised as a demonstration during the 2000 Summer Harvest Festival.
4. Lincoln Highway - The H.I. Lincoln Building, located at 136 N. Elm Street, is the national headquarters for the Lincoln Highway Association. The Lincoln Highway passes through the Village of Franklin Grove. The Lincoln Highway was the first road across America. The Lincoln Highway spanned more than 3000 miles, coast-to-coast, from Times Square in New York City to Lincoln Park in San Francisco, through 14 states: New York, New Jersey, West Virginia, Pennsylvania, Ohio, Indiana, Illinois, Iowa, Nebraska, Colorado, Wyoming, Utah, Nevada, and California. The Lincoln Highway is one of America's best-known historical roads. It inspired the Good Roads Movement and the National Interstate and Defense Highways Act of 1956, which was championed by President Dwight D. Eisenhower, influenced by his experiences as a young soldier crossing the country in the 1919 Army Convoy on the Lincoln Highway. As the first road

to link the East and West Coasts of the United States, the Lincoln Highway brought great prosperity to hundreds of cities, towns and villages along the way. Affectionately, the Lincoln Highway became known as "The Main Street Across America", a nickname that, even today, remains synonymous with the famous old road. The Lincoln Highway Association, originally established to plan, promote and sign the highway, is now dedicated to promoting and preserving it.

E. Other Community Facilities and Services

1. Churches - Four churches are located in the Village of Franklin Grove: 1) Church of the Brethren is located at 121 W. North Street; 2) First Presbyterian Church, USA is located at 106 S. Walnut Street; 3) St. Paul's Lutheran Church (ELCA) is located at 107 W. Lahman Street; and, 4) United Methodist Church is located at 223 Middle Street.
2. Senior Citizen's Facilities - The Meadows of Franklin Grove, located at 510 N. State Street, provides independent senior citizen housing. Franklin Grove Nursing Center is a nursing home facility for care-dependent persons.

F. Community Facilities Needs/Issues

To maintain its attractiveness as a residential community, the Village must continue to provide a high level of community services and facilities. The following recommendations are offered to strengthen the Village's existing facilities and services and ensure that future improvement and building programs are economical and efficient.

1. Village Facilities and Services Needs/Issues:
 - a. Village Hall: The Village is comfortable with the current level of service?
 - b. Police Protection: The Village is comfortable with the current level of service?
 - c. Fire Protection: The Village is comfortable with the current level of service?
 - d. Library: The Village Board is comfortable with the library facilities and services?
2. Public School Facilities Needs/Issues:
3. Junior College Facilities Needs/Issues:
4. Parks, Recreation and Open Space Needs/Issues:
5. Other Community Facilities and Services Needs/Issues:

Section 4.4 Goals, Objectives, Policies

A. Public Utilities And Services Goals, Objectives, Policies

1. Goal

To provide sanitary sewer, water and other necessary public utilities, facilities and services to existing and planned future development in an efficient and cost effective manner.

2. Objectives

- a. Promote the expansion, maintenance, and rehabilitation of utilities and community facilities/services to achieve housing, economic development, land use and other comprehensive planning goals.

- b. Continue the municipal waste hauling contract.
- c. Encourage the provision of public utilities in areas that can be most efficiently and economically served.
- d. Promote the extension of public utilities only in areas environmentally suitable for urban development.
- e. Promote the fair and equitable distribution of benefits and costs for future public utility upgrades and expansions.

3. Policies

- a. A capital improvements program should be developed to complement land use strategies of the Comprehensive Plan. (A capital improvements program should be updated and reviewed on a regular basis.)
- c. Land developers should be responsible for the cost of providing facilities and services in order to promote the fair and equitable distribution of costs and benefits.
- d. Maintain and protect the quality of the Village water supply.
- e. Work with Lee County to coordinate future growth and development.

B. Community Facilities Goals, Objectives, Policies

1. Goal

To maintain and provide community facilities and services that will make Franklin Grove a more attractive community in which to live and work.

2. Objectives

- a. Work with the Franklin Grove Fire Protection District to ensure that adequate fire protection, and ambulance and emergency medical services are provided to all areas of the Village.
- b. Police force?
- c. Encourage the provision of a wide variety of social, cultural and educational activities for the benefit and enjoyment of all residents.
- d. Village officials should periodically communicate with Ashton-Franklin Center school officials any education-related issues or concerns regarding AFC students.

3. Policies

- a. The Village of Franklin Grove should continue work with the Franklin Grove Fire Protection District to provide fire protection services that will attain the highest levels of efficiency in providing for the safety and welfare of residents.
- b. Police policies?
- c. An effective capital improvements program should be implemented to insure long range financial planning for needed public facilities.

C. Parks, Recreation and Open Space Goals, Objectives, Policies

1. Goal

Ensure that adequate open space and recreation facilities are provided for and made accessible to all the residents of Franklin Grove.

2. Objective

- a. Study the adequacy of existing park facilities and include any improvements or acquisitions as a component of a capital improvements plan.
- b. Promote expanded and new community recreational services and activities to meet the needs and desires of the community.
- c. Require future development to provide park and/or open space lands.