SECTION 19
PUBLIC UTILITIES

The public utilities addressed in this section are water distribution, wastewater collection and treatment, storm water drainage, and solid waste disposal. The other utilities that serve the community such as electric, natural gas, telephone, and cable (television and internet) are private. The location of utilities has land use implications in that water and sewer availability is essential in order for intensive development to occur. Therefore, public utilities, or more precisely, their extension or capacity can be an effective tool to guide urban growth.

WATER

The Evansville Utility Department has a service area of approximately 100 square miles. Within this service area, water is provided to approximately 93 percent of the residents in Vanderburgh County. The Department has four wholesale customers: German Township Water District, Gibson Water, Inc., Indiana Cities Water Corporation (Newburgh), and the Town of Elberfeld. Page 19-2 shows both the Evansville Utility Direct Water Service Area and the German Township Water Service Area. The other wholesale customers are outside of Vanderburgh County.

German Township Water District serves a large portion of Vanderburgh County including German and Armstrong Townships. German Township also has a line along State Road 65, serving Cynthiana in Gibson County. Posey County, Wadesville and Blairsville also receive water from the German Township Water District.

The source of water for the system is the Ohio River. Water taken from the river is treated to potable standards in a treatment plant located southeast of and up river of downtown. This treatment plant has a filtering capacity of 60 million gallons per day (MGD). The average amount of water pumped to customers daily is 27 MGD. July 8, 1988 is the record day with 38 MGD having been pumped.

EXISTING FACILITIES

The Evansville water treatment plant first supplied treated water to the City in 1912. Since 1912, the plant has been expanded and modernized several times.

The Evansville water system contains eight water storage facilities ranging in size from 250,000 gallons to 20 million gallons. Total storage capacity in the distribution system is 27 million gallons. This system includes ten existing pumping stations, ranging in capacity from 0.3 MGD to 23 MGD. It also includes an extensive network of distribution mains.

Water Service Area

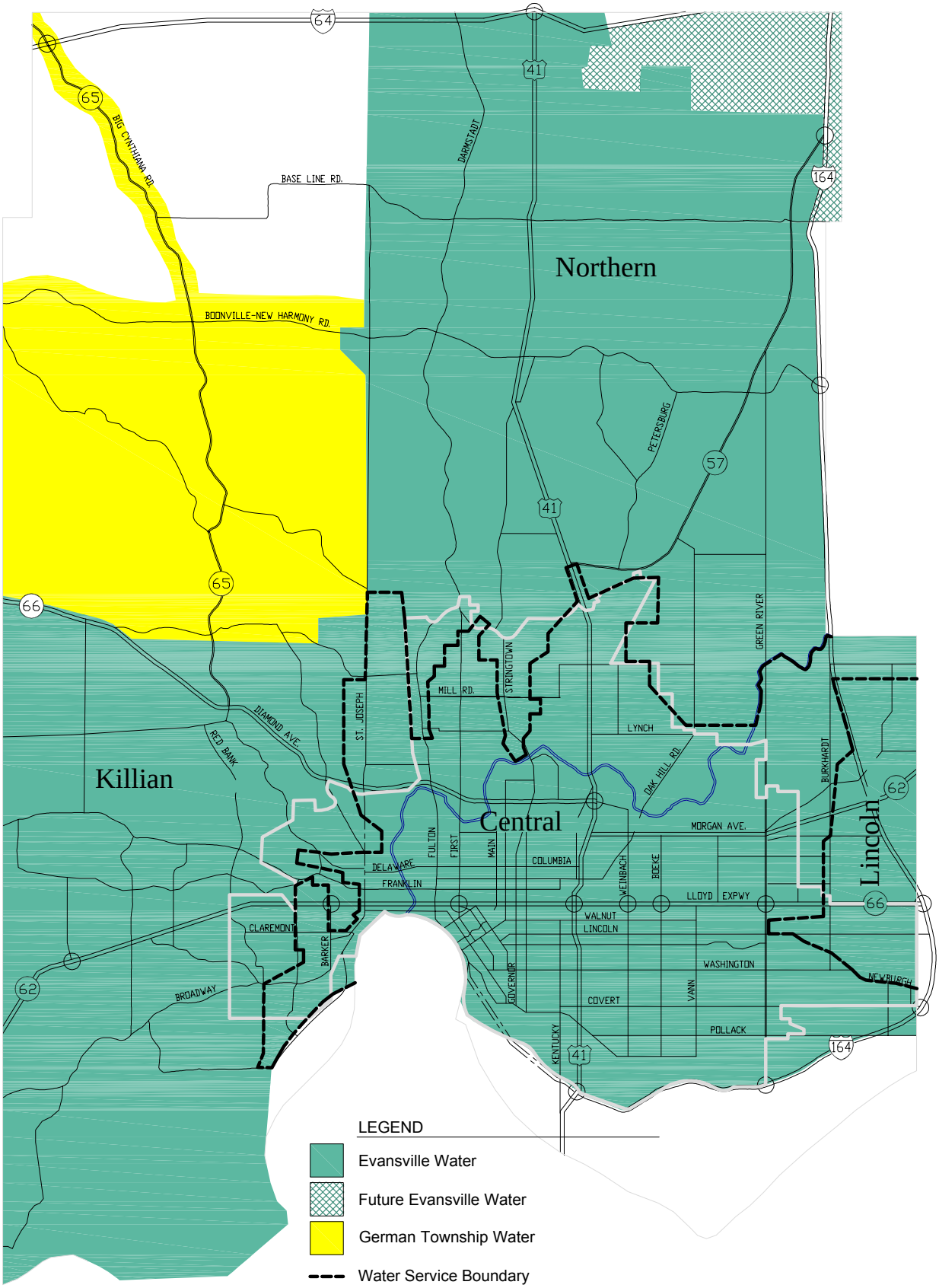


Table 19-3 below illustrates the projected amount of water which will be required on a daily basis to meet future demands on the Evansville water system. These projections were based on the population projections from the 1991 Comprehensive Plan. Since the 2004 Comprehensive Plan projects as many as 16,000 more residents for Vanderburgh County than was projected in the 1991 Plan, the future water demand for 2010 shown in Table 19-3 could be low. In addition, one of the regional projections in the 2004 Plan shows Warrick, Gibson and Posey Counties gaining 24,000 new residents by Year 2025. Therefore, the service area of the four water wholesale customers will continue to grow as well.

TABLE 19-3: WATER DEMAND: 1988-2010

1988 Maximum Day	2010 (p) Maximum Day	Current Filtering Capacity
38 MGD*	54 MGD	60 MGD

Source: Report on Water Works Facilities, 1989
*MGD - million gallons per day
(p) - projected

RECOMMENDED WATER SYSTEM IMPROVEMENTS

The primary responsibility of the Evansville Water Utility is to supply customers with adequate water of high quality at acceptable pressures. In order to evaluate whether the system is accomplishing this responsibility, periodic hydraulic analyses are conducted. These identify deficiencies in the distribution system and facilitate the establishment of an improvement program designed to reinforce the existing system, keep pace with growth, assure high quality water service, and provide a reliable base for commercial and industrial development.

In 1993, an update to the 1989 Report on Water Works Facilities was completed with particular emphasis on the rapidly growing Northern service area. This document provides a description of the improvements needed to correct distribution system pressure deficiencies, and it establishes a long-range plan for expansion to meet projected growth in the water service area. More recently, a 10-Year Water System Master Plan was developed for the Utility. The following is a description of these plans and their recommendations.

The water section of the Water and Sewer System Master Plan splits the discussion into two areas, a detailed growth analysis and the Evansville Water Utilities' Five-Year Capital Improvement Plan (CIP). The growth analysis starts with a big picture look at the system to predict general growth trends through Year 2010 based on zoning, future land use, population

trends, and the potential for increases in the wholesale customer's contracts. The CIP includes such items as maintenance, replacement of existing facilities and service, lines to new subdivisions, other new service and projects previously recommended in earlier master plans.

A general engineering evaluation of the Evansville water distribution system was performed to determine the future infrastructure needs. This analysis was performed as part of the overall Water and Sewer System Master Plan, and involved the development of scenarios that were used to evaluate the system's ability to absorb growth both within the service area and from the wholesale customers.

Scenarios for different combinations of growth within Evansville and their wholesale customers were developed to show what improvements will be needed within the Evansville distribution system to meet projected demands. The Master Plan shows what projects will be needed in 2005 and 2010 under each scenario. The projects listed will be needed for the system to meet the projected demands of each scenario. For planning purposes, the projects identified are those that can accommodate the highest growth scenario. This approach presents a worst case in terms of future needs for the Evansville infrastructure. It is important to remember that growth within the Vanderburgh County service area is not the only factor to consider when examining future needs, as the wholesale customers account for a significant portion of the recommended projects. For this reason, many of the projects will only be installed on an as needed basis when the affected wholesale customer agrees to share in the cost of the system upgrades.

Water Supply and Treatment

Raw Water Supply - The existing raw water pumps, with a capacity of 144 MGD, greatly exceed the current needs and projected demands.

Treatment - Based upon present drinking water standards, the total design filtering capacity of the water treatment plant is 60 MGD. The quality of the treated water begins to deteriorate, however, as the treatment rate approaches 50 MGD. Table 19-3 shows that by 2010, demand is projected to reach 54 MGD. Therefore, plant/treatment modifications will eventually be necessary in order to meet projected water demands.

In addition, treatment processes must comply with federal mandates and the Safe Drinking Water Act. To proactively determine the most cost effective treatment alternatives needed to insure continued regulatory compliance, the Utility will continue to study this issue in cooperation with the Environmental Protection Agency. Based on these studies and the ongoing Water Quality Master Plan, the Utility will also continue to maintain a Strategic Action Plan detailing all economic and compliance considerations. Design and construction of new processing facilities could be necessary if major changes to federal treatment standards are adopted in the future.

Distribution System

Because of variations in elevation by more than 200 feet, there are currently seven service levels (areas) in Evansville's water distribution system. In order to supply water to these levels, the Utility maintains eight water reservoirs and ten pumping stations. The 1989 Report of Water Works Facilities for Evansville determined that some adjoining service levels can be consolidated without extensively revising the existing distribution system. By merging the service levels, the number of reservoirs and pumping stations in the distribution system can be reduced. Some of the highlights of this study, its revision in 1993, and the Master Plan are described below.

Northern Service Level - In this rapidly developing area, the current pumping stations and distribution lines are operating at maximum capacity. A significant project that is under construction in this area is a new water line extension to serve the Warrick County Industrial Park north of I-64 and east of SR 57. This new line will make water service available to many properties along its route in both Vanderburgh and Warrick Counties.

The Master Plan assumes industrial growth will occur at U.S. 41/Volkman Road and in the Daylight areas, including a single one (1) MGD user. Serving this amount of growth would require installation of an additional water main to loop the system allowing more water to the Boonville-New Harmony tank and to the large user. Other improvements recommended to meet 2010 projected demands from population and industrial growth include:

- pump station pump replacements to increase existing capacity;
- numerous distribution line enhancements;
- additional water mains to feed this area and the Volkman Road tank;
- a new elevated water storage tank and associated water mains along Baseline Road east of Barton Road to meet peak hourly and fire flow demands; and
- a new pumping station on Schroeder Road with standpipe storage.

Central Service Level - This encompasses the older, more developed areas of Vanderburgh County. Significant growth is not predicted for this area; thus, water demands are not expected to increase significantly. Nevertheless, because booster systems are supplied from the Central system, the anticipated growth in the outlying areas will place additional stress on the central service level. The Utility should ensure that water is extended to the remaining, unserved residents in this area.

General System-wide Improvements -
- Upgrade booster stations and their capacities to keep water reservoirs filled and to maintain minimum pressures.

Gibson County Rural Water – Due to population, industrial, and wholesale growth:
- Increase capacity of main along U.S. 41 to allow for more water to be provided to industry in this area; and
- Upgrade booster station to increase capacity.

German Township Rural Water – Due mainly to population and wholesale growth:
- Install additional water mains to feed the Boonville-New Harmony tank at the Township connection; and
- Upgrade booster station to increase capacity.

Indiana American Water Co., Newburgh – Due to wholesale growth:
- Install additional water mains to feed the existing connection point and to improve flow and pressure in the Lincoln zone; and
- Add a new connection point.

RECOMMENDATIONS FOR WATER PLANNING

Since the Master Plan and the other water studies are dated, it is recommended that the Master Plan be revised to study future demand and capacity needs of the water system and its wholesale customers to Year 2025. This planning should be done with the objective of keeping a 20 percent capacity surplus to stay ahead of demand.

WASTEWATER COLLECTION AND TREATMENT

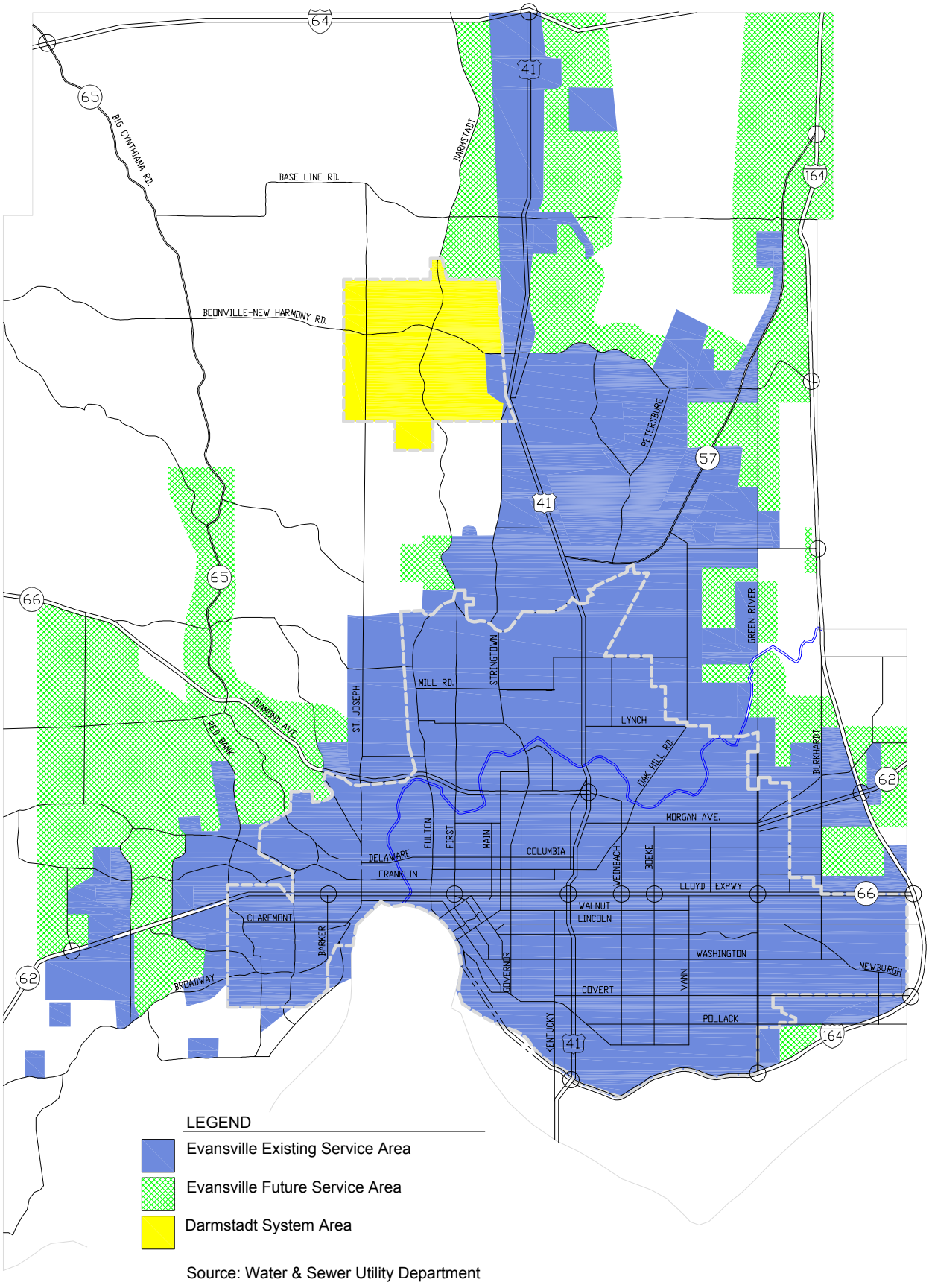
The area served by the Evansville Sewer Utility includes the City of Evansville and the portions of Vanderburgh County shown on page 19-7. In 1988, the Town of Darmstadt completed construction of a pressurized sewer system. Sewage from this system is routed to the Evansville wastewater collection system and is treated in the Evansville plant. Structures in the remaining portions of the County are on individual septic systems.

Currently, the system is composed of two wastewater treatment plants, 80 lift stations, 23 combined sewer overflows (CSO) outfalls, and approximately 500 miles of wastewater collectors. The treatment plants and lift stations are operated and maintained privately by Environmental Management Corporation. These collectors carry either separated sanitary or combined sanitary and storm water.

COLLECTION

As previously noted, there are two types of wastewater collectors in the Evansville System (sanitary and combined). The construction of separated systems has been required in all development since the mid 70's. The majority of the older areas of the City (roughly that area south of Pigeon Creek and west of Vann Avenue) are served by the combined collectors. The east plant's service area has approximately 80 percent sanitary sewers and 20 percent combined sewers. The west plant's service area has approximately 40 percent sanitary sewers and 60 percent combined sewers. Consequently, the entire sewer-service area is served by the combination mains since wastewater collected through the separate mains must flow to the treatment plants through the combined mains. Many cities throughout the United States have systems similar to that of Evansville. The Federal government is requiring action by local governments to eventually eliminate combination sewers.

Sewer Service Area



Clear water infiltration into the wastewater system continues to be a problem for the sewer utility. However, the amount of clear water in the system has been reduced in recent years. To meet federal guidelines, further reductions are expected. If clear water can be eliminated in the system, it will help to minimize future wastewater treatment costs.

TREATMENT

The east side and west side treatment plants that were built in 1954 and 1956, respectively, have undergone several upgrades over the years. However, these plants have reached their capacities. Table 19-8 describes the systems treatment capabilities and projected flows from the Water and Sewer System Master Plan. This data shows that while flows are expected to increase, the Utility is planning improvements at both the East and West plants that will provide adequate capacity in the future.

TABLE 19-8: TREATMENT PLANT STATISTICS

Plant	Existing Design Capacity	2000 Average Flows	2025 Projected Flows	2025 Proposed Capacity
East	18 MGD	13.3 MGD	16.2 MGD	24 MGD*
West	20 MGD	19.7 MGD	32.9 MGD	38 MGD*
Total	38 MGD	33 MGD	49.1 MGD	62 MGD*

* Current estimate from Water and Sewer Department staff.

WASTEWATER IMPROVEMENTS

A system-wide Water and Sewer Master Plan has been prepared for the Department by a consultant. It provides a “roadmap” for system upgrades and phased improvements to the collection system, including specific recommendations on sewer and force main locations and sizes. The current emphasis for sewer improvements is on increasing capacity, rehabilitation of the existing collection system, and reducing and eventually eliminating combined sewer overflows (CSO's). The Long Term Control Plan was recently developed as the strategy to be used for reducing/eliminating CSO discharges into Pigeon Creek and other local watercourses.

The main focus of the sewer Master Plan is on the areas outside of the combined sewer limits where the current system is being rapidly expanded. Areas inside the combined sewer limits generally have adequate capacity for dry weather flows. Detailed analysis and discussion of wet weather flow capacity in the combined sewer limits is extensively studied in the Long Term Control Plan.

The sewer section of the Master Plan discusses topics such as:

-- The existing collection system routes and available capacity;
-- How existing flows and future flows were allocated within the study area;
-- New interceptor system routes for future flows;
-- Conceptual costs of proposed interceptor system routes and necessary reinforcement of existing sewers; and
-- Prioritization and approximate schedule of proposed improvements.

Recommendations in the Master Plan are made with the goal of maximizing the use of existing facilities, including pump stations, force mains and/or sewer lines. In keeping with this goal, parallel sewers and force mains, and/or facility and pump upgrades are considered where feasible for future improvements. Similarly, where system facilities are known to be in the late stages of their expected life cycle, or they cannot be economically upgraded or rehabilitated, new or replacement facilities are recommended.

The proposed improvements to the collection system in the Master Plan were based on the recommendation that a new sewer treatment plant be constructed to address the growth in the northern portion of the County. Since the Plan was written, the City has determined that the needed capacity to serve this growth can be provided by improving existing facilities without building a new plant. This alternative would require a major capacity increase at the Westside Treatment Plant. A study to analyze and design these improvements is underway.

Although utility planning is carried out by local government, the large majority of sewer extensions are initiated and constructed by developers. In these situations, all costs associated with extending and/or accessing City sewers for new service to a development are the responsibility of the developer. Other efforts to extend sewer with public funds also occur periodically. An example of a current project that is not developer funded is the sewer extension along Broadway Avenue from the West Treatment Plant to Johnson Lane.
The primary improvements planned for the near future to address capacity and expected growth in northern and western Vanderburgh County are:

1) Upgrades at the West Plant that will increase its wet weather capacity to 38 MGD, nearly doubling the existing capacity, will include new technologies in secondary treatment along with many other improvements; and

2) A new lift station near U.S. 41 and Lynch Road replacing the existing Pfeiffer Road station along with a new force main from this location to the West Plant to carry flow from the anticipated growth in the northeast portion of the County.

Various other improvement projects involving new facilities and upgrades of existing facilities are now in the planning stage. Some of the projects are mandated by changes in the City's wastewater discharge permit. Work which is a result of these new regulations includes the elimination of illegal storm water connections and the separation of storm and sanitary sewers.

Major projects that are being planned for the near future by the Utility to address these issues are:

1) Separating storm and sanitary sewers in conjunction with the southeast side drainage project, involving the area generally bounded by Weinbach Avenue, Washington Avenue, Vann Avenue and Covert Avenue; and

2) Install CSO gate structure on Kentucky Avenue and Sweetser outfall to take advantage of storage capacity in the large Kentucky Avenue sewer and eliminate the by-pass to Bee Slough.

Individual sewer extensions incrementally expand the area in which sewer is available. The map on Page 19-7, developed in consideration of both past and planned sewer extensions, shows the existing and future sewer service areas. The future sewer service areas on the map reflect the planned and recommended extensions to the wastewater collection system. These recommendations are based upon past growth patterns and projected growth for Year 2025.

The main areas recommended for sewer service are:

-- The remaining unserved pockets in the City;
-- The remaining unserved portions of unincorporated Center and Perry Townships;
-- Portions of unincorporated Knight Township, particularly along the Lynch Road extension east of I-164;
-- The State Road 65 (Big Cynthiana Road) corridor from outer Diamond Avenue (State Road 66) to and including the St. Joseph area, and portions of German Township; and
-- The area along I-164 between the north County boundary and the Boonville-New Harmony interchange.

RECOMMENDATIONS FOR SEWER PLANNING

Since the Master Plan and the Long Term Control Plan are both based on the assumption that a new plant was to be constructed, it is recommended that these planning documents be restudied and revised to address the capacity needed for the future in the most cost effective manner.

RURAL SEPTIC SYSTEMS

On-site sewage disposal plays a vital role in the development of the County. It can be a major limiting factor in the suitability of a lot for development where sanitary sewers are not available. The type of soil on an individual lot determines whether it can be developed. According to the Vanderburgh County Soil and Water Conservation Service, approximately 95 percent of the soils in the County have severe limitations for on-site sewage disposal. This makes septic

systems a temporary solution to sewage disposal at best.

In 1990, there were 72,637 housing units in the County, of which approximately 63,419 (87.3%) units were connected to sanitary sewers. Most of the 9,218 (12.7%) homes that rely on on-site sewage disposal were located in the County. The City-County Health Department had permitted 1,043 new septic system installations from 1990 through 2002. Given these figures, the need for extended sewers is obvious.

STORM WATER DRAINAGE

Evansville's terrain, existing drainage system, and proximity to the Ohio River contribute in making surface water drainage a complex problem. This is especially true for the City's east side, since much of this area is low and very flat.

Currently, surface water drainage is controlled through a variety of conveyance facilities. The older parts of the City are served by combined sewers carrying both sanitary sewage and drainage. The combined sewers become problems when overloaded during heavy rainfall which results in localized flooding and health issues. Newer developments have been constructed with local storm sewers which discharge to nearby open ditches or into separate storm interceptor sewers that ultimately outfall to levee ponding areas or pump stations. The rural area and some of the growth areas on the fringe of the City are served by ditches and legal drains which discharge into nearby streams.

During periods of heavy rainfall both citizens and local officials become acutely aware of the problems associated with the combined storm water and sanitary sewer system. Some of these problems are local flooding, reduced capacity and efficiency of treatment plant operations and overflow causing direct sewage discharge into Pigeon Creek and the Ohio River. Currently, there are six major combined sewer overflows, or outfalls, on the Ohio River and seven on Pigeon Creek.

A significant problem with combined sewers is treating the storm water runoff in the wastewater treatment plants during and after heavy rains which reduces plant capacity. When the plants exceed their capacity, the results are direct sewage discharge into the Ohio River and Pigeon Creek. The alternatives are to increase the capacity of our treatment plants and/or reduce the volume of storm water reaching the plants.

Previous planning efforts have resulted in proposals for large scale storm/sanitary sewer separation projects in areas that were served by combination sewers. Examples of this type of project are the new storm sewer systems which have been installed along Fulton Avenue, St. Joseph Avenue and Weinbach Avenue. These projects separate the sewer systems and provide relief from localized flooding. Future projects include:

-- Vann Avenue, extending from Walnut Street to Rheinhardt Avenue;
-- Culver Drive and numerous other streets in the Culver Area; and

-- Diamond Avenue, from U.S. 41 to Pigeon Creek and adjoining areas.

These past and future projects, which will minimize the sewage discharge into the Ohio River and Pigeon Creek, are necessary to meet the Clean Water Act standards. The high cost of resolving the problems caused by the CSO's dictates that the needed improvements be phased in over a period of years.

In 1997, Clark and Deitz consulting engineers prepared a Storm Water Master Plan for the City. This plan studied and identified needed improvements to resolve localized flooding and storm water drainage problems. The City financed $30 million in bonds to provide the necessary funds to design and construct system-wide improvements to help alleviate these problems. The improvements involved various alternatives to address identified drainage needs.

The alternative solutions were studied and identified for their ability to reduce, mitigate, or eliminate drainage and flooding problems. Alternatives were categorized as either structural or non-structural and also were characterized according to their scale, at the neighborhood, watershed, or system-wide level. Cost was also an important consideration in this analysis. Implementation of these improvement projects identified in the Storm Water Master Plan will be a long term process. The Plan includes a list of priority projects based upon criteria such as population served, cost effectiveness, and ability to be constructed.

A CSO Long Term Control Plan was also recently completed by the Water and Sewer Department with the assistance of a citizen advisory committee. This Plan analyzes the impact of existing CSOs and develops cost-effective solutions to eliminate or reduce as much as possible the discharge of sanitary sewer flows into Pigeon Creek, Bee Slough and the Ohio River to comply with federal requirements. The Plan recommends a set of seven control improvements to accomplish this goal. Some of these proposed CSO controls are in-system and off-line storage of storm water that can be released slower after a storm event; and diversion of some flow to the proposed north side treatment plant. This Plan needs to be revised to reflect the fact that the new treatment plant will not be built as proposed. Any modifications to the Plan must be reviewed for approval by the Environmental Protection Agency. Replacement lines that will separate the storm and sanitary sewers are proposed in the Storm Water Master Plan for certain areas.

One of the main drainage projects planned by the City is described as follows:

The Southeast Side Drainage Project –

- Includes the separation of storm and sanitary sewers within the area generally bounded by Weinbach, Washington, Vann and Covert Avenues;
- Expected cost - $22 million;
- Will direct storm water south into an improved storm sewer, then into widened ditches and eventually into Eagle Slough; and
- Design work to begin in the near future.

Management of storm water in Evansville and Vanderburgh County is generally the responsibility of the Evansville Board of Public Works and the Vanderburgh County Drainage Board (County Commissioners). All major subdivisions must have preliminary drainage plan approval by the appropriate board before consideration by the Area Plan Commission at a public meeting. Additionally, drainage review of site plans occurs if required at the Site Review Committee stage of development plan review.

Because the control of surface water drainage is complex in Evansville and Vanderburgh County, proper management is an important concern. The variety of existing and new facilities must be integrated into a comprehensive system that provides adequate drainage throughout the County. Additionally, proper planning and design is essential for subdivisions and other large developments (shopping centers, apartment complexes) with large areas of impervious surface or requiring placement of substantial fill. To help guide developers and policy makers in the development process, a comprehensive drainage system plan is needed. This type of a plan would require coordination and participation by several local agencies including the City and County Engineers, the Board of Public Works, the County Commissioners, the Area Plan Commission, and most importantly, the County Surveyor and the County Drainage Board. These last two agencies are responsible for preparing and executing long-range plans for the construction, maintenance, reconstruction, and classification of regulated drains under their jurisdiction.

In addition to the existing regulations and problems concerning storm water runoff, the City of Evansville and portions of Vanderburgh County will soon be required to comply with new regulations regarding the water quality of storm water runoff. These regulations have been developed by the Indiana Department of Environmental Management (IDEM) to comply with the National Pollutant Discharge Elimination System Phase II program of the Federal Environmental Protection Agency (EPA), known as Rule 13. The intent is to reduce the amount of pollutants that enter receiving water bodies. IDEM has notified the City of Evansville and Vanderburgh County that local plans must be developed to obtain compliance. These plans will involve the development of a storm water management program that includes:

Public Education and Outreach
Public Participation and Involvement
Illicit Discharge Detection and Elimination
Construction Site Runoff Control
Post-Construction Runoff Control and
Pollution Prevention and Good Housekeeping

The City and County will be required to assess the water quality of waters such as the Ohio River and Pigeon Creek. A plan will then be developed to improve water quality through implementation of the measures listed above. Local ordinances are currently being developed to require and guide implementation. This is the process the City and County are required to follow to address the new federal and state storm water management standards.

SOLID WASTE

Solid waste generated in Evansville and Vanderburgh County is primarily disposed of at the Browning Ferris Industries (BFI) Laubscher Meadows Sanitary Landfill on St. Joseph Avenue, north of Mill Road. This privately owned landfill located on more than 200 acres in northwest Vanderburgh County has been operating under an IDEM permit since 1978. It is the only final disposal facility for municipal solid waste in Vanderburgh County.

As specified by their local permit and written agreement, Laubscher Meadows is a regional landfill that only accepts waste from Vanderburgh, Warrick, Posey and Gibson Counties in Indiana and from Henderson County in Kentucky. The origin and destination of the waste generated in the region has continued to change over the last several years. About 60 percent of the waste disposed of at Laubscher Meadows originates in Vanderburgh County. The waste from outside of Vanderburgh County hauled to this local landfill as its destination has steadily increased from 8% in 1991 to as high as 40% of the total in 2000. The origin of the waste from outside the County at the Laubscher landfill is currently 27% from Posey County, 31% from Henderson County, 29% from Warrick County and 13% from Gibson County.

The destination of the waste generated in Vanderburgh County was at one time almost exclusively Laubscher Meadows. However, the amount of this waste sent out of the County for disposal has been increasing. In 1991, only .57% of the Vanderburgh waste was sent out of the County for disposal. This percentage increased to nearly 30% in 2002. All of the 87,777 tons of waste hauled out of the County in 2002 was taken to the Blackfoot Landfill in Pike County, which is owned by Onyx Waste Services.

BFI and Onyx Waste Services, Inc. are the two major disposal companies that provide trash collection in the City and the County. These two businesses, along with several local independent companies, provide service to the unincorporated areas of Vanderburgh County and to the Town of Darmstadt for residential, commercial and industrial customers. BFI currently has a five-year contract through 2004 with the City of Evansville, and as part of this contract, serves approximately 40,000 single-family homes and small apartment buildings of five units or less. In addition, BFI also serves customers in the unincorporated area of the County.

Under a separate contract, the City's biweekly curbside recycling and yard waste programs will be provided by BFI at least through 2004. This contract requires BFI to process and market the recyclables or contract with another company to do so. The collected recyclables are taken to Tri-State Resource Recovery for processing and marketing. Tri-State Resource Recovery has become the "processing center" that is considered critical to reaching the Solid Waste District's diversion goals. In addition to this program, there are 25 private companies and not-for-profit organizations on 42 sites that accept drop-off recyclables.

Weekly yard waste collection is offered by BFI in the City from the spring through fall. BFI customers also have access to a state-registered compost facility adjacent to the landfill.

Solid waste services, waste education, and recycling in Vanderburgh County are guided by the Vanderburgh County Solid Waste Management Plan. This 20-year Plan was developed by the Vanderburgh County Solid Waste Management District. The District, which consists of a single-county, was created by the Vanderburgh County Commissioners in 1991. It is governed by a Board of Directors and has the power to pass ordinances, levy taxes, and issue bonds.

The Solid Waste Management Plan was adopted by the District Board in 1992. The goal of the Plan is to not only reduce the amount of material entering the waste stream through source reduction and reuse, but to increase the amount of recycling in all sectors, especially the residential and commercial sectors. The Board guides an ongoing education and marketing program emphasizing reduction, reuse, and recycling to reach established goals. The Board also insures that the private provision of waste disposal programs, services, and facilities are compatible with the Plan.

Education is one of the major functions of the Solid Waste District. The Solid Waste Plan calls for an education program to improve the awareness and understanding of solid waste management activities in Vanderburgh County and insure that the waste reduction goals are achieved. The implementation of a successful recycling and source reduction program depends upon changes in behavior on the part of the residents of Vanderburgh County.

To promote the recycling message in the community, the District provides various programs to schools and civic groups about waste reduction, recycling and household hazardous waste. These programs are:

Household Hazardous Waste Collection Day - Offered since 1994 as a single day event.

Tire Amnesty Day - Offered biannually since 1994 to collect old tires.

Household Battery Recycling Program - Offered since 1994 with six local stores as drop-off locations for old batteries.

Monthly Drop-off Recycling Days - Offered since 1998.
City Heavy Trash Pick-Up Program - Offered biannually since 2001 to collect large and bulky items.

Computer and Electronic Recycling Day - This event was new in 2002.

At the current rate of disposal, Laubscher Meadows has over 20 years of capacity remaining. Since the permitting and approval for a new landfill is a lengthy process, site selection for a new landfill site should be initiated in about 10 years. This assumes that the future amount of waste disposed at Laubscher Meadows per year remains about the same. Therefore, this schedule will need to be adjusted if drastic changes occur in the rate of disposal.

EVANSVILLE WATER AND SEWER UTILITY ACTION PLAN

Source: Water and Sewer Utility and Area Plan Commission

GOAL

To provide quality water and wastewater service throughout the current and future service area.

OBJECTIVES

To improve treatment plant facilities and processing to meet the needs of the community while simultaneously achieving compliance with Federal and State regulations, particularly Clean Water and Safe Drinking Water Act Amendments.

Keep a 20 percent capacity surplus so that the system can stay ahead of the demand for new water and sewer service.

To increase the system's reliability and maintain minimum residual pressure of 30 pounds per square inch under maximum hour demand conditions.

POLICIES

A financing mechanism should be developed for extending service to those structures in the developed area not currently served by the water and sanitary sewer system, and all unserved structures should be connected into the system.

Revise the Water and Sewer Master Plan to guide the provision of these services.

Require those receiving the service to pay the cost of providing such service.

All costs associated with extending and/or accessing the water and sanitary sewer network for new service to a development is the responsibility of the developer.

The utility shall assume, after inspection, ownership and maintenance of all qualifying water and wastewater facilities installed in the service area.

Facilities previously installed but not meeting adopted standards shall not be maintained or expanded until these standards are met.

Insure that water and sewer system improvements necessary to accommodate new development are in place when needed to mitigate development impacts.

Sanitary sewer improvements, along with the proper zoning, must be in place for extensive commercial or industrial development.

Install a minimum water pipe size of eight inches for fire protection purposes.

OBJECTIVE

Phase out the passage of storm water flow through the sanitary sewer system reducing the clear water flow into the treatment plants.

POLICIES

Replace the existing combined sewer systems with separate storm water and sanitary sewer lines.

STORM WATER DRAINAGE ACTION PLAN

GOAL

Improve the surface collection and capacity of the storm water drainage system.

OBJECTIVE

Reduce the extent and duration of localized flooding.

POLICIES

Encourage the City and County to develop and implement a storm water drainage and erosion control master plan.

Identify those developed areas where frequent localized flooding occurs, prioritize these problems, and develop alternatives for reducing, mitigating, or eliminating the problems through both structural and non-structural means.

Where flooding problems have been identified, increase the capacity of the drainage system in these areas to handle a 10-year storm event and/or implement other alternative solutions.

Develop a City drainage ordinance that will be consistent with the County ordinance that was adopted in 1994.

Ensure that the post development storm water runoff does not exceed pre-construction volumes, thereby reducing the impact of new development on the existing drainage system.

Expand the inclusion of detention and/or retention ponds in new development.