

Point Source Management in Dearborn County

Requirements for Water Quality Management Planning

As described in the first chapter, the Ohio-Kentucky-Indiana Regional Council of Governments (OKI) is responsible for water quality management planning in the greater Cincinnati region, including Dearborn County. The governor of Indiana designated OKI for this role because of Section 208 of the Clean Water Act, which requires that areas with substantial water quality problems develop management plans to control pollution on a regional basis, often referred to as “208” plans for the sake of brevity. Such water quality problems can involve point sources from publicly owned wastewater treatment works and nonpoint sources of pollution such as stormwater runoff, and intermittent sources such as combined sewers (older sewers carrying both stormwater and wastewater, the combination of which may bypass the treatment plant when the volume of flow increases with heavy rains).

A key aspect of “208” planning is to identify areas in which the feasibility of public wastewater treatment alternatives can be investigated, called facility planning areas or FPAs, and to designate management agencies or DMAs for each FPA. The intent has generally been that while more than one agency (multiple DMAs) might be designated to provide sewage collection within an FPA, only one agency or DMA would be designated to provide wastewater treatment within an FPA. This approach helps to avoid duplication of effort and its associated costs.

Federal and State Oversight of Public Wastewater Treatment Plants

The goal of the Clean Water Act is to limit pollution so that our water resources can support a variety of uses—not only the disposal of municipal and industrial waste, but also drinking water supply, industrial needs, agriculture, recreation, and supporting aquatic life. The significance of a pollutant depends on the extent to which it inhibits the ability of a body of water to support a diversity of uses. The level of pollution control required is related to a stream’s assimilative capacity, its ability to purify itself by using dissolved oxygen to decompose organic waste.

After state governments determine the uses a stream should be able to accommodate, they establish water quality standards to enable these uses. Water quality standards are expressed in terms of physical and chemical parameters that are considered minimum requirements, not to be diminished by the impacts of wasteloads, such as the discharge of effluent from treatment plants. Effluent limitations are developed for all municipal and industrial plants in a process called wasteload allocation. Depending on the pollutant in question, an effluent limitation may permit some discharge or no discharge at all. In addition, U.S. EPA requires industries discharging to public treatment plants to pretreat their wastes to reduce or remove elements that cannot be handled by the public plant’s treatment processes.

The Clean Water Act created an oversight system for wastewater dischargers called the National Pollution Discharge Elimination System (NPDES) permit which includes requiring that effluent limitations must be identified and met. In Indiana, IDEM sets effluent limitations and issues NPDES permits, which must then be renewed every 5 years or whenever significant modifications or expansions are made to the treatment plant. IDEM also conducts reviews and issues permits for the construction of wastewater facilities whether they involve sewer collection systems, treatment plants, or expansions or improvements to these systems and plants. In addition, IDEM provides oversight of system operations and compliance by requiring that

treatment facilities submit monthly operating reports that indicate effluent quality and any monitored exceedances of the parameters identified in their NPDES permits.

In general, water quality problems caused by point sources are related to inadequacies in treatment levels, plant size, or operation and maintenance. By-passing is the water quality problem caused most often by inadequate plant size. If a facility is not large enough to process the flows conveyed to it, untreated wastewater is by-passed into the receiving stream. Poor maintenance or operation of a treatment plant and poor maintenance of sewer collection systems are also causes of water quality problems. Systems with cracked joints and broken pipes allow groundwater infiltration, which may substantially increase the volume of water delivered to a treatment plant. Drains connected to a sewer system from rooftops and foundations contribute to inflow problems. Infiltration and inflow (often referred to as “I/I”) problems can be quite serious in poorly constructed or maintained systems.

Local Management of Treatment Plants and Sewer Collection Systems

While Dearborn County includes several small wastewater treatment “package” plants that are owned and managed by developers, commercial enterprises, or mobile home parks, this plan update focuses on the six major wastewater treatment facilities in Dearborn County that serve the public: the South Dearborn Regional Plant in Lawrenceburg; the Highridge Plant located in the High Ridge Estates subdivision along U.S. 50 between Aurora and Dillsboro; the Dillsboro plant located just west of the town of Dillsboro; the Moores Hill plant located just south of the town of Moores Hill; the St. Leon plant located east of the town of St. Leon; and the Logan Miller Harrison (LMH) plant located in the Bright area, which is referred to as the Picnic Woods plant by IDEM on the LMH plant’s NPDES permit.

Figure 5-1 shows the locations of these wastewater plants and sewer service areas in the county in the context of the facility planning area (FPA) boundaries that existed before this plan update. As demonstrated by Figure 5-1, the existing OKI plan for Dearborn County did not identify an FPA for St. Leon facilities or LMH facilities because neither were being contemplated when the original plan was developed in the 1970’s. Given conditions at that time, much of the county was designated as a “Rural Areas of Dearborn County” FPA, with the recommendation that the County continue to monitor the performance of on-site wastewater management systems. In addition, as indicated by the existing FPA boundary shown around West Harrison, Indiana, that community has long been served by the wastewater treatment plant of Harrison, Ohio, identified in OKI’s original 208 plan as the designated management agency for the Harrison FPA.

Figure 5-2 provides additional information about major wastewater facilities in Dearborn County, including the stream and watershed receiving treated wastewater (effluent) from each plant and the design capacity of each plant—the maximum amount of wastewater flow that it is designed to discharge.

Figure 5-3 provides information about the operations and monitoring of the major wastewater plants in Dearborn County, including for each the NPDES permit number, average wastewater flow (in millions of gallons per day or MGD), the parameters that each plant must monitor to ensure compliance with the effluent limitations in its NPDES permit, the frequency with which each parameter is monitored, and brief characterizations of each parameter’s significance for water quality.

Figure 5-1. Major Wastewater Treatment Plants, Facility Planning Areas in 2009, and Sewer Service Areas in Dearborn County

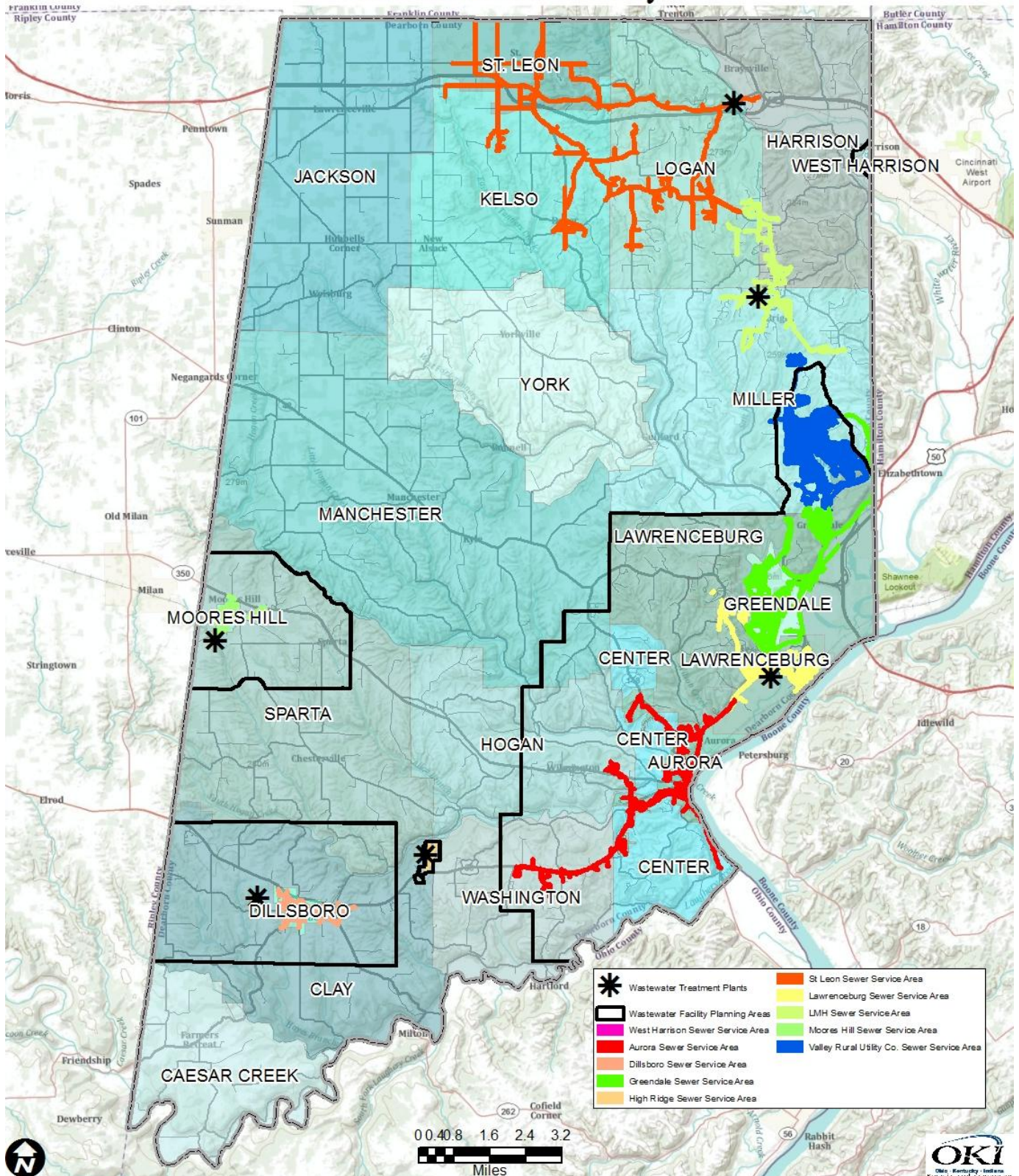


Figure 5-2: Major Wastewater Facilities in Dearborn County

Facility Name NPDES #¹	Facility Planning Area Sewer Service Area	Receiving Stream Watershed	Design Capacity²
DILLSBORO MUNICIPAL WWTP IN0022781	Dillsboro Dillsboro	Peter Creek Hayes Branch	0.5 MGD
HIGH RIDGE WWTP IN00663525	High Ridge High Ridge Estates	Unnamed Tributary of South Hogan Creek Allen Branch-South Hogan Creek	0.02 MGD
MOORES HILL WWTP IN0023817	Moores Hill Moores Hill	Whitaker Creek Little Hogan Creek-North Hogan Creek	0.105 MGD ³
SOUTH DEARBORN WWTP IN0024538	South Dearborn Regional Sewer District South Dearborn Regional Sewer District	Ohio River Salt Fork-Tanners Creek	6.0 MGD
ST. LEON MUNICIPAL WWTP IN0058408	None at Present St. Leon	Whitewater River Johnson Fork-Whitewater River	0.30 MGD ⁴
LOGAN-MILLER-HARRISON (LMH) WWTP IN0053759	None at Present Bright	Unnamed Tributary of Turkey Creek Salt Fork-Tanners Creek	0.48 MGD

1. NPDES = National Pollution Discharge Elimination System permit, which is a discharge permit for treatment facilities.

2. Design Capacity per NPDES Permit is shown for wastewater treatment plants (WWTP) in millions of gallons per day (MGD).

3. A new Moores Hill wastewater treatment plant with a design capacity of 0.2 MGD is under construction, and is expected to be operational by Summer 2011.

4. The St. Leon wastewater treatment plant is being expanded to a design capacity of 0.57 MGD, with the additional capacity expected to be available by Summer 2011.

**Figure 5-3: Operations and Monitoring at
Major Wastewater Treatment Plants in Dearborn County**

Facility Name- NPDES #*	Receiving Stream/ Watershed	Average Flow	Monitored Parameters	Monitoring Frequency
DILLSBORO MUNICIPAL WWTP – IN0022781	Peter Creek/ Hayes Branch	0.1495 MGD	CBOD5	3 X Weekly
			TSS	3 X Weekly
			Ammonia-nitrogen	3 X Weekly
			pH	5 X Weekly
			Dissolved Oxygen	5 X Weekly
			E. coli	3 X Weekly
HIGH RIDGE WWTP – IN0063525	Unnamed Tributary of South Hogan Creek/ Allen Branch-South Hogan Creek	.0008MGD	CBOD5	1 X Weekly
			TSS	1 X Weekly
			Ammonia-nitrogen	1 X Weekly
			pH	2 X Weekly
			Dissolved Oxygen	2 X Weekly
			Total Residual Chlorine (Contact Tank and Final Effluent)	2 X Weekly
			E. coli	1 X Weekly
MOORES HILL WWTP - IN0023817	Whitaker Creek/ Little Hogan Creek-North Hogan Creek	0.040 MGD	CBOD5	2 X Weekly
			TSS	2 X Weekly
			Ammonia-nitrogen	2 X Weekly
			pH	2 X Weekly
			Dissolved Oxygen	5 X Weekly
			Total Residual Chlorine (Contact Tank and Final Effluent)	5 X Weekly
			E. coli	2 X Weekly
SOUTH DEARBORN WWTP - IN0024538	Ohio River/ Salt Fork- Tanners Creek	3.6 MGD	CBOD5	Daily
			TSS	Daily
			Ammonia-nitrogen	2 X Weekly
			Fecal Coliform (Nov 1 – Mar 31)	Daily
			pH	Daily
			E. coli (April 1 – Oct 31)	Daily
ST LEON MUNICIPAL WWTP - IN0058408	Whitewater River/ Johnson Fork-Whitewater River	0.212 MGD	CBOD5	3 X Weekly
			TSS	3 X Weekly
			Ammonia-nitrogen	3 X Weekly
			pH	5 X Weekly
			E. coli	3 X Weekly
LOGAN-MILLER- HARRISON (LMH) WWTP - IN0053759	Unnamed Tributary of Turkey Creek/ Salt Fork- Tanners Creek	0.293 MGD	CBOD5	3 X Weekly
			TSS	3 X Weekly
			Ammonia-nitrogen	3 X Weekly
			pH	5 X Weekly
			Dissolved Oxygen	5 X Weekly
			Total Residual Chlorine (Contact Tank and Final Effluent)	5 X Weekly
			E. coli	3 X Weekly

*NPDES – National Pollution Discharge Elimination System permit, which is a discharge permit for treatment plants.

CBOD – Carbonaceous Biochemical Oxygen Demand: CBOD measures the oxygen consumed by biological processes that break down organic pollutants, and the greater the CBOD, the greater the amount of pollution.

TSS – Total Suspended Solids: Suspended solid contaminants in wastewater can resist removal by conventional means.

Ammonia-nitrogen: Ammonia is the form of nitrogen associated with dead organic material and fecal matter. It is thus the most common form associated with wastewater.

pH: pH is a measure of acidity and alkalinity and a crucial parameter for the survival of aquatic life. The pH of natural surface water is around 6.5 to 8.5.

Dissolved Oxygen (DO): The level of dissolved oxygen is one of the most important indicators of a water body’s ability to support desirable aquatic life; it also aids in the prevention of odors.

Total Residual Chlorine: Chlorine can be a powerful disinfectant in wastewater treatment, but certain levels of residual chlorine in natural environments can be harmful.

Fecal Coliform and E. coli: These are bacteria found in the intestinal tracts of mammals, which serve as indicators of the possible presence of dangerous pathogens. E. coli is a type of fecal coliform.

The following profiles provide summary information about the organizations responsible for managing the major wastewater treatment facilities, based on interviews with staff and/or board members of each.

South Dearborn Regional Sewer District (SDRSD)

- The original SDRSD wastewater treatment plant was built in the late 1970's and then expanded significantly in 1997-98.
- The Lawrenceburg Distillery (LDI) uses ph neutralization as pre-treatment.
- The SDRSD plant is a contact stabilization plant. The plant management's biggest concern is managing ammonia, as the plant is not designed to treat for ammonia. Using an activated sludge process would increase ammonia removal, but would decrease biochemical oxygen demand (BOD) removal to a capacity of 40 lbs per cubic foot.
- Treatment capacity is 6 MGD, and average daily flow is 3.6 MGD.
- No plant expansion is planned at this time.
- The individual communities on the sewer board (Aurora, Lawrenceburg, and Greendale) are responsible for their individual collection systems and any expansion of these collection systems.
- The Valley Rural Utility Company (VRUC) serves the Hidden Valley Lake development, and is not a member of the SDRSD board, but sends its wastewater to Greendale's collection system for conveyance to the SDRSD plant.
- All the communities with sewer collection systems associated with SDRSD have some level of I/I issues related to the age and maintenance expenses of their systems, and are making an effort to address I/I as funding is available for repairing or replacing sewer lines.

Valley Rural Utility Company (VRUC)

- VRUC took over the utility company function in 1995 from Hidden Valley Lake, Inc.
- The Hidden Valley Lake (HVL) collection system was built around 1972 with predominantly 8"-10"-12" pipes made of clay (80%) or plastic (20%).
- Since the HVL sewer system was originally constructed, repairs have been made that have reduced the proportion of clay pipes to 60%.
- A previous HVL treatment facility was decommissioned in the 1980's because of operational problems and because it lacked adequate capacity for growing development.
- As recommended in OKI's 1977 "208" plan, after the HVL treatment facility was decommissioned HVL's sewage has been conveyed to Greendale.
- In order to deal with I/I problems, VRUC expects to receive a U.S. Department of Agriculture loan to rehabilitate the whole collection system, including replacing clay tile and repairing lift stations. The rehabilitation will be phased in over approximately three to four years.
- Peak flows (1.2 MGD) are three to four times the average daily flow (.4 MGD).
- HVL currently has about 1850 homes.
- About 1000 HVL lots are undeveloped. Based on topography and homes being built on multiple lots, 2,000 homes likely represent build-out for the HVL development.

Greendale

- In 2007 a 30-year agreement was reached between Greendale and VRUC for Greendale to continue to convey wastewater from VRUC to the SDRSD plant.

- VRUC's I/I and overflow problems have been severe, and affect the volume of waste that can move through Greendale's sewer system.
- Leachate from the old Greendale landfill goes first to VRUC's system and then to Greendale and SDRSD.
- PriPak, a bottling operation for energy drinks, has had a pretreatment issue involving grease and oil in a lift station.
- The last major Greendale annexation occurred in 1997.
- 99.9% of homes in Greendale are on centralized sewer.
- The City has fixed a number of failing septic tanks on Oberting Road and SR 1.

Lawrenceburg

- With the benefit of gaming revenues, Lawrenceburg has spent \$33 million on water and wastewater infrastructure improvements since 2002, including building a new water plant that went on line in 2004, eliminating all combined sewer overflows and sanitary sewer overflows in its system, and rebuilding all the sewage lift stations.
- I/I issues exist along Ludlow Hill off SR 48 and Bielby Road because of old clay pipe dating to the 1950s and 1960s, which will be re-lined or replaced with plastic pipe.
- Most of Lawrenceburg's sewer lines are gravity lines; the only major low pressure line runs along SR.48 to Three Mile Road and Horizonway which feeds into a lift station.
- Lawrenceburg has recently annexed about 77 acres between Wilson Creek Road and Florence Drive, which will be sewerred.
- Areas of possible expansion for Lawrenceburg's sewer collection system would probably deal with areas of failing and failed septic systems, such as some along SR 48, SR 148, and SR 350.

Aurora

- All the sewer expansions installed in Aurora since 1995 have been force mains because they reduce disruption and the impact on existing homes, and the cost is lower than gravity mains which must be buried more deeply.
- A 16" replacement is being planned for Aurora's force main to the SDRSD plant.
- The 16" replacement can accommodate 2500 gallons per minute (gpm), in contrast to the existing two 8" mains that can carry 1100 gpm if both are functioning.
- The most recent development has occurred in Dutch Hollow, southwest of Aurora, and includes 90 to 100 homes.
- Aurora's two sanitary sewer overflows (SSOs) were eliminated in October 2010.
- Aurora prefers to provide sewer where it provides water.

Dearborn County Regional Sewer District (DCRSD)

- The DCRSD was formed in 2003 to focus on providing centralized sewer service to problem areas with failing septic tank systems and to opportunity areas where growth is expected, such the West Harrison Tax Increment Financing District (TIF).
- It is governed by a board appointed by the County Commissioners, County Council, the City of Aurora, and the Dearborn County Health Department. It has historically been funded by the County Council, which has access to gaming revenues, although it also has the authority to issue bonds and pursue loans and grants.
- Because of existing treatment capacity in the County, DCRSD has operated primarily through inter-local agreements with existing sewer system operators and treatment providers.

- Inter-local agreements have enabled DCRSD to construct sewer extensions to problem areas, which are then served by such entities as Aurora's collection system conveying the additional flows to the South Dearborn Regional treatment plant.
- Because sewer extensions to the Highridge Estates area would have been cost-prohibitive, and the water quality and public health issues associated with its failed treatment system were urgent, the DCRSD constructed a small treatment plant for the area with a design capacity of 0.02 MGD, which went on line in 2010 with an average daily flow of .0008 MGD.
- The DCRSD considers the West Harrison TIF to be a priority for sewer expansion because of interest expressed in the area by both the State of Indiana and private developers.

Dillsboro

- The collection system dates back to the mid-1960's.
- The current wastewater treatment plant was constructed in 2006.
- The Town has some I/I problems due to basement drains that were hooked onto the sewer system when the system was built.
- The plant's design capacity is 0.500 MGD and the 2009 average daily flow is .1495.
- The plant currently is using one of its two oxidation ditches.
- The system currently has about 510 customers (connections) and anticipates about 600 connections by 2030.
- Growth of Dillsboro's sewer system is most likely to the east due to the U.S. 50 corridor, and to the south along 262 because of failing septic systems.
- The DCRSD has expressed some interest in providing sewers to the area around Lake Dildear west of Dillsboro, where many failing septic systems exist on small lots, and connecting the sewers from this area to Dillsboro's system.

Moore's Hill

- All existing main lines have been totally replaced in an effort to eliminate I/I.
- The new lines have not been totally successful in eliminating I/I, and the town determined that the existing plant, dating to 1964, needed to be replaced.
- The new treatment plant will be on line in the summer of 2011 and will increase capacity from 0.105 to 0.200 MGD.
- The improvements also include redoing a lift station at Main and SR350.
- The facilities include an oxidation ditch for sludge management.
- Current wastewater flows are 0.040 MGD with a 0.250 MGD maximum flow.
- The school is the biggest customer of the existing 262 customers and 220 connections.
- The town envisions future land use in the vicinity to include some commercial development, but mostly low density residential and agricultural land uses.

St. Leon

- USDA funded St. Leon's original system and has required hook-ups to it.
- In 2007 St. Leon received a construction permit from the state to expand their plant.
- The expansion will increase the plant's design capacity from 0.3 MGD to 0.567 MGD.
- Average daily flows are currently 0.212 MGD.
- The plant expansion is based not only on residential developments that have gone through the county review process but also on some assumptions of commercial/light industrial development.

- The expansion assumes that commercial/light industrial development will generate about 0.100 MGD in treatment demand.
- St. Leon has had discussions with the Dearborn County Regional Sewer District about serving the West Harrison TIF (Tax Increment Financing) District, and a property owner extended a sewer line under the Whitewater River to the western edge of this TIF.
- St. Leon has worked with the Dearborn County Economic Development Initiative on an economic development study for the area in the vicinity of the SR 1 and I-74 interchange.
- The St. Leon system has no combined sewer overflows and no pretreatment users.
- Current customers of St. Leon's include the Higher Ground Conference Center (which serves 20,000 guests per year) and North Dearborn School facilities.

Logan-Miller-Harrison (LMH) Utilities

- LMH came into being in 1986 and underwent a recent expansion and upgrade from 0.300 MGD to 0.500 MGD.
- LMH currently has no expansion plans for the future.
- A force main is planned along Stateline Road between White Ridge and Bond Roads.
- The system has no combined sewer overflows or sanitary sewer overflows. The oldest part of the system has some I/I which is being evaluated.
- The average daily flow is currently 0.244 MGD.

Looking Ahead to 2030

In anticipating needs for centralized wastewater treatment in the planning horizon year of 2030, OKI took a systematic approach to data collection and analysis. As described in detail in other chapters of this plan update, OKI considered existing water quality; current and planned land uses; existing and projected population figures and growth trends as indicators of future treatment demand; topography; and nonpoint pollutant sources to help indicate hot spots where septic tank systems are failing and centralized treatment is needed. In addition to these factors, OKI considered wastewater management agencies, their current service areas, their current and planned treatment capacities, operational issues and institutional resources to propose updated facility planning area (FPA) boundaries and designated management agencies (DMAs) for them.

OKI also considered comments from wastewater management agencies about their desires and plans to serve extended areas in the future, particularly their intentions to provide sewer service to areas with failing on-site systems which are the most significant water quality problem in Dearborn County. Because sewer service is affected by many factors, including population densities, commercial and industrial land uses, topography, and finances, identifying FPAs and DMAs does not necessarily indicate an expectation that sewer service will be provided throughout the full geographic extent of an FPA.

Identifying FPAs and DMAs does carry the expectation, however, that DMAs will evaluate treatment needs and alternatives and prepare wastewater facility plans for areas that need them, which entails committing the resources necessary for facility planning, whether for sewer extension or for wastewater treatment. Because significant excess treatment capacity is available at each of the six wastewater plants described in this plan update, and detailed facility planning will be needed to determine the most technically feasible, environmentally sound, cost effective and locally acceptable alternative for service to a given area, this plan update does not include

recommendations for construction of additional wastewater treatment facilities, nor does it rule out the potential for them based on a detailed evaluation of alternatives.

Updating Facility Planning Areas (FPAs) and Designated Management Agencies

As a departure point for updating, OKI began by revisiting existing wastewater FPA boundaries and management agency designations. As previously mentioned, the original OKI plan for Dearborn County did not identify an FPA for St. Leon facilities or LMH facilities because neither were being contemplated when the original plan was developed in the 1970's. In addition, neither St. Leon nor LMH were identified as designated management agencies in the 1977 OKI plan, and the DCRSD was designated through a 2009 plan amendment as a management agency responsible for collection and treatment in the small Highridge Estates FPA.

Working with the Advisory Committee described in Chapter 1, OKI gathered and analyzed state and local data throughout the plan update process, and prepared multiple versions of a draft updated wastewater FPA map in December 2010, February 2011, and May 2011. These versions of an updated FPA map were based on growing levels of information and discussion, as indicated in the meeting agendas and meeting summaries provided in Appendix A.

In the final analysis, the Advisory Committee could not reach complete consensus on an updated wastewater FPA map after months of discussion. At the Advisory Committee's last meeting on June 13, 2011, much discussion and three sets of voting were needed to arrive at a final map of recommended wastewater management designations, with votes of 10-13, 7-15 and 20-2; the process is described in greater detail later in this chapter and in the meeting summary in Appendix A. This plan update includes the final proposed FPA map determined by the Advisory Committee. More detail about the evolution of the final proposed FPA map is provided after the following description of factors considered by OKI in preparing the earlier drafts:

Existing sewer lines provided a practical consideration for updating FPA boundaries, as they involve wastewater facilities available for use and expansion and can also involve a substantial investment of public dollars. For example, the sewer systems of St. Leon and LMH did not exist when the original OKI plan was prepared, and the SDRSD's sewer lines have since expanded to serve evolving demand.

Natural physical features were another factor in the updating process. A general understanding of slope/surface gradient is important when gravity lines are being contemplated. Ravines and major streams are often costly to cross with infrastructure and should be evaluated as future service areas are considered. For example, the topography associated with Hogan Creek was a consideration for the Moores Hill FPA. Built physical features like roads and railroads were also considered in the update process, as they add cost to extending sewer lines.

In Dearborn County, known areas of on-site septic tank system concentrations were a major factor in contemplating sewer service needs and proposing updated wastewater FPAs. As noted in the nonpoint source chapter, many on-site systems have failed and are contributing to water quality problems because of the generally poor suitability of soils in the County for their use. A map of hot spots of problem on-site systems is provided in the nonpoint source chapter, and includes the SR 148 corridor near the SR 48 intersection, the Guilford area, and portions of the U.S. 50 corridor.

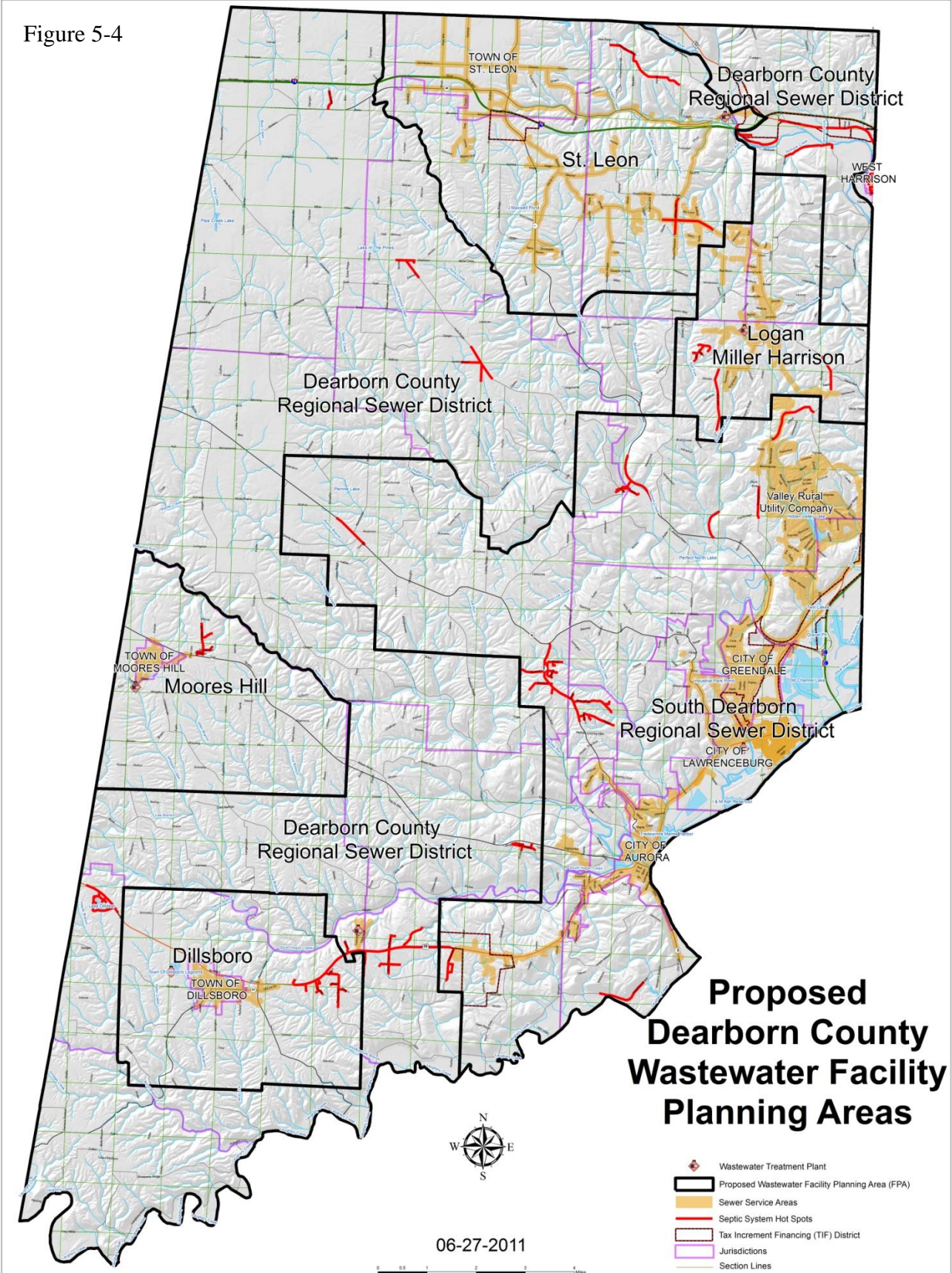
Areas where population is projected to increase significantly were also considered as OKI revisited FPA boundaries, including the SR 48 corridor and Logan Township, as well as areas where population is expected to decrease, such as Lawrenceville. Future land uses planned by the Dearborn County Plan Commission and associated needs for centralized sewer service were another factor considered. In addition, OKI considered areas with incentives to spur development, such as Tax Increment Financing (TIF) districts, because they are assumed to develop within the life cycle of this plan update. These include the West Harrison TIF district, the West Aurora TIF district, the St. Leon TIF district, and the Greendale TIF district. For the sake of simplicity and clarity, the updated FPA boundaries were aligned with township boundaries and township section lines wherever practical.

Figure 5-4 shows the wastewater management designations identified by the Advisory Committee, which evolved from four previous maps drafted by OKI. In December 2010, OKI prepared an initial draft FPA map for discussion with the Advisory Committee based on the factors described above. After receiving feedback from several committee members and discussion at a January 2011 Advisory Committee meeting, in February 2011 OKI prepared a revised map that expanded the areas of almost every sewer provider to be more reflective of their treatment capacities. The February 2011 version of the map was displayed on the county website and as part of extensive community outreach. After an April 2011 Advisory Committee meeting discussion and receiving additional information about each sewer provider's institutional and financial capacities and willingness to provide service, OKI presented a third iteration of the map at a May 2011 public meeting simultaneously with the map's posting on the county website.

Much of the April 2011 Advisory Committee discussion was about the "hot spot" areas of failing on-site treatment systems identified in the County and how the designated management agencies would plan to address these areas, as these "hot spots" were identified as the most significant water quality issue in the County. The municipal sewer providers indicated that the "hot spots" of failing on-site systems should be addressed using County funding, not municipal resources, due to the location of most of them in the unincorporated areas of the County. The DCRSD provided additional documentation of their recognition by IDEM for serving unincorporated areas of the county and their engineering studies commissioned to deal with "hot spot" areas. The draft map revised by OKI for the May 2011 public meeting consequently included less area for the municipal sewer providers and more area designated for the Dearborn County Regional Sewer District than the February draft. To address comments made at the May public meeting about refining the proposed boundaries in a few small areas, OKI provided a fourth iteration of the map at the final meeting of the Advisory Committee on June 13, 2011.

After much discussion, the Committee decided not to accept this fourth iteration by a vote of 10 to 13. A discussion then ensued in which each sewer provider indicated a preference for their FPA as proposed in either the second (February) draft map or the fourth (May) draft map (after the public meeting), with St. Leon proposing to serve additional area from the West Harrison TIF district, where the County had previously requested and received a plan amendment from OKI for the DCRSD to address needs for wastewater management. The Advisory Committee did not accept this hybrid proposal by a vote of 7 to 15. In a final action, the committee considered essentially the previous hybrid proposal minus any change to the County's service area in the West Harrison TIF district, and accepted this hybrid proposal by a vote of 20 to 2.

Figure 5-4



The following narrative descriptions summarize the rationale for the wastewater management recommendations and the geographic areas in question for each of the facility planning areas (FPAs) and designated management agencies (DMAs).

Dillsboro

The recommended wastewater facility planning area consists of approximately 12,000 acres including the Town of Dillsboro and surrounding vicinity. The area generally reflects input from the Town of Dillsboro regarding their recent wastewater treatment plant expansion and their expected growth areas outside their current facility planning area. The western FPA boundary for Dillsboro was also tightened at Dillsboro's request so it did not include the unincorporated problem areas around Lake Dilldear. Beginning at the northwest corner of Section 3 (T5, R3) and traversing clockwise, the proposed planning area boundary follows the northern Clay Township boundary to South Hogan Creek and then follows the existing facility planning area boundary east, then south to Hogan Road, just west of Brady Anderson Road. The proposed boundary then crosses South Hogan Creek and traverses southeastward, crossing US 50 just west of Sharon Drive, and then follows the Highridge facility planning area eastward to the eastern Clay Township boundary. It then turns southward to the southeast corner of Section 20 (T4, R2). The proposed southern facility planning area boundary follows section line boundaries westward to the Clay Township boundary near Boyd Branch Creek and follows the township boundary to the west side of Section 22 (T5, R3) and turns north. The proposed western facility planning area boundary follows section line boundaries north to the northwest corner of Section 3 (T5, R3).

Moores Hill

The recommended wastewater facility planning area consists of over 10,500 acres including the Town of Moores Hill and the surrounding vicinity, including much of Sparta Township. This area generally reflects input from the Town of Moores Hill regarding their current wastewater treatment plant expansion and their expected growth areas, as well as their limitations in borrowing additional funds for collection system expansion because they have a 40-year loan for their current treatment plant construction. Beginning in the northwest corner and traversing clockwise, the proposed planning area boundary begins at the Dearborn County boundary and follows the northern Sparta Township boundary, which also follows North Hogan Creek, to the eastern Sparta Township boundary and then traverses southward along the township boundary to the south side of Section 20 (T5, R2). The proposed southern facility planning area boundary follows section lines westward to the Dearborn County boundary. The proposed western facility planning area boundary follows the Dearborn County boundary.

St. Leon

The recommended wastewater facility planning area consists of approximately 22,000 acres in the northern portion of Dearborn County including the Town of St. Leon. The area generally reflects the location of existing sewer facilities operated by St. Leon and input from the Town of St. Leon regarding their current wastewater treatment plant expansion plans, their expected growth and future service areas, with an exception. The exception is the northeast corner of the county, where St. Leon expressed interest in providing wastewater treatment for flows from sewer lines to be constructed by the Dearborn County Regional Sewer District (DCRSD), as the DCRSD has received local funding for that purpose. In the northeast corner of the county, the Dearborn

County Commissioners requested that the DCRSD construct sewer lines to serve a pending development in the West Harrison Tax Increment Financing (TIF) District that is contingent on sewer availability, and convey the flows to Harrison (Ohio) for treatment.

The recommended FPA for St. Leon can be described as follows: beginning in the northwest corner and traversing clockwise, the northern proposed planning area boundary for St. Leon follows the Dearborn County boundary from Trackville Road to the eastern side of Logan Township. The proposed facility planning boundary then follows the Logan Township boundary southeastward to State Road 46. At this point, the proposed facility planning boundary “notches” to the east to encompass properties east of the Whitewater River that are currently served by St. Leon facilities and follows State Road 46 eastward to US 52, then follows US 52 southeastward to Interstate 74. The proposed facility boundary follows Interstate 74 westward to the eastern Logan Township boundary and follows the Township boundary southward to the south side of Section 22 (T7, R1).

The proposed facility planning area boundary then follows the southern boundary of Section 22 (T7, R1) westward and turns south on the eastern boundary of Section 28 (T7, R1). It then follows quarter section boundaries in a south and west fashion across Section 28 and Section 33 (T7, R1) and crosses the middle of Section 32 (T7, R1). It curves in a southwest direction across Section 31 (T7, R1) to the southwest corner of Section 31 and follows the southern boundaries of Sections 35 and 36 (T7, R2) to Tanners Creek. This section line is the proposed southernmost St. Leon facility planning boundary. The proposed facility planning boundary then follows Tanners Creek East Fork north and west to Trackville Road. The proposed western boundary of the facility planning area is Trackville Road.

Logan-Miller-Harrison Utility

The recommended Logan-Miller-Harrison (LMH) Utility facility planning area consists of approximately 8,800 acres in the east-central portion of Dearborn County including the unincorporated community of Bright. The area generally reflects the location of existing sewer facilities operated by LMH and input from the LMH Utility regarding their current wastewater treatment plant capacity and their expected growth areas. The proposed facility planning area also encompasses the area included in the Certificate of Territorial Authority (CTA) issued to LMH by the Indiana Utility Regulatory Commission (IURC).

Beginning in the northwest corner and traversing clockwise, the proposed northern planning area boundary begins at the western Harrison Township boundary and follows the northern side of Section 22 (T7, R1) east to the west side of Section 23 (T7, R1); it turns southward following section lines to the northern Miller Township boundary. The proposed facility planning area boundary then follows the Township line east to the eastern Dearborn County line and follows the County line south to the southern side of Section 12 (T6, R1). It then follows the southern boundary of the LMH CTA westward to the eastern side of Section 16 (T6, R1) and traverses southward to include the northeast quadrant of Section 16. It then follows the northern side of Section 16 to the western side of Section 9 (T6, R1) to the north side of Section 4 (T6, R1). The proposed boundary then traverses east halfway through Section 4 and turns northward to include the eastern half of Section 33 (T7, R1) and southeastern quadrant of Section 28 (T7, R1). It then follows the west and north sides of Section 27 (T7, R1) to the western boundary of Harrison Township north to the north side of Section 22 (T7, R1).

South Dearborn Regional Sewer District

The proposed South Dearborn Regional Sewer District (SDRSD) facility planning area consists of approximately 52,000 acres in the southeastern and central portion of Dearborn County including the cities of Lawrenceburg, Greendale and Aurora, and the Hidden Valley Lake community. The area reflects the location of existing collection systems being treated by the SDRSD wastewater treatment plant and the final vote of the Advisory Committee to include large areas that are not yet sewered and contain several hot spots of failing on-site systems.

Within the proposed SDRSD facility planning area, several agencies provide wastewater collection systems that ultimately feed into the SDRSD treatment plant, including VRUC, the City of Greendale, the City of Lawrenceburg, the City of Aurora and the Dearborn County Regional Sewer District (DCRSD). As previously noted, the SDRSD plant has significant excess capacity that may suffice within the proposed FPA for the planning horizon year of 2030, subject to more detailed study and facility planning. In addition, as also previously noted, designation of a management entity for treatment in water quality management planning carries the expectation that the treatment DMA will evaluate needs and alternatives and prepare wastewater facility plans for areas that need them.

The municipal members of the SDRSD board, however, have stated in Advisory Committee meetings that they cannot be responsible for areas outside their corporate boundaries and that it is up to the DCRSD to address problem areas and to pay for solutions in unincorporated areas. At the same time, representatives of the DCRSD have indicated that the DCRSD is willing to continue conducting engineering studies and preparing detailed wastewater facility plans for problem areas and opportunity areas in the unincorporated areas of the SDRSD FPA only if all options are open to them—not automatically conveying wastewater flows to the SDRSD treatment plant without comparing the relative technical feasibility, environmental soundness, cost-effectiveness and local acceptability of options that come from detailed planning.

Given this dichotomy, and IDEM's 2006 recognition of the DCRSD for providing wastewater management in the unincorporated areas of the County, and the need to address problem areas and to prevent problem areas through wastewater facility planning, OKI makes the following recommendations for the SDRSD facility planning area proposed by the Advisory Committee:

- 1) that the use of excess capacity and the provision of wastewater treatment at the SDRSD plant be considered as an option in any facility planning undertaken in the FPA;
- 2) that interlocal agreements continue to be considered as an option in any facility planning undertaken in the FPA;
- 3) that if the SDRSD does not commit time and resources to facility planning for treatment needs in the FPA, the individual management agencies designated for collection may conduct such planning without seeking a "208" plan amendment;
- 4) that facility planning conducted by the SDRSD or the individual management agencies in the FPA be evaluated for its relative technical feasibility, environmental soundness, cost-effectiveness and local acceptability on a case by case basis.

The proposed SDRSD facility planning area can be described as follows: beginning in the northwest corner and traversing clockwise, the boundary begins at the northwest corner of Section 19 (T6, R2) and traverses eastward to and then along the northern Manchester Township boundary to Miller Township. It then turns north and follows section lines to the north side of Section 18 (T6, R1) and turns east. The proposed boundary follows section lines eastward along the course of the proposed southern LMH facility planning area described above to the Dearborn County line. The proposed boundary follows the Dearborn County line south along the Ohio River and Laughery Creek to the west side of Section 23 (T4, R2). It then follows the west side of Section 23 north to the south side of Section 10 (T4, R2) and turns west. The proposed facility planning area includes the east half of Section 10 and Section 3. The proposed boundary then turns east along the north side of Section 3 (T4, R2) and Section 2 (T4, R2) to the middle of Section 1 (T4, R2). It then turns north and the area includes the eastern halves of Sections 36, 25, 24 and 13 (T5, R2). The proposed boundary then follows the south and west sides of Section 12 (T5, R2) and turns west, following section lines to the west side of Section 4 (T5, R2) where it turns north. The proposed boundary then follows the west side of Section 4, then the south then west side of Section 32 (T6, R2), then the south then west side of Section 30 (T6, R2) to the northwest corner of Section 19 (T6, R2).

Dearborn County Regional Sewer District

The proposed Dearborn County Regional Sewer District (DCRSD) facility planning area consists of just over 91,000 acres in the central, northeastern, western and extreme southern portions of the county. The proposed facility planning area is considerably smaller than IDEM's 2006 recognition of the DCRSD's authority to serve the unincorporated areas of the county because of the final vote of the Advisory Committee, although it reflects some input from the DCRSD about its mission to address problem areas with failing septic systems and areas of economic opportunity such as Tax Increment Financing (TIF) districts. This mission has been supported by Dearborn County Council with local funding support that has not required the DCRSD to pursue grants or loans, although the DCRSD is constituted to do so.

To date, the DCRSD has operated primarily by interlocal agreements, constructing sewer extensions that connect to the existing lines of other systems, with the exception of constructing and operating the Highridge Estates treatment plant in the center of the county because sewer extensions to either Dillsboro or Aurora would have been cost-prohibitive. It is recommended that the DCRSD continue to take advantage of excess treatment capacity available at the existing wastewater plants in the county wherever possible through additional interlocal agreements, rather than constructing new facilities, based on detailed facility planning. This facility planning should arrive at technically feasible, environmentally sound, cost effective and locally acceptable alternatives, as already noted. In general, package plants should be avoided unless other alternatives are not technically feasible, environmentally sound, cost effective or locally acceptable.

The proposed DCRSD facility planning area includes the existing Highridge facility planning area and the portion of the US 50 corridor in the center of the county between the Dillsboro and South Dearborn Regional Sewer District facility planning areas. The proposed DCRSD facility planning area also includes the area north of the facility planning area of LMH and east of the facility planning area of St. Leon. This northeast portion of the county includes the West Harrison TIF District. A Facility Planning Area was created by OKI's passage of an amendment to the Water Quality Management Plan on March 10, 2011 after a public notice and comment

period, public hearing and OKI Executive Committee consideration of a staff report. The amendment was requested by the Dearborn County Commissioners in December 2010 because of concerns about the timeliness and relative cost of service; the commissioners wanted to ensure that current development prospects and the jobs associated with them are not lost. The DCRSD committed funding to construct sewer lines in the eastern portion of the West Harrison TIF, and has entered into an interlocal agreement with the City of Harrison to provide treatment for flows from that area.

While the pending development affects only the eastern portion of the West Harrison TIF District, the County formed the TIF District and requested that DCRSD be the management agency for essentially the whole district to simplify the planning and provision of wastewater facilities for economic development prospects. A DCRSD engineering study prepared in October 2010 considered conveying some flows from the western portion of the West Harrison TIF (west of Johnson Fork Road) to St. Leon, which would provide an opportunity for an interlocal agreement if mutually acceptable terms could be achieved. It is recommended that the DCRSD revisit the possibility of conveying flows in the western portion of the West Harrison TIF District to the St. Leon treatment plant and conduct further analysis.

In addition, it is recommended that the DCRSD investigate the feasibility of addressing “hot spots” of failing on-site systems in relative proximity to the collection systems of Aurora, Greendale, and Lawrenceburg by interconnecting new collection systems and conveying the sewage flows to the South Dearborn Regional Sewer District (please see the previous narrative description for the SDRSD FPA). The DCRSD has already been investigating the feasibility of addressing problems around Lake Dilldear by constructing a collection system and conveying sewage flows to Dillsboro.

The remaining portions of the proposed DCRSD facility planning area include areas southwest of St. Leon and the unincorporated communities of Lawrenceville, New Alsace, Hubbell Corner, Weisburg, Yorkville, Bonnell, Mt. Sinai, Wilmington, Cold Springs, Chesterville, Lake Dilldear and Farmers Retreat, all of which lie significant distances from the existing sewer systems and available treatment capacities of other treatment providers in the county.

Table 5-1 summarizes for each wastewater management provider in the County the design capacity of existing wastewater treatment plants (WWTPs) and their average daily flow; the acreage associated with their existing FPA (where applicable) and updated FPA; the existing population and households and those projected for 2020 and 2030; and the estimated wastewater flow associated with each, based on an estimated flow of 400 gallons per day per household.

Table 5-1

Dearborn County Water Quality Management Plan Proposed Wastewater FPA¹ Projections

DILLSBORO

Existing Profile	
Existing FPA Size	10,626 Acres
2010 Existing FPA Population	2,396
2010 Existing FPA Households	950
2010 Connection Estimate	510
2010 Average Daily Flow	0.1495 MGD ²
WWTP Design Capacity	0.50 MGD

Acres	Projections						
	2020 Projections			2030 Projections			
	Population	Households	Estimated Maximum Daily Flow (400 gpd/HH) ³	Population	Households	Estimated Maximum Daily Flow (400 gpd/HH)	
Proposed FPA	11,951	2,686	1,099	0.4396	2,773	1,164	0.4656

LOGAN-MILLER-HARRISON UTILITIES

Existing Profile	
Existing FPA Size	n/a
2010 Existing FPA Population	n/a
2010 Existing FPA Households	n/a
2010 Connection Estimate	1,100
2010 Average Daily Flow	0.445 MGD
WWTP Design Capacity	0.50 MGD

Acres	Projections						
	2020 Projections			2030 Projections			
	Population	Households	Estimated Maximum Daily Flow (400 gpd/HH)	Population	Households	Estimated Maximum Daily Flow (400 gpd/HH)	
Proposed FPA	8,766	6,511	2,496	0.9963	6,616	2,652	1.0610

HIGHRIDGE

Existing Profile	
Existing FPA Size	162 Acres
2010 Existing FPA Population	94
2010 Existing FPA Households	47
2010 Connection Estimate	47
2010 Average Daily Flow	0.0008 MGD
WWTP Design Capacity	0.02 MGD

Acres	Projections						
	2020 Projections			2030 Projections			
	Population	Households	Estimated Maximum Daily Flow (400 gpd/HH)	Population	Households	Estimated Maximum Daily Flow (400 gpd/HH)	
Proposed FPA	189 ⁴	118	59	0.0236	124	62	0.0248

ST. LEON

Existing Profile	
Existing FPA Size	n/a
2010 Existing FPA Population	n/a
2010 Existing FPA Households	n/a
2010 Connection Estimate	991
2010 Average Daily Flow	21.20 MGD
WWTP Design Capacity	0.57 MGD

Acres	Projections						
	2020 Projections			2030 Projections			
	Population	Households	Estimated Maximum Daily Flow (400 gpd/HH)	Population	Households	Estimated Maximum Daily Flow (400 gpd/HH)	
Proposed FPA	21,938	4,482	1,631	0.6522	4,687	1,796	0.6946

MOORES HILL

Existing Profile	
Existing FPA Size	5,636 Acres
2010 Existing FPA Population	1,876
2010 Existing FPA Households	655
2010 Connection Estimate	220
2010 Average Daily Flow	0.04 MGD
WWTP Design Capacity	0.20 MGD

Acres	Projections						
	2020 Projections			2030 Projections			
	Population	Households	Estimated Maximum Daily Flow (400 gpd/HH)	Population	Households	Estimated Maximum Daily Flow (400 gpd/HH)	
Proposed FPA	10,686	2,373	881	0.3524	2,325	897	0.3688

DEARBORN COUNTY REGIONAL SEWER DISTRICT

Existing Profile	
See Highridge Existing Profile above	

Acres	Projections						
	2020 Projections			2030 Projections			
	Population	Households	Estimated Maximum Daily Flow (400 gpd/HH)	Population	Households	Estimated Maximum Daily Flow (400 gpd/HH)	
Proposed FPA	91,005	10,045	3,875	1.5499	10,122	4,004	1.6015

SOUTH DEARBORN REGIONAL SEWER DISTRICT

Existing Profile	
Existing FPA Size	35,481 Acres
2010 Existing FPA Population	22,178
2010 Existing FPA Households	3073
2010 Connection Estimate	7,570
2010 Average Daily Flow	3.60 MGD
WWTP Design Capacity	6.00 MGD

Acres	Projections						
	2020 Projections			2030 Projections			
	Population	Households	Estimated Maximum Daily Flow (400 gpd/HH)	Population	Households	Estimated Maximum Daily Flow (400 gpd/HH)	
Proposed FPA	52,056	27,209	11,652	4.6609	27,816	12,404	4.9613

NOTE:

While some households are not served by and may never be served by centralized sewer for a variety of reasons, for purposes of comparison and estimating maximum flow (demand), all the numbers listed for population and households include the full population and all the households within the FPA.

Footnotes:

1. Wastewater Facility Planning Area (FPA)
2. Millions of Gallons per Day (MGD)
3. 400 gpd/HH refers to an estimated 400 gallons per day (gpd) generated by household (HH)
4. The Highridge acreage is based on the current service area for the Highridge Wastewater Treatment Plant plus the Sharon Road vicinity; this FPA will continue to be managed by the Dearborn County Regional Sewer District.

June 14, 2011

The Evolution of “208” Planning and Consistency Reviews

In the years since 1977 when OKI completed the original Areawide Water Quality Management Plan under Section 208 of the Clean Water Act, much has changed at the national, state, and regional levels. Federal and state policies and programs have increasingly focused on watershed planning and nonpoint sources of pollution; federal and state funding for wastewater facilities have generally experienced a downward trend; and federal funding for “208” planning has dropped to a small fraction of what was available when such plans were first developed in the 1970’s.

As previously noted, the NPDES permits issued by IDEM cannot be “substantially inconsistent” with “208” planning because of requirements in federal and state law. These requirements sometimes result in OKI staff receiving requests from IDEM, from local wastewater management agencies, and from private sector developers for “208” consistency reviews, in which OKI staff determine if a given wastewater facility project is substantially consistent with the OKI “208” plan.

Given these circumstances, OKI has continued “208” planning consistency reviews and has passed four plan amendments to the plan for Dearborn County to reflect evolving circumstances in the period between 1978 and 2009. These amendments were typically sparked by the need for localized updates to avoid impeding permits and funding for wastewater facility improvements. The work on this plan update undertaken from the winter of 2010 to the summer of 2011 has been the first opportunity for a major and fully integrated plan update since the original plan was prepared, made possible by federal funding through the American Recovery and Reinvestment Act of 2009.

The Plan Amendment Process

In making updates and amendments to the plan, OKI follows a process that includes:

- defining the issue(s) to be addressed;
- gathering and analyzing relevant information from local, state and federal sources;
- conferring with local management agencies and IDEM;
- notifying potentially affected jurisdictions;
- seeking public input;
- preparing a staff report and recommendation; and
- presenting the report, amendment or update to the relevant OKI policy body for action.

(On a quarterly basis the 117-member OKI Board of Directors meets and acts as the policy body, and during the other months an OKI Executive Committee of approximately 30 members has been named to act as the policy body.)

After an update or amendment has been acted upon by OKI, it is provided to the State of Indiana for certification before the State sends it to U.S. EPA for federal review and approval. When local jurisdictions request plan amendments from OKI, the following specific steps are involved:

Steps in Amending the “208” Plan

- 1) The jurisdiction notifies OKI of its desire for a plan amendment.
- 2) The jurisdiction meets with appropriate OKI staff for a pre-submittal conference to review the amendment process steps, documentation required, and background material.
- 3) The jurisdiction prepares the request letter and documentation required for the plan amendment and submits it to OKI.
- 4) OKI reviews the documentation and requests additional documentation as appropriate.
- 5) OKI makes arrangements for public notification and opportunity for input on the proposed amendment in keeping with federal and state requirements.
- 6) OKI prepares a staff report and recommendation and summarizes the results of public input for consideration by the OKI Executive Committee (which meets monthly) or Board of Directors (which meets quarterly).
- 7) The OKI Executive Committee or Board of Directors considers the amendment, staff recommendation and public input and takes action.
- 8) If approved, the amendment is forwarded to the appropriate state agency for certification by the governor.

Depending on the complexity of the amendment request and supporting documentation, the meeting schedule of the OKI Executive Committee and Board of Directors, and the level of interest from the public and potentially affected parties, it may take OKI from 3 to 6 months to go through the amendment process, assuming no additional information is requested of the applicant. The information required for evaluating plan amendment requests is tailored to the scope of the specific request, but typically includes some combination of these items:

Information Checklist for “208” Amendment Requests

- 1) A. letter requesting the plan amendment, explaining the reason for the request
- 2) Appropriate map(s), preferably in digital form, showing:
 - the boundaries of the current sanitary sewer system and all existing wastewater treatment plants (including package plants)
 - the location of trunk lines and lift stations
 - the location of any system overflow points
 - the current Facility Planning Area (FPA) boundary
 - the proposed FPA boundary, if applicable
 - unsewered areas within existing and proposed FPAs
 - appropriate jurisdictional boundaries
- 3) Existing service population and twenty-year population projections for the (existing, and if applicable, proposed) FPA based on best available census data

- 4) Description of existing and proposed wastewater treatment options for the FPA including options for the unsewered/undeveloped areas within the FPA, e.g., on-site septic systems, package plants, etc.
- 5) Table(s) showing the plant permit number under the National Pollutant Discharge Elimination System (NPDES), current plant permit limits, current demand, existing plant design capacities, and projected plant capacities
- 6) Discussion of how the proposed wastewater treatment options will meet the needs of the proposed population
- 7) Discussion of how the proposed wastewater treatment options will be protective of water resources, including streams, rivers, lakes, wetlands, and groundwater
- 8) Summary of the entity's financial and managerial capability to undertake the proposed project and its projected financial impact on ratepayers
- 9) Documentation of any public participation involved in proposing the wastewater treatment improvements
- 10) Acknowledgements from other jurisdictions located within or adjacent to the existing FPA that they have been notified of the proposal, and copies of any relevant service agreements

Criteria and Policy Considerations

OKI considers some general criteria when evaluating plan amendment requests, while also considering circumstances unique to each individual request. Because circumstances vary from request to request, the following general criteria are not listed in order of priority nor are they weighted.

- 1) Mitigation of public health hazards (such as those due to failing onsite systems)
- 2) Need for water quality maintenance or improvement and timeliness of service
- 3) Adequate wastewater treatment capacity for existing and projected needs
- 4) Opportunity for treatment on a watershed or sub-watershed basis (e.g. enables gravity sewers and eliminates lift stations)
- 5) Existing development patterns and population densities suitable for centralized wastewater treatment systems
- 6) Local comprehensive plans indicating growth areas for which new infrastructure will be needed, areas where slow growth or no growth is expected, and existing and projected population densities

- 7) Financial and institutional capability of management entity or entities
- 8) Impact on rate payers
- 9) Agreement or neutrality among jurisdictions affected and potentially affected
- 10) Degree and content of public participation

When approached with a plan amendment request, OKI encourages the applicant to consult with potentially affected jurisdictions to arrive at consensus before pursuing the amendment. OKI cannot compel potentially affected jurisdictions to agree but will attempt to facilitate communication. In the absence of agreement among the jurisdictions potentially affected by a proposed plan amendment, the OKI Board of Directors or Executive Committee will determine whether additional information or communication is needed before they take action on the amendment request.

For some circumstances involving designated management agencies (DMAs) and service agreements OKI does not require a “208” plan amendment. For example, when a DMA for wastewater collection wants to expand its sewer service area within an FPA where another DMA is responsible for wastewater treatment, and the treatment DMA is agreeable and has adequate capacity, no plan amendment is required if a service agreement is reached between the DMAs. If neighboring DMAs enter into a sanitary sewer service agreement that crosses an FPA boundary between them, they have the option of requesting a plan amendment to change the FPA boundary that is crossed, but OKI does not require it.

OKI also does not require a “208” plan amendment when wastewater agencies that have been designated to manage collection and/or treatment within the limits of their corporate boundaries experience a change in those boundaries; such a change is made administratively by OKI when the DMAs provide documentation of their updated corporate boundaries.

Future Planning Activities

In response to requests from IDEM, local jurisdictions and developers, OKI will continue to perform consistency reviews to ensure that proposed wastewater facilities are not substantially inconsistent with the “208” plan. OKI will also continue to evaluate plan amendment requests from local jurisdictions and provide related information to local governments and the public before taking the request and the input received to OKI’s Board of Directors or Executive Committee for action. Based on available funding, OKI will determine scopes of work for future “208” plan updating in consultation with funding agencies and local jurisdictions in Dearborn County.