Chapter XIII

UTILITIES AND COMMUNITY FACILITIES ELEMENT

INTRODUCTION

The future development and redevelopment of lands in Racine County, as identified in the land use element of the comprehensive plan, may have a significant impact on utilities and community facilities and services. The utilities and community facilities element seeks to evaluate, to the extent possible, the future demand for utilities and community facilities in the County. Together, utilities and community facilities allow the County to function and enhance a community's environmental, economic, and social qualities of life.

The utilities and community facilities element is one of the nine elements of a comprehensive plan required by Section 66.1001 of the *Wisconsin Statutes*. Section 66.1001(2)(d) of the *Statutes* requires this element to compile goals, objectives, policies, and programs to guide future development of utilities and community facilities within Racine County. The *Statutes* also require an inventory of existing utilities and community facilities, an approximate timetable that projects the need to expand, rehabilitate, or replace existing utilities and community facilities and community facilities. A goal, objective, policy, and program has been developed for each of the following utilities and community facilities:

- Sanitary sewer service
- Water supply
- Stormwater management
- Onsite wastewater treatment technology
- Solid waste disposal
- Recycling facilities
- Electric and natural gas
- Alternative energy
- Telecommunications facilities
- Fire and rescue
- Police

- Emergency management
- Government facilities
- Parks
- Trails/bikeways
- Libraries
- Schools
- Healthcare facilities
- Community assisted living facilities
- Child care facilities
- Cemeteries
- In addition, the following comprehensive planning goals related to the utilities and community facilities element are set forth in Section 16.965 of the *Statutes* and were addressed as part of the planning process:¹

¹Chapter VIII lists all 14 of the comprehensive planning goals included in Section 16.965 of the Statutes.

- Promotion of the redevelopment of land with existing infrastructure and public services and the maintenance and rehabilitation of existing residential, commercial, and industrial structures.
- Encouragement of neighborhood design that supports a range of transportation choices.
- Protection of natural areas, including wetlands, wildlife habitats, lakes, woodlands, open space, and groundwater resources.
- Encouragement of land uses, densities, and regulations that promote efficient development patterns and relatively low municipal, State government, and utility costs.
- Encouragement of coordination and cooperation among nearby units of government.
- Building of community identity by revitalizing main streets and enforcing design standards.
- Provision of adequate infrastructure and public services and an adequate supply of developable land to meet existing and future market demand for residential, commercial, and industrial uses.

Element Format

This chapter is organized into the following four sections:

- Background Information on Utilities and Community Facilities in Racine County;
- Public Input—Utilities and Community Facilities Issues;
- Projections—Utilities and Community Facilities:
 - Future Population Growth and Change;
 - Future Utilities and Community Facilities and Services Demand; and
- Utilities and Community Facilities Goals, Objectives, Policies, and Programs.

BACKGROUND INFORMATION ON UTILITIES AND COMMUNITY FACILITIES IN RACINE COUNTY

Existing Conditions

This section presents a summary of key information that was considered in developing the utilities and community facilities element. A detailed description of existing utilities and community facilities serving residents within Racine County is presented in Chapter V of this report.² The following is a three-part summary of existing utilities and community facilities and services in Racine County.

Government Agencies and Other Service Providers

All of the utilities and community facilities required to be addressed in this element by the *Statutes* are either affected, regulated, or directly provided in some manner by a Federal or State government agency, school district, utility, such as WE Energies, or a private service provider, such as a private hospital. It is paramount that Racine County and local governments work with these types of entities to implement applicable regulations, plans, and programs, and to ensure adequate land is available for the provision of essential and desirable utilities and community facilities, such as transmission lines, telecommunications facilities, schools, healthcare facilities, and child care facilities. The following is a brief summary of the various public and private utility, facility, and service providers in Racine County.

• **Racine County** provides services or administers ordinances associated with environmental quality, including regulation of shoreland-wetlands and floodplains, stormwater management, and farm and watershed conservation planning; environmental health and sanitation, such as the regulation of private

²Information regarding parks, bikeways and trails is inventoried in Chapters III and IV, respectively, of this report, and presented later this chapter.

onsite waste treatment systems (POWTS) and hazardous waste collection and disposal; parks and recreational facilities; healthcare services and facilities; safety and emergency management services; and other general government services. Transportation facilities and services, which are also provided by the County, are addressed in the Transportation Element (Chapter XII).

- *Local governments* (cities, towns, and villages) typically provide services or administer ordinances associated with stormwater management, solid waste collection and disposal, recycling facilities, parks, fire protection, and rescue services. Cities and villages, and some of the towns, also provide sewage collection, treatment, and disposal, water supply, library, and police protection services. Local land use regulations also affect the location of telecommunications facilities, power plants, cemeteries, healthcare facilities, child care facilities, and schools.
- Special purpose districts provide a range of services, including services related to education, water resources management, and provision of public utility services. School districts are responsible for planning, constructing, and operating school facilities and for providing educational services. Public inland lake protection and rehabilitation districts or lake management districts, lake sanitary districts, and some utility districts provide stormwater and wastewater conveyance and treatment services to lakeside communities, while town sanitary districts and utility districts can provide both water supply as well as sanitation services, depending upon their specific mandates. Sanitary districts are empowered to manage both solid and liquid wastes.
- *The private sector* typically provides electric power, natural gas, communications services, healthcare, and child care services, although there are some cases where these services are provided by the County or a local government.

Utilities Background Information

- Areas served by public sanitary sewer service in Racine County in 2000 encompassed a total area of about 51.6 square miles, or 15 percent of the County, with an estimated resident population of 169,900 persons, or 90 percent of the County population. These areas include most of the developed portions of the County's cities and villages, along with certain lake area communities and other urban enclaves in towns (see Map V-1 in Chapter V). Public sewage treatment plant capacities and flow rates are listed in Table V-1 in Chapter V.
- Under State Administrative rules, sanitary sewers may be extended only to areas located within planned sanitary sewer service areas adopted as part of the regional water quality management plan. Sewer service area plans are prepared through a planning process involving the concerned local units of government including the governmental unit responsible for the sewage treatment plant, the Regional Planning Commission, and the Wisconsin Department of Natural Resources (WDNR). Sewer service area plans may be amended in response to changing local conditions as well as in response to new population projections, subject to the provisions of Chapter NR 121 of the *Wisconsin Administrative Code*. Currently adopted planned sanitary sewer service areas in Racine County are shown on Map V-1 in Chapter V.
- Many of the developed, urbanized areas of Racine County are served by public sanitary and utility districts. In general, sanitary and utility districts may include sewage disposal, water supply, stormwater management, and solid waste removal. As shown on Map V-2 and in Table V-2 in Chapter V, sanitary and utility districts encompassed a total of 77.5 square miles, or about 23 percent of the County planning area in 2007.
- Residential development and other urban development not served by public sanitary sewerage systems rely on private onsite wastewater treatment systems (POWTS), including conventional systems, in-ground pressure systems, mound systems, holding tank systems, and others. It is estimated that about 10 percent of the population in Racine County was served by POWTS in 2000.
- Within Racine County, cities and villages rely on curb and gutter storm sewer systems or a combination of curb and gutter systems and roadside ditches, natural swales and culverts, while towns rely primarily

on roadside swale and culvert systems to convey stormwater runoff. Stormwater storage and infiltration facilities, as well as innovative and low-impact design approaches, are increasingly important components of the stormwater management system, regardless of whether curbs and gutters or roadside swales are used to convey stormwater.

- In 2005, 12 municipal water supply systems provided water supply to about 38 square miles, or about 11 percent of the total area of Racine County, with an estimated resident population of about 147,000 persons, or about 76 percent of the County population. Eight of the municipal water supply systems in the County rely on Lake Michigan as the source of supply, and the remainder relies on groundwater as the source of supply. Areas served by public water supply systems in 2005 are shown on Map V-3 in Chapter V, and selected characteristics of each system are presented in Table V-3 in Chapter V.
- In 2005, there were also 12 existing privately-owned, self-supplied residential water systems (Other-Than Municipal) operating in Racine County (see Map V-4 and Table V-4 in Chapter V). These systems rely on groundwater and primarily serve residential development, such as subdivisions, apartment or condominium developments, and mobile home parks. These systems served a total of about 1,600 persons in Racine County in 2005, or less than 1 percent of the County population.³
- There are also numerous other privately owned, self-supplied water supply systems operating in Racine County. These systems serve industrial, commercial, institutional and recreational facilities, agricultural facilities, and other irrigation facilities.
- In addition to water supplied through the aforementioned systems, an estimated 46,300 persons, or about 24 percent of the total County population, were served by private domestic wells in 2005.
- All of Racine County is within the WE Energies electric power and natural gas service area. The major transmission facilities and natural gas pipelines within Racine County are shown on Map V-5 in Chapter V.
- In Racine County, telecommunication networks provide the infrastructure for information exchange. Currently, the first generation of broadband services in the form of telephone company DSL (digital subscriber line) and cable company hybrid fiber-coaxial cable (cable modem) are available in most urban and rural areas of the County (see Map V-6 in Chapter V). Fixed wireless broadband is also available in some areas of the County. There are over 75 antenna sites that accommodate cellular/PCS antennas for mobile wireless service, and two antenna sites that provide fixed wireless service in the County (see Map V-6 in Chapter V).
- In 2007, there were two active, privately-owned landfills in Racine County. Map V-7 and Table V-5 in Chapter V indicate the locations of landfills, solid waste disposal facilities, recycling facilities, and composting facilities, as well as contracts with private haulers for residential pickup of solid waste and recyclables.
- In Racine County, there are eight public inland lake management districts and town sanitary districts that have lake district powers.⁴ Lake management districts are governmental bodies that have specifically defined boundaries. However, lake districts are special purpose governmental bodies with elected leaders as well as an adopted annual budget, but limited powers outside of their lake management function.

³Other-Than Municipal (private) self-supplied community water supply systems are not owned by a city, village, town, or other public entity as identified by the WDNR. As classified by the WDNR, a community water system is essentially one that regularly serves at least 25 year-round residents.

⁴*Information regarding lake districts is inventoried in Chapter III*, Inventory of Agricultural, Natural, and Cultural Resources, *of this report*.

Community Facilities Background Information

- In 2007, there were six State and seven County offices, 17 local municipal halls, and 11 U.S. post offices in Racine County (see Map V-8 and Table V-7 in Chapter V). The Racine County Ives Grove Office Complex houses many County Department offices, such as:
 - Aging and Disability Resource Center;
 - County Clerk;
 - Finance;
 - Human Resources;
 - Human Services;
 - Land Information and Planning and Development;
 - Public Works;
 - Register of Deeds; and
 - University of Wisconsin-Extension
- There were 10 municipal police department facilities and two Racine County Sheriff's Department facilities in Racine County in 2007 (see Map V-9 in Chapter V). Table V-8 in Chapter V lists the number of full- and part-time officers employed by each municipal police department and Sheriff's Department in 2007.
- Fire protection service in the County was provided by 14 different fire departments in 2007. The fire station service areas for the 14 departments, along with the location of fire stations in the County, are shown on Map V-10 in Chapter V.
- Within Racine County, 11 fire departments provide both emergency medical services (EMS) and fire protection services. In 2007, there were four private ambulance companies that respond to emergency medical calls. Map V-11 and Table V-9 in Chapter V indicate the EMS zones in the County.
- There is no consolidated County Dispatch Center to handle requests for police, fire, and rescue services. Nonetheless, the County Communications Center handles the telephone dispatch requests for a large area of the County.
- In 2007, there were five public libraries in Racine County, each operated by a city or village (see Map V-8 in Chapter V). These libraries may be used by all Racine County residents with valid library cards.
- Most of Racine County is served by K-12 public school districts (see Map V-12 and Table V-10 in Chapter V). In addition to those public schools, Map V-13 and Table V-11 in Chapter V identifies private schools in the County in 2007, as well as three technical college facilities, all operated by Gateway Technical College.
- In 2007, there were 280 park and open space sites owned by Racine County, the State of Wisconsin, cities, villages, towns, and school districts in Racine County encompassing a total of about 9,100 acres (see Maps III-19 and III-20 and Tables III-17, III-18, and III-19 in Chapter III). In addition to the publicly owned parks and open space sites, there were 108 privately owned outdoor recreation and open space sites, encompassing a total of about 2,630 acres, in the County (see Map III-21 and Table III-20 in Chapter III). This includes privately owned golf courses, hunting clubs, boat access sites, campgrounds, resorts, and sites held for open space preservation purposes by private nonprofit conservation organizations. Furthermore, there were eight conservation easements held on privately-owned land in the County, encompassing 73 acres in 2007 (see Map III-22 and Table III-21 in Chapter III).
- Bicycle and pedestrian facilities accommodation is provided on surface arterial streets and highways and off-street multi-use paths by various levels and units of government (see Map IV-6 in Chapter IV).

- In addition to the aforementioned public community services and facilities, many community facilities and services are provided by the private sector in Racine County. In 2007, these included the following:
 - Three hospitals and 23 health clinic facilities (see Map V-14 and Table V-12 in Chapter V);
 - 141 licensed child care centers (see Map V-15 and Table V-13 in Chapter V);
 - Seven nursing homes (see Map V-16 and Table V-14 in Chapter V);
 - 41 assisted living facilities that offer various levels of care and supportive services for people that do
 not require continuous access to skilled nursing care (see Map V-16 and Table V-15 in Chapter V);
 and
 - Two facilities serving people with developmental disabilities.
- In 2007, there were 40 known cemeteries in Racine County (see Map V-17 and Table V-16 in Chapter V).

PUBLIC INPUT-UTILITIES AND COMMUNITY FACILITIES ISSUES

The plan should address key issues and opportunities based upon the utilities and community facilities-related information and public input gathered during the comprehensive planning process. The countywide public opinion survey, and strengths, weaknesses, opportunities, and threats (SWOT) analyses—both completed in 2007—resulted in the identification of a number of utilities and community facilities-related issues to be addressed in this element. These issues include:

- The plan should strive to preserve rural and small town character.
- The plan should strive to protect surface water and groundwater quality and quantity.
- The plan should strive to study the costs and impacts new growth and development have on utilities and community facilities.
- The plan should seek to balance the need to expand water and sewer services, while more compact development design and infill development should be considered to utilize land in existing urban service areas of the County.
- The plan should strive to provide recreational opportunities and preserve open space land.
- The plan should seek to balance the preservation of open space lands with property rights.
- The plan should seek to address the development and implementation of countywide land use patterns and water control plans to minimize the adverse effects of flooding.
- The plan should seek additional resources (public-private partnerships) for both utilities and community facilities planning.
- The plan should seek to improve the level of public services in Racine County, including working with utility companies to determine future demand.
- The plan should strive to maintain the environmental health of the County.
- The plan should seek to provide access to health care and medical care facilities, expand the health care industry when considering future economic development, and address the increasing costs of health care.
- The plan should seek to redevelop downtown areas and to create new funding sources for redevelopment projects.
- The plan should strive to support the development of alternative energy sources, such as wind and solar power. The potential demand for bio-fuel and bio-fuel technology could also provide economic opportunities.
- The plan should seek to expand technology (such as countywide wireless high speed internet) that may also reduce energy costs by providing residents and businesses with telecommuting capabilities.

- The plan should strive to preserve cultural resources and historic sites and districts.
- The plan should strive to maintain good schools and to ensure that the needs of all current and future residents are met through good fire/rescue, police, and emergency services.
- The plan should seek to develop and enhance partnerships between schools, economic development organizations, and workforce development agencies.
- The plan should seek to find ways to share municipal services such as libraries, recycling, and police services with neighboring communities.
- The plan should strive to increase activities for seniors and children.

PROJECTIONS – UTILITIES AND COMMUNITY FACILITIES

Section 66.1001(2)(d) of the *Statutes* requires a projection of the demand for future utilities and community facilities in the County and an approximate timetable of the expansion, rehabilitation, and replacement of existing facilities and the construction of new facilities to meet the projected demand. The projected demand and approximate timeline for various utilities and community facilities in the County are based on recommendations set forth by regional plans and the anticipated land use development and transportation patterns set forth in other elements of this report. Many of the utilities and community facilities referenced by the *Statutes* are not services provided by Racine County and may require additional refinement by local governments and other service providers.

Projections: Future Population Growth and Change

Each of the communities participating in the multi-jurisdictional comprehensive plan selected a year 2035 population projection for purposes of the comprehensive plan. Under the multi-jurisdictional comprehensive plan, the population of Racine County is projected to grow by about 35,500 persons between 2000 and 2035, with considerable variation in projected growth rates among the different civil divisions (see Table VII-8 in Chapter VII). Each of the participating communities will have to ensure that their own facilities and their arrangements for services, such as fire and emergency medical services, are capable of meeting future needs. County and local planning for community facilities and utilities should take into account the population projection—which in large part is a function of the strength of the regional and local economy—plans for community facilities and services should be sufficiently flexible to accommodate future population levels that are somewhat lower or higher than projected.

Projections: Utilities

Sanitary Sewer Service

Facilities Planning Needs Evaluation

Owners and operators of public sewerage systems within the Region periodically prepare facilities plans to evaluate the adequacy of their systems, including wastewater treatment plants, for a 20-year planning period. Those plans are reviewed by the Regional Planning Commission for conformance with the regional water quality management plan.⁵ It is recommended that communities continue to assess their wastewater conveyance and

⁵The regional water quality management plan for Southeastern Wisconsin has been updated several times since the original plan was issued in 1979, including a 2007 update for the greater Milwaukee watersheds (Kinnickinnic, Menomonee, Milwaukee, and Root River watersheds; the Oak Creek watershed; and the Lake Michigan Direct Drainage Area from the City of Port Washington to the City of Racine). The plan update design year is 2020. Within Racine County, the regional water quality management plan update study area includes only the area served by the Yorkville Sewer Utility District No. 1 wastewater treatment plant and some areas served by the City of Racine and the Village of Union Grove wastewater treatment plants.

treatment systems so as to provide the capacity necessary to allow for future development as it occurs while adhering to the conditions of their operating permits. This comprehensive plan evaluates facilities planning needs based on a criterion that facilities planning should be initiated when the average daily flow to a wastewater treatment plant reaches 80 percent of the plan design capacity.

An evaluation of estimated future plant capacity needs is set forth in Table XIII-1 and is described below:

- By 2035, it is estimated that sewage flows to the City of Burlington and environs will have approximately equaled the existing plant capacity. The City prepared a facilities plan in 2005 that would increase average annual plant capacity to 4.82 million gallons per day (mgd) by 2027. That capacity is more than adequate to accommodate the estimated average annual year 2035 flow rate set forth in Table XIII-1.⁶ Thus, if the treatment capacity of the Burlington plant is expanded as called for under the facilities plan, additional facilities planning may not be required until around 2035, when the average annual flow rate to the plant is estimated to be about 75 percent of the upgraded plant capacity.
- Sewage flows to the City of Racine and environs are projected to be well below the 80 percent threshold in 2035. However, the Village of Caledonia recently completed a study to determine the most costeffective way to provide sanitary sewer service to portions of the Village that are anticipated to be developed by the year 2035.⁷ The study also involved the City of Racine, the Villages of Mt. Pleasant and Sturtevant, and the Towns of Raymond and Yorkville. Wastewater from the City of Racine and the Villages of Caledonia, Mt. Pleasant, and Sturtevant is currently treated at the plant operated by the Racine Water and Wastewater Utility. Wastewater flows from the Town of Yorkville sewer service area are treated at the plant operated by Town of Yorkville Sanitary District No. 1. Pursuant to the cost-effectiveness analysis, a sewer service area amendment was adopted that expands the boundaries of the sewer service area for the City of Racine and environs to include additional areas in the Villages of Caledonia and Mt. Pleasant. The 2035 population projections developed under that planning effort are considerably greater than those under the recommended regional land use plan. Thus, at some time following adoption of the sewer service area amendments for Racine and environs, and prior to 2035, it is recommended that detailed facilities planning be undertaken to establish what new conveyance, pumping, storage, and wastewater treatment facilities would be needed to provide service.
- Sewage flows to the Eagle Lake Sewer Utility District wastewater treatment plant are currently close to the 80 percent threshold, and by 2035 it is projected that the threshold would be exceeded. Thus, it is recommended that the Utility District undertake preparation of a facilities plan in the near future.
- Sewage flows to the Town of Norway Sanitary District No. 1 wastewater treatment plant would not be expected to exceed the 80 percent threshold by 2035, thus, it is not anticipated that facilities planning would be required unless necessary to address any needs for replacement of equipment and/or facilities that may be identified by the Sanitary District.

⁶The population information used to develop the flow rates in Table XIII-1 was based on the recommended 2035 regional land use plan population projections under the intermediate growth scenario. In evaluating population projections for conformance with the regional water quality management plan, consideration is given to whether the facilities plan population projections fall within the range between the recommended population level and the high-growth level as set forth in the regional land use plan. Thus, facilities plan flow projections may in some cases exceed those set forth in Table XIII-1.

⁷This planning effort was conducted by Earth Tech, Inc., for the Village of Caledonia in cooperation with the Racine Water and Wastewater Utility, the Villages of Mt. Pleasant and Sturtevant, the Towns of Raymond and Yorkville, and SEWRPC. The study is documented in the report entitled Village of Caledonia IH 94 Sewer Service Area Trunk Sewer Analysis, February 2007. The study is a refinement and update of a portion of the plan set forth in the 1992 Alvord, Burdick & Howson report entitled, A Coordinated Sanitary Sewer and Water Supply System Plan for the Greater Racine Area.

- Sewage flows to the Town of Yorkville Sanitary District No. 1 wastewater treatment plant would not be expected to exceed the 80 percent threshold by 2035. The Town of Yorkville Sanitary District No. 1 service area was not included in the refined Racine sewer service area. However, consistent with SEWRPC Community Assistance Planning Report No. 147 (2nd Edition), *Sanitary Sewer Service Area for the City of Racine and Environs*, which was adopted by the Regional Planning Commission on June 18, 2003, and with the 2007 SEWRPC regional water quality management plan update for the greater Milwaukee watersheds, it is recommended that the entire Yorkville system be connected to the sewerage system tributary to the Racine wastewater treatment plant. As a result, the Yorkville plant would be abandoned when it reaches the end of its useful life. The information set forth in Table XIII-1 of this report indicates that the Yorkville plant would still have adequate treatment capacity in 2035. Therefore, unless the physical condition of the plant dictates the need for significant upgrades prior to 2035—in-which case connection to the Racine system should be considered—abandonment of the Yorkville plant may not occur until after the year 2035.
- Sewage flows to the Village of Union Grove wastewater treatment plant would not be expected to exceed the 80 percent threshold by 2035; thus, it is not anticipated that facilities planning would be required unless necessary to address any needs for replacement of equipment and/or facilities that may be identified by the Village.
- Sewage flows to the Western Racine County Sewerage District wastewater treatment plant would not be expected to exceed the 80 percent threshold by 2035; thus, it is not anticipated that facilities planning would be required unless necessary to address any needs for replacement of equipment and/or facilities that may be identified by the District.

Sewer Service Areas

With the exception of the Town of Yorkville Sanitary District No. 1 service area, all sewer service areas within Racine County have been refined.⁸ It is recommended that the Yorkville service area be refined through a joint effort involving the municipality, SEWRPC, the County, and the WDNR. Local communities with treatment facilities should continue to work with SEWRPC to update their adopted sewer service area plans to accommodate new residential, commercial, and industrial growth, in part based on the land use development pattern anticipated in the local comprehensive plan through 2035.

OnSite Wastewater Treatment Technology

As noted in Chapter V, Racine County regulates private onsite wastewater treatment systems (POWTS) for any development in the County that is not served by sanitary sewer. The authority to regulate POWTS comes from the County *Code of Ordinances* and *Wisconsin Administrative Code*. When public sewers have been approved by the WDNR and installed by a sanitary district or a municipality and have become available for connection to an existing development, the existing development should be required to connect to the public sewer and the private sewage system should be disconnected and abandoned. It is the owner's responsibility to insure proper abandonment has occurred on their premises. In the future, the County Ordinance pertaining to POWTS should be updated periodically to allow for advancements in POWTS technology over the comprehensive plan design period in accordance with changes to the *Wisconsin Administrative Code*.

⁸Refined sewer service areas have been delineated through the local sewer service area planning process. As part of this process, the community concerned, assisted by SEWRPC, determines a precise sewer service area boundary consistent with local land use plans and development objectives. Reports documenting the sewer service areas include detailed maps of environmentally significant areas within the sewer service area. Following adoption by the designated management agency for the sewage treatment plant, local sewer service area plans are considered for adoption by the Regional Planning Commission as a formal amendment to the regional water quality management plan. The Commission then forwards the plans to the WDNR for approval.

Unrefined sewer service areas are generalized in nature and are the product of systems level planning.

Stormwater Management

As noted earlier in the chapter, the infrastructure for stormwater conveyance consists mainly of curb and gutter systems for cities and villages, while towns rely primarily on roadside ditches and natural swales and culverts for drainage. Stormwater storage and infiltration facilities are increasingly important components of stormwater management systems, regardless of the type of system in use. As indicated on Map XIII-1 and in Table XIII-2, most of the communities have adopted stormwater management and construction site erosion control ordinances. Although often designed on a subdivision-by-subdivision or project-by-project basis, stormwater management facilities ideally should be planned as an integrated system of stormwater and floodland management facilities for an entire watershed, or for an entire community with consideration given to the watershed(s) in which the community is located. Continued administration of the stormwater management and erosion control regulations will help control stormwater runoff and minimize sediment and other pollutants entering the surface water system. The County and local communities should ensure these ordinances are enforced through the comprehensive plan design year 2035.

Pollutant Discharge Permit System

The Federal Clean Water Act establishes the National Pollutant Discharge Elimination System (NPDES). Under this system the U.S. Environmental Protection Agency (USEPA) Administrator or a state, upon approval of the USEPA Administrator, may issue permits for the discharge of any pollutant or combination of pollutants upon the condition that the discharge will meet all applicable effluent limitations or upon such additional conditions as are necessary to carry out the provision of the Act. All such permits must contain conditions to assure compliance with all of the requirements of the Act, including conditions relating to data collection and reporting. In essence, the Act stipulates that all discharges to navigable waters must obtain a Federal permit or, where a state is authorized to issue permits, a state permit. The intent of the permit system is to include in the permit, where appropriate, a schedule of compliance which will set forth the dates by which various stages of the requirements imposed in the permit shall be achieved.

The USEPA has delegated the administration of the stormwater discharge permitting program in the State of Wisconsin to the WDNR. In the 1990s, Wisconsin developed the Wisconsin Pollutant Discharge Elimination System (WPDES) Stormwater Discharge Permit Phase I Program, which is regulated under the authority of Chapter NR 216 of the *Wisconsin Administrative Code*. The Phase I program applies to the specified industries and to municipalities with populations of 100,000 or more. The stormwater discharge permitting program is administered by the USEPA and calls for the issuance of NPDES permits. Pollution from stormwater runoff is commonly characterized as diffuse, or nonpoint source, pollution. The Clean Water Act specifically exempts such pollution sources from the requirements of the NPDES program. However, because most urban stormwater runoff is discharged to receiving streams through storm sewers or other facilities which concentrate flows, there have been Federal amendments that designate urban stormwater discharge permitting program requires: 1) control of industrial discharges utilizing the best available technology economically achievable, 2) control of construction site discharges using best management practices, and 3) municipal system controls to reduce the discharge of pollutants to the maximum extent practicable.

In October of 1999, the USEPA expanded the coverage of the stormwater discharge permitting regulations when it issued Phase II stormwater rules that apply to urbanized areas with populations greater than 10,000 persons and to construction sites that disturb from one to five acres. In 2006, Wisconsin approved its WPDES Phase II Program. The Phase II program requires that regulated municipalities reduce nonpoint source pollution to the "maximum extent practicable" through implementations of a set of minimum control measures, including:

- Public education and outreach;
- Public involvement and participation;
- Illicit discharge detection and limitation;
- Construction site stormwater runoff control;
- Post-construction stormwater management for new development and redevelopment; and
- Pollution prevention and good housekeeping for municipal operations.

Ultimately, every separate municipal stormwater management system will be required to obtain a permit, regardless of the size of the municipality.

Water Supply

Similar to sewer service area planning in Southeastern Wisconsin, the regional water supply planning program recognizes the close relationship between land use and environmental planning. Although land use planning decisions are subject to County and local planning and control, the aggregate effects of the spatial distribution of land use activities are regional in scope and can directly impact the need for and capacity of water supply systems. For the purposes of the comprehensive plan, the future demands for water supply are determined primarily by the size and spatial distribution of the future population, land use, and economic activity levels in Racine County, and by the level of water use and water conservation expected to be associated with the economic activity, demographics, and land use patterns and urban service areas. The following is a summary of the preliminary recommendations of the regional water supply plan.⁹

Regional Water Supply Plan – Water Supply Sources and Systems

In Racine County, the source of municipally supplied water depends in large part, upon the location of the use related to the subcontinental divide. The preliminary draft regional water supply plan recommends the use of a Lake Michigan supply to municipal service communities east of the subcontinental divide. Under the preliminary regional water supply plan, one utility area in Racine County, the Town of Yorkville Utility District No. 1, located east of the subcontinental divide, is recommended to change from groundwater to a Lake Michigan supply over the planning period (to 2035). Racine County water utilities west of the divide would continue to utilize groundwater as a long term source of supply. The Village of Union Grove, which straddles the divide, would continue to rely on groundwater supplies. This plan is being proposed as part of a regional strategy to partially restore a declining water table in the deep aquifer to minimize the loss of baseflow in surface waters, and to reduce chloride discharges to surface waters.

In 2005, there were 12 municipal water supply utility systems operating in Racine County (see Map XIII-2). By the year 2035, each of the groundwater- and surface water-supplied municipal utility water service areas in the County is projected to experience an increase in water demand. In addition to the 12 existing municipal water utilities, it is anticipated that seven additional groundwater municipal water supply systems will be developed by 2035 to serve the areas which are currently largely developed in the Towns of Burlington, Dover, Norway, Rochester, and Waterford, and the Village of Rochester, as well a currently undeveloped area in the Village of Caledonia where development is anticipated.¹⁰ Overall, groundwater pumping in the County would increase from about 13 million gallons per day (mgd) in 2005 to about 16 mgd in 2035. Lake Michigan supply use would increase from about 27 mgd in 2005 to about 31 mgd in 2035. Expanding an existing utility or converting to a new municipal water supply system in existing developed areas, which rely on individual wells, is envisioned to occur only if local conditions and initiatives warrant. Absent such local conditions, residents and businesses of these areas would remain on individual wells indefinitely.

⁹Documented in preliminary SEWRPC Planning Report No. 52, A Regional Water Supply Plan for Southeastern Wisconsin: 2035. A preliminary draft of that plan includes recommendations regarding long-range potential of extending water supply service areas and new sources of water supply for public water utilities and districts; potentially needed major water supply infrastructure; protection of important groundwater recharge areas; water conservation measures; stormwater management measures that would help to maintain the groundwater recharge in areas of new development; and processes to be followed to minimize impacts of new high-capacity wells on nearby wells and surface waters. Public informational meetings on the preliminary plan are scheduled for the winter of 2008-2009. A final water supply system plan is expected to be completed in 2010.

¹⁰As of 2007, there has been a consolidation of utilities within the Village of Caledonia and the Village of Sturtevant Water Utility has been purchased by the City of Racine. As a result, there were nine municipal water supply utilities in existence. Thus, there are expected to be 16 municipal water supply utilities in 2035.

In 2035, it is expected that two of the privately owned, self-supplied, water systems operating in Racine County which provide water supply services to primarily residential land uses, would remain. These systems serve mobile home parks located beyond the municipal water supply service areas. There are also a number of self-supplied industrial, commercial, institutional, recreational, agricultural, and other irrigation water supply systems in the County (see Map XIII-3). Most of the self-supplied systems (both low- and high-capacity) located within the planned municipal service areas, which existed in 2005, are expected to be connected to expanded municipal systems and no known new systems are currently planned. The remaining systems that utilize groundwater as a source of supply are expected to be maintained as self-supplied systems.

Furthermore, as of the year 2035, there are expected to be about 17,400 persons, or about 5 percent of the total resident year 2035 population of Racine County, served by private domestic wells. Assuming an average use of 65 gallons per capita per day, these private domestic wells would withdraw about 1.1 mgd from the shallow groundwater aquifer. It is expected that the households served by private domestic wells will also be served by onsite sewage disposal systems. Thus, the majority (approximately 90 percent) of the water withdrawn by private wells, or about 1.0 million gallons per day, would be expected to be returned to the groundwater aquifer via onsite sewage disposal systems.

Regional Water Supply Plan – Water Supply Projections

As presented in Table XIII-3, in the year 2000, the resident population served by municipal water utilities in Racine County was about 146,400, or about 78 percent of the total population of the County. Under the preliminary regional water supply plan, by 2035, the total population planned to be served by municipal water utilities is projected to increase by about 49,800 to about 196,200 residents, or approximately 90 percent of the 2035 population.

Under the preliminary regional water supply plan, the area served by municipal water supply systems within Racine County is expected to increase by about 70 percent between 2000 and 2035, from about 37.9 square miles in 2000 to about 64.5 square miles in 2035. About 40 percent of the increase in water service area is due to the anticipated development of the seven new utilities noted above which include areas that are largely developed. Another significant portion of the increase in urban area served is due to the expansion of existing municipal water service areas into developed areas currently served by self-supplied water systems. As noted in Chapter V, in 2005, about 38.3 square miles were served by municipal water supply systems within Racine County. Thus, the expected increase in area served between 2005 and 2035 is about 26.1 square miles, or an increase of about 68 percent.¹¹ Table XIII-3 also provides forecast changes in urban area envisioned under the preliminary regional water supply plan for the 16 existing and planned municipal water service areas in Racine County for the plan design year 2035.

Under the preliminary regional water supply plan, estimates were made of the future water use demands and pumpage for each municipal water utility based on the changes in population and land use envisioned under the regional land use plan within each of the service areas, as shown in Table XIII-4. The total water use demand on an average daily basis for the 16 existing and planned municipal water utilities in Racine County is estimated to increase from 23.3 mgd in 2000 to 29.0 mgd in 2035. The corresponding pumpage is estimated to increase from 28.6 mgd to 36.8 mgd on an average daily basis, and from 46.0 mgd to 59.7 mgd on a maximum daily basis. These pumpage estimates include water use based on sales, water used for production and system maintenance, and unaccounted-for water (e.g. pipe leakage in the utility system). Further, about 80 percent of the projected increase in water use between 2000 and 2035 for municipal water supply systems in the County is due to existing

¹¹In total, the amount of urban land existing in 2000 included within the expansion or new municipal water service areas in Racine County comprises about 22.6 square miles, or about 85 percent of the increased service area. Thus, the amount of new urban land envisioned to be developed and served by municipal water systems between 2000 and 2035 is about 4.0 square miles, an increase of about 6.6 percent over the 60.5 square miles of urban land existing in 2000 within the planned 2035 municipal water service area

development that is not currently served, but is within the planned 2035 service areas shown on Map XIII-2. This portion of the increase in municipal water supply system water use represents a change from self-supplied system water use to municipally supplied water use.

The Racine Water and Wastewater Utility provides water to multiple utilities, including the Village of Sturtevant Water and Sewer Utility, the Village of Wind Point Municipal Water Utility, and portions of the Village of Caledonia East Utility and West Utility Districts. The Racine Water and Wastewater Utility also provided water to the Villages of Elmwood Park and North Bay. Summary data on population and area served, water use, and pumpage envisioned for the Racine Water and Wastewater Utility under the preliminary regional water supply plan is set forth in Table XIII-5.

The principal features and costs for new, expanded, and upgraded water supply facilities and programs for all municipal water utilities in the County envisioned under the preliminary regional water supply plan through 2035 is shown in Table XIII-6. On average, the annual cost of all new, expanded, and upgraded supply facilities and programs envisioned in the plan for municipal utilities averages \$6 per person per year in Racine County, with a range of about \$1 per person per year in the eastern areas to about \$20 per person per year in the western areas.

Regional Water Supply Plan – Water Supply Conservation

Measures, Groundwater Recharge, and Well Siting Procedures

The level of water conservation to be implemented should be utility-specific based upon the utility infrastructure needs, the characteristics and sustainability of the source of supply, and consistency with the Lake Michigan Compact and Federal and State regulations, compiled as part of the preliminary regional water supply planning program. Table XIII-7 presents a summary of water conservation measures, including estimates of effectiveness and costs, compiled as part of the regional water supply planning program. The level of municipal water conservation, which may be expected to be implemented and achieved, will be unique to each community and water utility and dependent upon the composition of its water users, the level of utility efficiency already being achieved, the adequacy of its water supply infrastructure, and the sustainability of its water supply. On a regional level, the level of water demand reduction which might be expected from water conservation programs utility-wide will vary from 4 to 10 percent in average daily demand and from 6 to 18 percent in maximum daily demand. For all Racine County communities, the recommendations provide for base level or intermediate level water conservation programs providing for from 4 to 8 percent reduction in average daily demand and a 6 to 12 percent reduction in maximum daily demand.

As part of the preliminary regional water supply plan, the recharge areas within southeastern Wisconsin have been identified and ranked low, moderate, high, and very high with regard to the amount of recharge which occurs on each acre of land. Implementation of the 2035 regional land use plan will result in protection of about 80 percent of the area ranked as having high and very high recharge characteristics in the Southeastern Wisconsin region. In Racine County about 73 percent of the high and very high recharge areas are planned for protection based upon the County comprehensive plan.

In order to implement the recommendations, further steps would have to occur regarding siting procedures and cost of municipal facilities and programs. For example, recommended high capacity wells siting procedures would involve more site selection and impact analysis, monitoring, and mitigation steps.

Electric Power and Natural Gas Service

The Racine County planning area is provided with electric power and natural gas service by WE Energies. Electric power and natural gas service is not anticipated to be a constraint to development during the comprehensive plan design period. Because the development of new facilities, such as substations, electric transmission lines, and natural gas pipelines can be difficult to site and costly to build, energy providers are exploring ways to cost effectively:

- Upgrade and increase capacity along existing routes and within existing facilities;
- Increase clean technology options; and
- Minimize impacts on the landscape and other land uses.

One example of reducing costs for new transmission lines is through the sharing of utility corridors or the construction of new utilities in existing or future road rights-of-way, thereby minimizing the amount of the land affected. Another example of reducing utility costs is through the increased use of clean technologies through public and private partnerships. In this regard, assisted by several private grants, a public school in the City of Racine has installed solar panels on its roof not only to meet its own long-term energy efficiency goals, but to sell the electricity generated back to WE Energies.

In general, electric power and natural gas facilities are planned and developed by private utilities and transmission companies, subject to State and local government regulation. Such planning should take into account the projections and land use plan element of this multi-jurisdictional comprehensive plan. The Wisconsin Public Service Commission recommends that community planners and zoning officials consider some of the following as they work with utility companies in planning for the development of new utility facilities:

- In areas where more capacity or service is needed, consider the feasibility of upgrading existing facilities or building new electric transmission lines in existing utility rights-of-way;
- Land use compatibility and land use conflicts (e.g. adjacent to schools); and
- Site selection and land availability for new facilities, such as new electric substation, and demonstration energy-saving projects similar to the solar panel project at a local school.

Alternative Energy and Conservation

Racine County and its communities have a long history of activities intended to protect and enhance the environment, including regulatory approaches, open space acquisition, and other means. Alternative energy sources represent an additional—and increasingly important—consideration in environmental policy-making for the county and its communities.

Racine County and local communities recognize the efficacy of "green" alternative energy in their land use plans and zoning ordinances. Racine County has adopted ordinances to allow for the development of alternative energy sites, such as wind and solar power. At the local level, some communities have developed alternative energy goals in land use plans and associated land use development. As a result, the County is ahead of the curve in realizing that alternative energy is tied to creating green jobs, which will become a competitive advantage for the local and global economy.

At the same time, the State of Wisconsin can provide guidance in alternative energy development. In 2006, Wisconsin adopted Senate Bill 459, representing a major overhaul of its energy policy. In effect, the law requires Wisconsin utilities to directly support energy efficiency programs and invest in renewable energy technologies, as well as provide technical and financial assistance for local governments to determine feasibility, plan, and implement energy efficient projects. In 2008, two economic and energy plans established the groundwork for greater economic and energy independence¹². Essentially, both plans promote affordable, renewable, and diverse energy supply and technologies; target investments of clean energy to rebuild the economy and create new jobs; encourage the public and private sectors, as well as citizens, to audit their energy use; and collectively work together between the public and private sectors and residents to address environmental issues.

Telecommunications Facilities

Telecommunications have become increasingly important in the local, national, and global economies. On the regional level, there has been a telecommunications planning effort to create a better understanding of telecommunications networks and the provision of services, such as cable, wireless and wireline, and broadband systems. The Regional Planning Commission has completed an inventory of telephone and cable services, as well

¹²Clean Energy Wisconsin: A Plan for Energy, Governor Doyle's Plan, *dated spring 2008 and* Renewing America: A Blueprint for Economic Recovery, *Wisconsin Environment Research & Policy Center, dated November 2008.*

as wireless telecommunications providers and antennas providing cell phone service in Racine County, which is included in Chapter V of this report. In October 2007, SEWRPC Planning Report No. 53, *A Regional Broadband Telecommunications Plan for Southeastern Wisconsin* was published, and sets forth the basic principles and objectives that should be met by an advanced broadband telecommunications system. The ultimate goal is to provide fourth generation (4G) broadband data voice and video communications throughout the seven-county Region. Racine County and local governments in the County should work to implement the recommendations set forth through the regional telecommunication planning program to provide adequate telecommunications infrastructure in the Racine County planning area. In particular, the County and local communities should strive to work together on demonstration projects to implement and maintain these systems, such as fixed wireless broadband or WiFi systems. In addition, public and private partnerships should be explored to reduce start up and maintenance costs not only to provide an advanced telecommunications service, but also for installation of the equipment on public sites and on rooftops of public buildings.

Solid Waste Management and Recycling Facilities

Solid Waste Disposal

Most solid waste currently collected in the Racine County planning area is landfilled at two privately-owned sites located in the City of Racine and Village of Caledonia. As of January 2008, there were approximately 2.1 million cubic yards of capacity (initial or original capacity was 5.0 million cubic yards) remaining in the landfill in the City of Racine. The landfill in the Village of Caledonia had approximately 2. 5 million cubic yards of capacity (initial or original capacity was not known) remaining as of January 2008. There are currently no plans for expansion at the existing landfill sites. Racine County and its communities should monitor landfill capacity inside and outside the County in efforts to ensure that future solid waste disposal needs can be met.

Recycling Facilities

As of 2008, each community participating in the Racine County multi-jurisdictional comprehensive planning process administered or offered recycling services for household recyclables. In addition, Goodwill, the Salvation Army, other thrift stores, and various businesses accept cell phones for recycling. As for recycling computers, there may be programs available with the intent on salvaging, repairing, and upgrading the computers for resale at a nominal cost and, in addition, properly disposing unusable equipment. The *Kenosha/Racine Counties Reduce/Reuse Recycling Guide 2008*, prepared by UW-Extension, provides general information to County residents about which communities provide services for disposing of various household items and which institutions or private businesses and industries accept or collect various household items for proper disposal.

It is not anticipated that the County government will administer a recycling program during the comprehensive plan design period; however, as noted later in this chapter, the County should study the need for and consider implementing a household and agricultural hazardous waste drop-off program, a tire collection program, and household appliances and electronics collection program.

Lake Districts

Chapter 33 of the *Wisconsin Statutes* provides for the creation of public inland lake protection and rehabilitation districts that undertake programs of lake protection and rehabilitation. These special purpose governmental units, known as lake districts or lake management districts, are created primarily by petition of the riparian landowners or, in the case of incorporated municipalities encompassing the entire frontage of a lake, by action of a city or village board. Lake districts may adopt sanitary district powers, and town sanitary districts created under Chapter 60 of the *Wisconsin Statutes* can adopt lake management district powers—such districts being known as lake sanitary districts. Because such districts are voluntary units of government, their formation cannot always be forecast; however, in Racine County, such governmental units currently serve the communities surrounding each of the major lakes. Consequently, the formation of new districts is considered to be unlikely, although it is possible that the existing inland lake protection and rehabilitation districts that lack sanitary district powers may adopt these powers as development continues in their drainage areas.

There are six lake management districts and two lake sanitary districts in Racine County. The lake management districts serve Lake Denoon, Eagle Lake, Long Lake (Kee-nong-go-mong Lake), the Waterford Impoundment,

Waubeesee Lake, and Wind Lake. The sanitary districts serve Bohners Lake and Browns Lake. Of these, the Regional Planning Commission has prepared comprehensive lake management plans for the Waterford Impoundment and Wind Lake.¹³ Other types of local level plans exist for a number of the other major lakes, including aquatic plant management plans for Bohners Lake, Browns Lake, Eagle Lake, and Waubeesee Lake.

Major water quality concerns facing the management units include stormwater, erosion from construction sites, and septage from onsite sewage treatment systems. These concerns, in turn, frequently give rise to in-lake water quality concerns associated with degraded water quality and excessive aquatic plant growths. The latter concern underlies the aquatic plant management activities of these special purpose districts. Excessive aquatic plant growths impede and impair recreational uses of the lakes, create aesthetic concerns, and modify the aquatic ecology of these systems, the latter encouraging the occurrence of non-native and invasive species such as Eurasian water milfoil. Frequently these issues become inter-related, with the presence of Eurasian water milfoil, for example, resulting in recreational use impairment and diminution of the visual amenity of the lakes. Consequently, lake management interventions as recommended in the comprehensive lake management plans include watershed-based measures to control stormwater runoff and manage onsite wastewater systems-which address the sources of contaminants-as well as in-lake measures-which address the symptoms associated with the delivery of contaminants into the lakes. The Waterford Waterway Management District and Wind Lake Management District, for example, have acquired lands and constructed stormwater management facilities to limit the movement of terrestrial contaminants, such as nutrients and sediments, into the respective lakes. In a same manner, the Bohners Lake and Waubeesee Lake districts have active aquatic plant management programs designed to facilitate recreational use and aesthetic enjoyment of their respective waters.

All of the lake organizations, in partnership with voluntary associations serving many of the lakes and state and local governments, conduct active community informational and educational programs, and serve as focal points for community-based lake management programs. Many serve as advocates for other environmentally-friendly policies and practices, including:

- Development of stormwater management plans and facilities within their shoreland communities and watershed;
- Adoption of adequate shoreland setbacks, impervious surface limits, and related zoning requirements by general purpose units of government;
- Enforcement of erosion control, onsite sewage system inspection, and related ordinance provisions; and
- Encouragement of land owners to install practices such as rain gardens, natural shorescapes, and native landscapes to minimize the need for fertilizers, biocides, and other chemical agents, among other practices.

In the future, lake districts and lake sanitary districts should continue to utilize state cost-share funds to acquire lands and/or implement management measures, and partner with state and local agencies in seeking and utilizing specialist knowledge in this process. The Wisconsin Lakes Partnership—comprised of the WDNR, UW Extension, and the Wisconsin Association of Lakes (WAL)—provides a number of statewide and regional workshops in support of local action.

Projections: Community Facilities

Community facilities are in many ways the core community identity for residents. For some people, these represent long-standing civic institutions, while for others they are places of education, recreation, and social gathering. As noted throughout the comprehensive plan, population and economic growth in the County may be

¹³SEWRPC Community Assistance Planning Report No. 198, 2nd Edition, A Lake Management Plan for Wind Lake, Racine County, Wisconsin, June 2008; SEWRPC Community Assistance Planning Report No. 283, A Lake Management Plan for the Waterford Impoundment, Racine County, Wisconsin, Volume One, Inventory Findings, and Volume Two, Alternatives and Recommendations, October 2007.

expected to create additional demand for community facilities that are provided by the public and private sectors. In particular, growth in the senior population of the County (see Table VII-2 in Chapter VII) may also increase the need for healthcare and assisted living facilities. It is often too difficult to predict when or where an existing community facility building will be renovated or converted, or if a new building will be built and at what location. However, Racine County and local communities have been proactive in developing maps and plans, such as comprehensive land use plan maps and park and open space plans, for identifying future needs and locations for community facilities. This section is intended to help identify the future needs for County and local community facilities.

Government Facilities

County, city, village, and town governments and agencies typically maintain their own buildings and facilities. Government buildings are listed in Chapter V of this report. In general, Racine County has a collection of historic and modern municipal civic hall facilities; such municipal buildings are typically located in the heart of a community. In addition to housing county and local government officials and meeting rooms, many government buildings also serve other purposes, such as a disaster relief control point or a polling station. County and local governments should continue to ensure that government facilities adequately serve the public's needs, and should continue to maintain county and local government buildings and facilities as needed to effectively conduct county and local government business. As the population grows, local governments should work with their residents to determine if new, expanded, or rehabilitated facilities are required. When new municipal buildings are needed, consideration should be given to locating them in a mixed-use setting that includes other compatible land uses, such as a public park, housing, and retail services—preferably with land available for future expansion of the municipal facilities.

Police Facilities and Services

Law enforcement responsibility within Racine County is carried out by the Racine County Sheriff's Department and local police agencies. The County Sheriff's Department has full law enforcement authority in the County and is comprised of many specialized units—including, but not limited to, administrative, investigative, and patrol services. In addition, the Sheriff's Department is responsible for the operation of the Racine County Jail. In the future, the Racine County Sheriff's Department should continue to assess needs to determine if the resources in its various divisions are adequate to serve County residents.

At the local level, each of the 10 municipal police departments has sworn officers that serve the community. General duties include calls for service and civil disturbances, parking enforcement, animal control, and assisting with traffic direction at accident scenes. As the population grows in local communities, police departments will have to assess the adequacy of services being provided. Communities and police departments should also assess operating costs and potential shared-service agreements, such as the intergovernmental agreement for emergency dispatch services provided through the County Sheriff's Department to any interested community located in the County.

Fire and Rescue Facilities and Emergency Management Services (EMS)¹⁴

For fire and emergency incidents, the amount of time it takes to provide adequate rescue and medical resources is the key concern in considering the location of fire and rescue facilities. Though there are many factors involved in providing an effective fire or medical emergency service, such as preparedness with proper equipment and training and dispatch and turnout time, the response, or travel time, is the most critical. Generally, urban-density development should be located with 1.5 miles of a fire station, while rural-based homes should be located within

¹⁴Maps XIII-4 and XIII-5 show the current location of Wind Lake Fire Company Fire Station #2 in the Town of Norway. The fire station relocated to this site in 2008, which is 1.5 miles north of its previous location.

four miles of a fire station.¹⁵ The recommended 1.5 mile and four mile service radii for existing stations in Racine County are shown on Map XIII-4. Most of the County is located within four miles of a fire station—although not necessarily within four miles of the station which serves the area. Much of the urban area of the County is located within 1.5 miles of a fire station.

In addition to fire station service radii, the travel time from fire stations to areas which they serve is another important consideration in planning for fire stations. The results of a Geographic Information System (GIS) real street/roadway network analysis for existing fire stations in Racine County are shown on Map XIII-5. This map shows four-minute and 16-minute travel times, taking into account actual travel distances and vehicle speeds.¹⁶ The four-minute travel time may be considered more appropriate for full-time fire departments; the 16-minute travel time may be considered for volunteer departments.

In the future, each fire department and EMS provider should periodically assess the sufficiency of firefighters and EMS personnel, fire equipment and water supply, and fire and medical facilities in light of changing conditions with communities they serve. In addition, communities and their fire/EMS departments should assess current fire station locations and coverages using the foregoing service radius and/or travel time standards or other standards deemed appropriate by the community. Communities and fire departments should also assess the need of consolidating fire and rescue services (e.g., Village of Mt. Pleasant and Sturtevant will merge services in the beginning of 2009); evaluate the potential change from volunteer to full-time fire department, or the need for more volunteer or paid on-call personnel; and explore the use of other shared-service agreements.

Parks

As noted earlier, there are about 380 park and open space sites owned by various public and private agencies and organizations in Racine County in 2007. The comprehensive plan anticipates that these sites will continue to be maintained to provide a wide range of recreational opportunities to the existing and future population of the County. As necessary, and as recommended in County and local park and open space plans, some existing sites may be expanded and/or additional recreation facilities developed to serve the residents of Racine County. In addition, it is expected that new park sites will be acquired and developed as development occurs in the County to meet the increasing needs for such facilities. The identification of future park sites should be accomplished through the preparation, update, and implementation of detailed County and local park and open space plans. In Racine County, the County and a number of municipalities have prepared and adopted park and open space plans that contain recommendations for future park sites and associated recreation facilities. Map XIII-6 shows the

¹⁵The service area for each fire station can vary significantly between fire departments. It should be noted that the 1.5-mile and 4-mile service radii are intended to be general service areas for urban and rural areas of the County. Fire protection service has a direct bearing on the cost of property insurance for every home and building in a community. Generally, urban-based fire station providers have access to reliable water systems and reserves and lower response times. Providers in the rural areas generally lack fire hydrants due to lack of municipal water supplies and longer response times.

¹⁶According to the National Fire Protection Association (NFPA) 1710 and 1720 (Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments and Volunteer Fire Department, respectively) guidelines, it is recommended that fire departments arrive to a fire within six and 10 to 14 minutes, depending on the fire station location, 90 percent of the time. The six-minute standard for a career fire department (generally urban-based fire stations) to respond to a fire suppression emergency allows one minute for dispatchers to handle the call, one minute for firefighters to get out the door and four minutes or less to travel to the fire (the arrival of the first engine company). Not included in the six minutes is the time the fire has been burning before the call. The NFPA also acknowledges that volunteer fire departments (generally rural-based fire stations) take more time. It gives those in the most sparsely populated areas 10 to 14 minutes to get to a fire. It is important to note that the NFPA will be revising the 1710 and 1720 standards in 2009, which may affect the response time recommendations, Insurance Service Office, Inc. (ISO) ranges, and Public Protection Classification (PPC) ratings.

general location of proposed new County and local park sites based on adopted park plans. Table XIII-8 lists the government agency responsible for the acquisition and development of each proposed park site. As indicated in Table XIII-8, approximately 750 acres of land are proposed to be added as recreation land in the County. Such lands would be acquired on a willing-seller, willing-buyer basis, with landowners receiving fair market value for their property, or potentially through donation or dedication in developing areas.

Public and Private Schools

In 2008, Racine County encompassed 14 public school districts, 31 private school facilities, and three technical college facilities. Most of the public school districts have one school facility; the Racine Unified School District—which serves the largest area, including the City of Racine and the Villages of Caledonia, Elmwood Park, Mt. Pleasant, North Bay, Sturtevant, and Wind Point—has 33 schools. The majority of private schools are located east of IH 94, in the area of highest population density in the County. The three technical colleges are operated by the Gateway Technical College system and are located in the Cities of Burlington and Racine and the Village of Sturtevant.

Some school districts within the County prepare long-range facilities plans, while others do not. Such plans typically include needs assessments for new facilities and land, based on development and demographic statistics received from the local governments, the Regional Planning Commission, and the Wisconsin Department of Administration.

For the purposes of this element, the Regional Planning Commission surveyed the public school districts located in Racine County in 2008 to obtain long-range planning information. The survey included a range of questions about the development of a long-range school facilities plan, school siting acreage criteria, building new schools, preserving and renovating older schools, joint-use school planning, and challenges to locating and/or buying property to site new schools. Of the public school districts replying to the survey, five indicated they have prepared a school facilities plan or were in the process as of 2008. These plans indicate that a number of school building facility structural needs will need to be addressed in the future. With respect to the challenges of locating and/or buying property for new school sites, the survey indicated that affordable land costs and land availability, especially in areas served by public sewer and water, impact long-range school facility planning decisions. While transportation options (e.g., motorized, including school buses and non-motorized choices) and safe routes to school—bicycle and pedestrian travel safe routes to and from school—were not cited as challenges to siting a new school, safety of students is an important issue for existing and new schools (see Appendix E).

Under the Regional Planning Commission's population projections, the school-age population of ages five to 19 in the County would increase by about 5 percent between 2000 and 2035. As school-age populations increase, school districts will need to evaluate school capacities and condition and potentially consider the construction of new school buildings or the expansion of existing schools buildings. It is imperative that public school districts and private schools regularly review student populations, comprehensive plans, and zoning ordinances, for their respective service areas and to take these into account in planning for future school facilities. Public school districts and private schools should also work with local governments, Racine County, and the Regional Planning Commission to obtain information regarding proposed residential developments and population projections to prepare accurate facilities plans in short-term increments through the County comprehensive plan design year 2035. In addition, some older school buildings within the County may require replacement or rehabilitation, or be adaptively reused, as the facility becomes antiquated. At the same time, it is important for local units of government to maintain open communication with public school districts and private schools, including joint public meetings between school boards and government officials.

Issues to be addressed in detail by school districts include enrollment and capacity, adaptive re-use of closed schools, transportation services, student health and well being, safe routes to school, and siting new elementary and middle schools in the context of school-oriented neighborhood developments, whereby schools strive to be the center of new residential and/or mixed-use developments and may be jointly located with new parks and community centers. In addition, school districts should consider incorporating "green" design concepts such as the Wisconsin Energy Star School Challenge to reduce building energy consumption.

As noted earlier, Racine County is the home to three Gateway Technical College campuses. The technical colleges should work with Racine County, the Racine County Economic Development Corporation, and other public, private, and non-profit organizations to partner in economic development and technical training initiatives. These initiatives may require planning for additional facilities and programs, academic faculty and staff, and equipment.

Libraries

Racine County is served by five public libraries, of which four are west of IH 94 and one is located in downtown City of Racine.¹⁷ The library system also operates a bookmobile that serves portions of Racine County at locations where residents are likely to gather. The bookmobile provides mostly popular materials for recreation and limited reference materials. Residents are encouraged to use one of the public libraries in the County for reference service due to the limited capacity of the bookmobile.

As part of the 2008 County budget, the County Board of Supervisors Finance and Human Resources Committee reviewed funding mechanisms for library services. The County Board will use the budget report as a guide when determining budget requests from the Lakeshores Library System. Most importantly, the budget report will assist in the consideration of long-range costs associated with planning for a new library, potentially located in the eastern portion of Racine County in order to meet the needs of future population growth.

In the future, Racine County and local communities should work together to determine various demands on public libraries in the County and how to most efficiently use available funding to address those demands. In addition, given the advances in technology and changing demographics and service needs of County residents, libraries should work with local governments, transit officials, schools, non-profit organizations involved in healthcare, assisted living, and fitness services, and real estate professionals to provide library service to such facilities, potentially as a joint-use or co-located site.

Bicycle, Pedestrian, Equestrian, and Waterway Facilities and Trails

The Transportation Element of this comprehensive plan aims to provide for safe accommodation of bicycle and pedestrian travel, to encourage non-motorized travel as an alternative to personal vehicle travel, and to provide a variety of transportation choices. The Land Use and Agricultural, Natural, and Cultural Resources Elements of this comprehensive plan are conducive to bicycle, pedestrian, equestrian, and waterway facilities and connectivity, and encourage the provision of sidewalks and bicycle routes and lanes. In addition, residential development concepts encouraged as part of the Land Use Element, such as conservation subdivisions, can be designed with pedestrian access to open space amenities that are preserved as part of the development.

Much planning has already been done with respect to on-street and off-street bicycle trails and routes and offstreet pedestrian trails in Racine County. A composite of on-street and off-street facilities identified in these plans is shown on Map XIII-7. This composite bicycle and pedestrian system plan derives from the following sources:

County-wide

- Back to the Root: An Urban River Revitalization Plan (2008);
- Lake Michigan Pathway Master Plan (2002);
- The regional transportation system plan as it pertains to Racine County; and
- Racine County Park and Open Space Plan: 2020.

City

- City of Burlington Bicycle and Pedestrian Plan (2001);
- City of Racine Public Works "Pathway System Map", showing the Root River and Lake Michigan Pathways; and
- City of Racine Park and Open Space Plan: 2020.

¹⁷*Racine County is part of the Lakeshores Library System, which also serves Walworth County.* XIII-20

Village

- Village of Caledonia 2007-2012 Park and Open Space Plan and Village of Caledonia official map;
- Village of Mt. Pleasant Master Bicycle Plan 2030 and Park and Open Space Plan: 2020;
- Village of Sturtevant Bicycle Master Plan (2007); and
- Village of Union Grove Park and Open Space Plan: 2020.

Village and Town

- Village and Town of Rochester Land Use Plan: 2020;
- Village of Union Grove Safe Routes To School Plan (2008); and
- Village of Waterford Safe Routes To School Plan (2008).

In general, regional, County, and locally adopted bicycle, pedestrian, and park and open space plans constitute a guide for providing and improving bicycle and pedestrian opportunities throughout the County—improving connectivity and safety; meeting increased needs of bicyclists and pedestrians, particularly in the wake of new development; improving the identification/signage of routes; and providing an understanding of the laws, rights, and responsibilities of bicyclists, pedestrians, and motorists, such as "sharing-the-road" rules. Bicycle accommodation could include marked bicycle lanes, widened outside travel lanes, widened shoulders, or separate bicycle multi-use paths, as well as bicycle parking facilities.

Bicycle accommodation should be considered on arterial streets, except freeways, as those streets are constructed, reconstructed, or resurfaced. Since motorized and non-motorized transportation users may share similar origins and destinations, arterial streets may be the most efficient and continuous routes for many bicyclists. As such, in addition to the bicycle routes based on existing plans shown on Map XIII-7, a new bicycle travel route is proposed along (or separate of) USH 45 through central Racine County. Regional, County, and local plans relating to bicycle accommodation did not identify this proposed route. According to WisDOT safety data, this north/south USH 45 bicycle travel route is considered a safer bicycle environment than many other arterial streets in the County. Bicycle accommodation should be designed appropriately on arterial streets when considering destinations between urban and rural areas, particularly when these destinations include local shopping, employment, government centers, schools, or parks and recreation facilities. It is important to note that off-street bicycle paths are considered multi-use (non-motorized) paths, which provide for pedestrian use. Off-street multi-use pathways should be adequately set back from highway travel lanes, train, truck, and waterways (e.g., rivers and streams).

Bicycle accommodation should also encourage the development and cost-effective new construction of safe offstreet bicycle (multi-use) paths as an alternative to on-street bicycle routes. In Racine County, there are existing on-street bicycle routes that pose safety concerns for both the vehicle and bicycle operator. For example, the existing bicycle route along Seven Mile Road in the Village of Caledonia is a heavily traveled vehicle route, which has experienced a high crash rate between a vehicle and bicyclist in recent years. The crash incidences are due to factors, such as the rolling topography (resulting in short sight distance) and narrow width of the shoulder on both sides of the road. In the future, the Village of Caledonia plans to construct an alternative off-street bicycle and pedestrian path approximately one-half mile south and parallel with Seven Mile Road. This plan encourages the development of bicycle and pedestrian wayfinding signage not only in this corridor, but also in other areas of the County where on-street and off-street bicycle and pedestrian paths are close together. In addition, it is recommended that new off-street bicycle (multi-use) paths built in power line easement and utility corridors consider reducing the financial costs of construction through public-private partnerships (PPPs). Though PPPs are not the only solution to reduce the cost of new off-street bicycle path construction, nevertheless, PPPs can be an innovative and cost-effective option during times of budget constraints. It is also important to note that efforts should be made to seek the cooperation of landowners, stakeholders, and local government to resolve issues where several stretches of an off-street trail crosses private land. In some instances, activities adjacent to or within the vicinity of the trail corridor may adversely affect the scenic and physical character of the trail. With cooperative management during the planning phase, problems can be more proactively resolved that are associated with the acquisition, development, administration, and maintenance of the off-street trails.

As the County and the local governments plan for future land use development and preservation of natural resources, it is envisioned that future on-street and off-street (e.g. rails-to-trail bicycle and pedestrian pathways) facilities are considered with design flexibility and context-sensitive solutions. Context-sensitive solutions take into account natural character and urban surroundings in designing, building, operating and re-building both public and private facilities, ranging from developing new commercial and residential developments to incorporating traffic calming features that are compatible with new bicycle and pedestrian facilities. It is also envisioned that bicycle facilities be developed as a means to encourage recreation opportunities, to improve energy efficiency and air quality, to protect natural resources, to protect residents from vehicular traffic, and to serve the residents' needs to safely and efficiently move between activity areas and living areas within the County and local community areas. Various units and agencies of government should be responsible for the construction and maintenance of pedestrian facilities and adopt and follow recommended standards with regard to the development of those facilities, particularly within urban neighborhoods. Though equestrian trails are not indicated on Map XIII-7, Racine County and local communities should continue to implement on-street (e.g., Bridle Path Equestrian Trail in the Village of Caledonia) and off-street (e.g., Caledonia Conservancy Greenspace Trail in the Village of Caledonia) trails to accommodate equestrian facilities. Furthermore, Racine County should continue the development, enhancement, and management of potential water trails. As illustrated on Map XIII-8, these water trails would be located on the Fox and Root Rivers and along the Lake Michigan shoreline and connect to water trails in adjacent counties.

Communities should continue to work with the County, the Regional Planning Commission, and WisDOT to implement all the elements of a regional multi-modal transportation system, including bicycle, pedestrian, and waterway facilities and trails. Local governments should recognize the need to place equal importance on all applicable elements of the County and local transportation system with communities, as well as work together to complete the on-street bicycle trail system. At the same time, local governments should implement a comprehensive, multi-modal, balanced, and high quality transportation system. In many cases, this will involve giving equal consideration to the local collector and land access street system and travel management systems, with respect to bicycle, pedestrian, and equestrian facilities and trails.

Healthcare, Community Assisted Living, and Child Care Facilities

Population projections developed under the regional land use plan anticipate changes in the age structure of the County population over the course of the comprehensive planning period (see Table VII-2 in Chapter VII). The population of children under age 10 in the County is expected to increase by about 4 percent over the planning period. In comparison, the population of residents 65 years of age or older is expected to increase by about 86 percent. Thus, it may be expected that there will be a significant increase in demand for healthcare and community assisted living facilities and services for seniors, and, potentially, only a marginal increase in demand for child care facilities.

In general, Racine County and local communities have accommodated a substantial increase in healthcare facilities, community-based residential facilities (CBRF) and adult family homes, residential care apartment complexes, senior housing apartment complexes, and child care facilities. County and local communities have been addressing access and transportation options to all of these facilities, especially for elderly and lower-income residents. Each type of facility provides a different level of service and care for residents. Some County- and locally-owned facilities, such as nursing homes, medical clinics, and senior housing, are open to people receiving government assistance.

In 2008, about 50 percent of all healthcare facilities, about 55 percent of all child care facilities, and over 60 percent of all assisted living facilities were located in areas zoned for urban residential uses, generally being accommodated as conditional uses. It is envisioned that this pattern will continue. The majority of nursing homes are located in governmental/institutional zoning areas.

In the future, Racine County should seek to work with State and local private, non-profit, and governmental officials in updating the Wisconsin State Health Plan and plan for facilities in areas of the County that may be lacking such facilities or considered to be lower-income areas, as well as prepare to address the need for capacity (demand for space) issues and to promote and protect the health of the children, adults, and the workforce.

Cemeteries

Cemeteries in Racine County are under a variety of religious, non-profit, and public agency ownerships. Existing cemeteries in the County are identified on Map V-17 in Chapter V. There are no known plans for additional cemeteries. The owners and operators of cemeteries in the County have the responsibility to plan for the future needs of cemetery facilities, working cooperatively with the County and local units of government as appropriate. Moreover, Chapter 157 of the *Wisconsin Statutes* establishes regulations and guidelines for the County to follow for proper disposal of human remains and other regulations related to cemetery and religious associations, location and siting procedures, platting, veteran burials, and penalties.

Currently Planned Utility and Community Facility Projects

Many of the communities in Racine County continue to develop and plan projects related to utility and community facilities. Listed below are examples of recently completed projects, projects that are underway, or committed to in the near future.

Racine County

• Plan to construct additional 350-bed minimum security housing units at Robert E. Ellsworth Correctional Centers in the Town of Dover.

City of Racine

- City Hall is in phase two of a three phase remodeling process. When complete, most city administrative services will be consolidated from the satellite location to City Hall. This is being done in an effort to reduce cost and increasing efficiencies, as well as making city government more accessible to the general public.
- In the 2009-2013 Capital Improvement Plan (CIP), Racine will be replacing playground equipment at various parks, studying the feasibility of installing Splash Pads at some parks, and installing additional restrooms at Horlick Field. The Racine Zoo has a master plan to add additional animal exhibits.
- The city has adopted design guidelines for commercial districts to include green building techniques (process, materials, equipment) as criteria for evaluating design proposals.
- The city has installed a solar array to provide electric power to City Hall Annex (a three story, multioffice) facility of over 65,000 square feet. Also, a portion of city vehicles and buses operate on compressed natural gas (CNG).

Village of Caledonia

- The development of soccer fields at Crawford Park.
- Planned expansion of the existing Parkview Gardens assisted living facility.

Village of Mt. Pleasant

- Plan to build a new municipal hall.
- Plan to build a new public works garage at the new municipal hall.
- Police headquarters will relocate to the new municipal hall.
- In 2009, consolidation of Mt. Pleasant and Sturtevant fire departments as the South Shore Fire Department.
- Potential relocation of Mt. Pleasant Fire Stations #1 and #2.
- Additional land has been acquired for the expansion of Smolenski Park.

Village of North Bay

- In 2009, switched from Village of Caledonia fire service to City of Racine fire service.
- In 2008, completed a lakefront restoration initiative.

Village of Sturtevant

- In 2009, consolidation of Sturtevant and Mt. Pleasant fire departments as the South Shore Fire Department.
- Plan to repair Sturtevant Train Depot.

Village of Union Grove

- Plan to build a new public works facility in the short-term.
- Demolished old grade school to provide more greenspace to complement existing ball field and playground.
- Plan to build a new Fire Station.
- Plan to construct a new public works facility by 2011.

Village of Waterford

- It is anticipated that police services (first shift) will be provided through a contract with the Town of Waterford in the near future, while second and third police shift service will continue with the Racine County's Sheriff's Department.
- The existing Village library has potential expansion space when needed.

Village of Wind Point

- Plan to expand indoor storage area for the public works facility.
- Commonly referred to as the Village Green, the community park will expand the playground area and install additional playground equipment.
- The expansion of parking and picnic equipment for the grounds surrounding Wind Point Lighthouse.

Town of Burlington

- In the future, the Town may study the potential to combine fire and rescue services with the City of Burlington.
- Plan to rebuild Fire Station #3 near Brown's Lake.
- Plan to construct a new addition of an assisted living facility.
- Plan to invest in vehicle storage facilities, which allow emergency equipment to be service ready at all times without requiring warm up times.
- Plan to improve government buildings to be more energy efficient.

Town of Dover

- Expanded volunteer fire department to include an ambulance and related emergency personnel.
- Expansion of fire station in order to store additional equipment and personnel.
- St. Mary's church cemetery has been approved by the Town Board for an expansion to the east of the existing cemetery.
- Southern Wisconsin Center continues to expand their facilities.

Town of Norway

- Plan to enlarge the winter salt storage area at the public works garage.
- In 2008, the Wind Lake Fire Company relocated Fire Station #2.
- Plan to increase parking and build a new entrance at the community park.
- By 2014, plan to develop an additional ball diamond at the community park.

Town of Waterford

- Plan to budget for the addition of equipment, fencing, trees, and playground and recreational equipment at the two Town parks.
- Potential to merge some of the local fire departments.

Town of Yorkville

- The town may build a new fire station in five to 10 years on land that is being donated.
- New residential subdivisions have to meet standards that include greenspace areas.

UTILITIES AND COMMUNITY FACILITIES GOALS, OBJECTIVES, POLICIES, AND PROGRAMS

The utilities and community facilities element goals and objectives, along with the implementing policies and programs were developed based upon consideration of the recommendations of regional, County, and local plans; the utilities and community facilities data inventoried in Chapter V; community surveys with local officials; and the results of the public participation process including input from the advisory committee, public opinion survey and SWOT analyses.

The following County utilities and community facilities related goals were developed under the comprehensive planning program and previously presented in Chapter VIII. It is important to note that the implementation of policies set forth in this element will be achieved through the actions of both public and private agencies and groups. The public sector policies in this element are subject to detailed review by County and local governing bodies, including as part of capital improvement programming and annual budgeting processes.

Racine County Utilities and Community Facilities Goals

Goal XIII-1:	Encourage development patterns that promote efficient and sustainable use of land, that can be readily linked by transportation systems, and utilize existing public utilities and services.
Goal XIII-2:	Preserve open space to enhance the total quality of the environment, maximize essential natural resource availability, give form and structure to urban development, and provide opportunities for a full range of outdoor recreational activities.
Goal XIII-3:	Provide adequate infrastructure and public services and an adequate supply of developable land to meet existing and future market demand for residential, commercial, industrial, and institutional uses.
Goal XIII-4:	Promote redevelopment and infill in areas with existing infrastructure and services, enhancing existing residential, commercial, and industrial areas.
Goal XIII-5:	Guide future growth in a manner that preserves and enhances the quality of life and character of urban and rural communities.
Goal XIII-6:	Encourage intercommunity planning efforts to make effective use of resources and to resolve conflicts.

Racine County Utilities and Community Facilities Objectives

- Utilities and community facilities should be maintained or enhanced to adequately serve future County and local population and business needs, and be consistent with County and local land use plans.
- Provide efficient and economical utility and community facilities and services at the lowest possible costs.
- County and local growth should be closely coordinated with public facility expansions and improvements to ensure a consistent and cost-effective approach to providing sanitary sewer, storm sewer, and water supply for water resource management of surface water, groundwater, and water dependent natural resources.
- Ensure that sanitary sewer and water systems are planned with adequate capacity and minimal disruption to the natural environment.
- Support recommendations in regional, county, and local plans related to land use, transportation, water quality management, water supply, lake districts, and parks and open spaces.
- When applicable, encourage future development to be concentrated within planned urban service areas offering basic public services.
- Utilities and community facilities should be compatible with the surrounding uses of the community.
- Encourage reinvestment in existing developed areas, including the promotion of green building and green infrastructure components.
- County and local governments should work together to site public facilities and other infrastructure to deliver reliable, quality service and identify funding sources for such facilities.
- Work to ensure adequate police, fire, and rescue services and solid waste and recycling programs are provided to Racine County residents. When applicable, identify opportunities and develop strategies to coordinate and/or consolidate services, such as for police protection, fire and rescue protection, and solid waste programs.
- Promote the development of shared facilities, services, and equipment to reduce cost and/or provide a higher level of service.
- Recognize and incorporate emerging utility and community facilities technologies into local systems in an equitable and affordable manner.
- Encourage the timely expansion, improvement, and rehabilitation of utilities and community facilities related to electric and natural gas, alternative energy, telecommunications, solid waste and recycling, police, fire and rescue, emergency, government, libraries, schools, healthcare, and child care.
- Ensure residents throughout Racine County have access to public libraries and library services.
- Provide a comprehensive system of parks and outdoor recreation sites and facilities to allow County residents adequate opportunities to participate in resource and nonresource-oriented outdoor recreation activities, including water-based outdoor recreation activities which are consistent with enjoyable surface water use and maintenance of adequate water quality.
- Provide an integrated and accessible system of trails that will provide County residents with a transportation alternative to motor vehicles.
- Maintain and enhance the high-quality educational systems in Racine County.
- Maintain and enhance the high level of healthcare services in Racine County.
- Maintain and improve the provision of community assisted living facilities and services for County residents.
- Provide adequate cemetery capacity and services for County residents.

- Foster social, educational, recreational, and leisure-time opportunities for residents.
- Encourage intergovernmental cooperation when selecting sites for locating public facilities, such as police and fire stations, schools and libraries, and quasi-public facilities, such as hospitals, clinics, and skilled nursing, and assisted living facilities and independent living centers for the elderly and disabled.

Racine County Utilities Policies and Programs

- Implement all utility-related policies in other elements of the comprehensive plan.
- Accommodate future land use development in areas recommended to be developed or redeveloped for the specific land use as identified on the land use plan map.
- Continue to prepare Capital Improvement Plans (CIP) to help identify major public projects, including the expansion of public sewer and water services.
- Support the development of land use patterns and water quality control programs to effectively meet the wastewater disposal needs of the County.
- Establish a cooperative process with WDNR, SEWRPC, and local governments to develop a framework for coordinated planning of land use, sewage treatment and disposal, stormwater management, and water supply.
- Assist local governments in identifying available models for determining fiscal impacts of new development, including sanitary sewer service and water supply utilities.
- Implement, where appropriate, the recommendations of the regional water supply plan to help ensure an adequate supply of safe water for County residents and businesses.
- Implement, where appropriate, the recommendations of the regional water quality management plan to update and improve water quality in the County.
- As warranted, prepare detailed facility plans related to essential services, including public sewer service, public water service, and schools.
- Continue the regulation of private onsite wastewater treatment systems.
- Support the development of land use patterns and water control facilities and programs, including stormwater management systems, to meet the stormwater runoff control needs of the County.
- Develop educational programs that promote alternatives to greenfield development, such as infill, modern sustainable infrastructure, and brownfield and greyfield development.
- Support the development of an urban land use pattern that can be efficiently served by utilities and community facilities.
- Educate and involve the public regarding water conservation practices, impervious surfaces and lot coverage, non-point source pollution, and stormwater management techniques that address improving quality and lessening the quantity of runoff.
- Encourage intergovernmental cooperation and community participation when selecting sites for locating public facilities and quasi-public facilities, including but not limited to, government centers, electrical substations, telecommunication and wireless communication facilities, and cable substations.
- Work with electric and gas service providers, such as We Energies, to determine future demand in Racine County.
- Explore regional public and private partnership options for new opportunities of developing integrated waste reduction, waste processing and disposal management, resource recovery, and recycling programs and facilities.
- Encourage Racine County staff to research programs to safely dispose of new types of hazardous household wastes. Continue to apply for grants to conduct household and agricultural chemical hazardous waste Clean Sweep programs. Partner with local communities during implementation of the programs.

- Support utility efforts to develop alternative sources of energy, such as solar, wind, and geothermal.
- Support utility efforts to develop and carry out educational programs to help conserve energy resources.
- Consider developing an alternative energy and renewable action plan to accelerate short-term progress toward long-term energy-related objectives and policies.
- Racine County, local units of government, and the private sector should coordinate the development of a telecommunication ordinance relating to the co-location of antennas for wireless and other emerging technologies.
- Consider the development of an impact fee ordinance to off-set community costs of new utilities and community facilities.

Racine County Community Facilities Policies and Programs

- Implement all community facility-related policies in other elements of the comprehensive plan.
- Accommodate future land use development in areas recommended to be developed or redeveloped for the specific land use as identified on the land use plan map.
- Encourage the County to coordinate multi-jurisdictional meetings to discuss relevant issues or services to improve efficiencies in providing services.
- Continue to prepare Capital Improvement Plans (CIP) to help identify major projects, including land acquisition, equipment acquisition, transportation facility development and maintenance (including roadways and transit), building maintenance and development, and park projects; and associated funding.
- Consider the use of LEED (Leadership in Energy and Environmental Design) Green Building standards when designing and constructing new government buildings.
- Local governments should work closely with Racine County, as appropriate, to help implement County programs and ordinances. Local governments and Racine County should also collaborate on services and ordinance implementation that both the local government and County may help to administer or fund, such as stormwater runoff management, library services, and parks.
- Encourage public-private partnerships to enhance the level of public services in Racine County. Possible partnership opportunities are included in several of the programs, listed later in this chapter. Additional opportunities include shared fire, public works, and municipal halls and offices with neighboring communities.
- Periodically assess County facilities, including the Racine County Sheriff's Department, the Justice Center, and the County jail to determine if the facilities are adequate to serve Racine County residents and house the Courts and various County departments and agencies.
- Continue to promote shared services and equipment between the Racine County Sheriff's Department and local police, fire, and rescue departments, and with emergency disaster relief.
- Develop methods to study effective cost savings and timely police, fire and rescue, and emergency management services between cities, towns, villages, and the County Sheriff's Department.
- Continue to provide emergency management services and coordinate with local governments and state agencies in disaster recovery.
- Continue to review and update the Racine Hazard Mitigation Plan, which provides guidance for responding to natural disasters throughout the County.
- Work with local governments to provide a system of public neighborhood and community parks in urban areas that complement the County park and trail system.

- Continue to provide information to local governments about County park and open space sites and recreational facilities, and coordinate with local governments for the joint development and use of facilities, where appropriate.
- Continue to update the County park and open space plan, including updates from the regional natural areas and critical species habitat protection plan, to maintain eligibility for available State and Federal outdoor recreation grants and stewardship program funds.
- Identify and seek grant funds to study future needs and demands for recreational programs and facilities for school-age children and teenagers.
- Work with local governments to promote State, County, and local parks and trails to encourage economic development and tourism.
- Consider park and recreation standards developed by SEWRPC, the National Recreation and Park Association, and the Wisconsin Park and Recreation Association when updating the County and local park and open space plans to ensure an appropriate number, size, and distribution of parks and recreational facilities.
- Allocate an adequate amount of land on the County Planned Land Use Map: 2035, for institutional land uses, such as hospitals and schools or continue to allow for such uses as conditional uses in developing areas.
- Work with school districts to strive that school-age children have access to high quality schooling in or in close proximity to their neighborhood.
- Cooperate with local school districts to ensure that school expansions or new facilities are planned to serve new growth areas in a timely fashion and scaled approximately to help achieve more bicycle- and pedestrian-oriented development patterns in new developments.
- Provide population projection data, including age composition and demographic projections, developed by SEWRPC and Racine County to school districts for use in preparing facilities plans.
- Coordinate county-wide on-street and off-street (multi-use) bicycle, pedestrian, equestrian, and waterway trail planning and development to provide connections to local trails and trails in adjacent counties.
- Monitor community needs with regards to healthcare, senior, and child care facilities and encourage the construction of new or expanded facilities near public facilities, such as libraries and post offices, and in locations that are accessible by multiple transportation modes.
- Continue to fund and administer public health, healthcare, and transportation programs and services offered by Racine County government departments and agencies, including Aging Services, Human Services, Public Health, and Veterans Services. The programs and services provided by Racine County agencies and departments should be assessed during the planning period. Some programs and services may become higher-priority, lower-priority, or obsolete as technology and the needs of County residents change during the comprehensive plan design period and should be altered as needed.
- Assist in coordinating activities and possible expansion of senior centers in Racine County to ensure that facilities are adequate in size and staff to meet the projected increase in the elderly population.
- Continue to support managed care programs in the County that serve people with mental illnesses, development disabilities, and juvenile defenders such as Community Aids and Youth Aids.
- Support healthcare services to uninsured and underinsured by looking at gaps in healthcare facilities and services.
- Encourage local advocacy groups to promote needed changes to healthcare delivery and cost.
- Study the expansion of current County healthcare services and facilities and the development of new County healthcare services and facilities, including facilities affordable to elderly residents receiving public assistance.

- Seek to develop partnerships with appropriate agencies and organizations to educate local businesses on the cost and time commitment associated with family care giving, and encourage policies at local businesses to reduce care giver impact.
- Continue to provide information to local governments regarding nursing homes, community-based residential facilities, residential care apartments, and adult senior centers in Racine County to help ensure that facilities are adequate in size and staff to meet the projected increase in the elderly population.
- Cities, villages, and towns in Racine County should be open to private sector proposals for community facilities that meet the needs of residents, consistent with County and local goals and objectives. This could include recreation, healthcare, and housing facilities.
- Consider the development of boundary and revenue sharing agreements relating to the provision of water and sanitary sewer service and cost sharing of community facilities, such as libraries and museums.

Racine County Utilities and Community Facilities Financial and Technical Assistance Programs

Various types of financial and technical assistance programs are available from Federal, State, and County agencies that are applicable to the implementation of the utilities and community facilities element recommendations (see Table XIII-9). Additional existing programs are described in the agricultural, natural, and cultural resources, the housing, and the economic development elements of the comprehensive plan (Chapters X, XI, and XIV, respectively).

SELECTED CHARACTERISTICS OF PUBLIC SEWAGE TREATMENT FACILITIES IN RACINE COUNTY: 2000, 2020, and 2035

Public Wastewater Treatment Plant Operator	2000 Estimated Population Served	2000 Estimated Unsewered Population ^a	Date of Most Recent Modification	Receiving Water	Design Capacity (million gallons per day)
City of Burlington ^b	14,390	490	2008	Fox River	3.55
City of Racine ^c	132,820	1,320	2005	Lake Michigan	36.00
Eagle Lake Sewer Utility District	1,560	50	2004	Eagle Creek ^d	0.40
Town of Norway Sanitary District No. 1 ^e	6,580	40	2001	Waubeesee Lake Drainage Canal ^d	1.60
Yorkville Sewer Utility District No. 1	240	80	1983	Tributary to Hoods Creek ^f	0.15
Village of Union Grove	5,270	110	2008	West Branch Root River Canal ^f	2.00
Western Racine County Sewerage District	10,280	540	2006	Fox River	2.53
Total	171,140	2,630			

		Planned 2020		Ratio of Planned 2035		ed 2035	Ratio of
Public Wastewater Treatment Plant Operator	2007 Average Annual Flow Rate (million gallons per day)	Estimated Population Served ⁹	Estimated Average Annual Flow Rate	Estimated 2020 Average Annual Flow Rate to Design Capacity	Estimated Population Served ⁹	Estimated Average Annual Flow Rate	Estimated 2035 Average Annual Flow Rate to Design Capacity
City of Burlington ^b	3.10	16,343	3.40	0.96	17,440	3.63	1.02
City of Racine ^c	23.07	134,369	23.32	0.65	134,540	23.35	0.65
Eagle Lake Sewer Utility District	0.31	1,793	0.34	0.86	1,930	0.37	0.92
Town of Norway Sanitary District No. 1 ^e	1.00	6,894	1.03	0.65	7,100	1.06	0.66
Yorkville Sewer Utility District No. 1	0.07	360	0.10	0.66	390	0.11	0.72
Village of Union Grove	1.02	6,026	1.12	0.56	6,510	1.21	0.60
Western Racine County Sewerage District	1.27	13014	1.50	0.59	14,660	1.69	0.67
Total		178,799			182,570		

^aYear 2000 unsewered estimated population within sewer service areas that is proposed to ultimately be sewered under the Regional Water Quality Management Plan. This column includes persons living within a planned sewer service area, but not currently served by a sewer system. Typically, the unsewered population resides in a town adjacent to the city or village operating the sewer system and treatment plant.

^bIncludes Browns Lake and Bohner Lake sewer service areas.

^cIncludes the far northern portion of the Town of Somers along CTH KR.

^dDirectly, or ultimately, tributary to the Fox River.

^eIncludes the Muskego South sewer service area in the vicinity of Lake Denoon.

^tTributary to the Root River, and, ultimately to Lake Michigan.

⁹Based on the recommended plan (intermediate growth scenario) as set forth in SEWRPC Planning Report No. 48, A Regional Land Use Plan for Southeastern Wisconsin: 2035, June 2006.

	Type of Ordinance		
Community	Stormwater Management	Construction Site Erosion Control	
Racine County			
City of Racine	Х	Х	
City of Burlington	Х	Х	
Village of Caledonia	Х	Х	
Village of Elmwood Park			
Village of Mt. Pleasant	Х	Х	
Village of North Bay			
Village of Rochester ^a	Х		
Village of Sturtevant	Х	Х	
Village of Union Grove	Х	Х	
Village of Waterford	Х	Х	
Village of Wind Point	Х	Х	
Town of Burlington	Х	Х	
Town of Dover	Х	Х	
Town of Norway	Х	Х	
Town of Raymond	Х	Х	
Town of Rochester ^a			
Town of Waterford	Х	Х	
Town of Yorkville	Х	Х	

STORMWATER MANAGEMENT AND EROSION CONTROL INFORMATION FOR RACINE COUNTY: 2008

^aThe Town and Village of Rochester were consolidated as the Village of Rochester in December 2008.

Source: Wisconsin Department of Natural Resources and SEWRPC.

SELECTED INFORMATION REGARDING STORMWATER MANAGEMENT SYSTEMS IN THE RACINE COUNTY PLANNING AREA: 2008 MILWAUKEE CO.



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SELF-SUPPLIED INDUSTRIAL, COMMERCIAL, INSTITUTIONAL AND RECREATIONAL, AGRICULTURAL,

Source: Wisconsin Department of Natural Resources and SEWRPC.

MUNICIPAL WATER SUPPLY SERVICE POPULATION AND AREA COMPARISON FOR RACINE COUNTY: 2000-2035 (PRELIMINARY REGIONAL WATER SUPPLY PLAN, SEWRPC PLANNING REPORT No. 52)

	Population				Area S	Served		
		2000-2035	Increment		2000	2000-2035	Increment	0005
Utility	2000 Population	Change in Population	Percent Change	2035 Population	Area Served (square miles)	Change in Area (square miles)	Percent Change	2035 Area Served (square miles)
City of Burlington Water Utility	9.950	5.350	54	15.300	3.8	2.3	61	6.1
City of Racine Water and Wastewater Utility	103,800	9,700	9	113,500	22.3	5.4	24	27.7
Caddy Vista Sanitary District ^a	800	450	60	1,250	0.2	0.3	173	0.5
Village of Caledonia Utility District No. 1 ^a	3,550	8,250	231	11,800	2.0	4.8	239	6.8
Crestview Sanitary District ^b	3,800	450	12	4,250	1.0	0.6	60	1.6
North Park Sanitary District (Oak Creek) ^b	600	100	16	700	0.4	0.0	0	0.4
North Park Sanitary District (Racine)	8,300	900	11	9,200	3.0	<0.1	1	3.1
Village of Sturtevant Water and Sewer Utility ^c	5,300	1,250	23	6,550	1.5	0.6	42	2.1
Village of Union Grove Municipal Water Utility	4,300	1,600	37	5,900	1.2	0.7	59	1.9
Village of Waterford Water Utility	4,050	1,350	33	5,400	1.2	1.1	94	2.3
Village of Wind Point Municipal Water Utility	1,850	500	26	2,350	1.1	0.0	1	1.1
North Cape Sanitary District	100	50	27	150	0.1	<0.1	6	0.1
Yorkville Utility District No. 1	<50	350	1,411	400	0.1	0.8	704	0.9
Town of Burlington-Bohner Lake Area		2,200		2,200		1.1		1.1
Town of Dover-Eagle Lake Area		2,000		2,000		1.0		1.0
Northwest Caledonia Area		200		200		0.3		0.3
Town of Norway Area ^d		5,800		5,800		2.6		2.6
Village of Rochester Area ^e		1,250		1,250		0.4		0.4
Town of Rochester Area ^e		1,300		1,300		0.8		0.8
Town of Waterford Area		6,700		6,700		3.6		3.6
Total	146,400	49,750	34	196,200	37.9	26.4	70	64.4

^aAs of 2006, the Caddy Vista Sanitary District and the Village of Caledonia Utility District No. 1 have been combined into the Caledonia West Utility District.

^bAs of 2007, the Crestview Sanitary District and the North Park Sanitary District have been combined into the Caledonia East Utility District.

^cAs of 2007, the Village of Sturtevant Water Utility was purchased by the City of Racine Water and Wastewater Utility and is served by the City Utility on a retail basis. The Village of Sturtevant continues to own and operate its sewer utility facilities.

^dLimited to the portion of proposed Norway refined service area within Racine County.

^eThe Town and Village of Rochester were consolidated as the Village of Rochester in December 2008.

MUNICIPAL WATER SUPPLY SERVICE AREA DEMAND AND PUMPAGE IN RACINE COUNTY: 2000 AND 2035 (PRELIMINARY REGIONAL WATER SUPPLY PLAN, SEWRPC PLANNING REPORT No. 52)

		Year 2000			Year 2035	
Utility	Average Water Use Demand ^a (gallons per day x 1,000)	Average Daily Pumpage ^a (gallons per day x 1,000)	Maximum Daily Pumpage ^a (gallons per day x 1,000)	Average Water Use Demand (gallons per day x 1,000)	Average Daily Pumpage (gallons per day x 1,000)	Maximum Daily Pumpage (gallons per day x 1,000)
City of Burlington Water Utility	1,576	1,884	2,892	2,129	2,545	4,508
City of Racine Water and Wastewater Utility	18,513	22,763	35,510	19,470	23,940	36,568
Caddy Vista Sanitary District ^b	42	50	199	88	105	317
Caledonia Utility District No. 1 ^b	276	613	698	1,444	3,208	4,366
Crestview Sanitary District ^c	233	270	836	300	348	835
North Park Sanitary District (Oak Creek) ^c	135	177	290	144	189	303
North Park Sanitary District (Racine) ^c	601	789	1,294	641	842	1,352
Sturtevant Water and Sewer Utility ^d	580	595	1,103	906	930	1,493
Village of Union Grove Municipal Water Utility	678	716	1,359	1,000	1,056	1,841
Village of Waterford Water Utility	320	391	698	507	620	1,228
Village of Wind Point Municipal Water Utility	231	254	417	262	288	462
North Cape Sanitary District	10	11	15	19	21	26
Yorkville Utility District No. 1	57	71	115	267	332	530
Town of Burlington-Bohner Lake Area				177	237	355
Town of Dover-Eagle Lake Area				212	285	426
Northwest Caledonia Area				71	95	143
Town of Norway Area				553	741	1,110
Village of Rochester Area ^e				98	132	197
Town of Rochester Area ^e				118	158	237
Town of Waterford Area				549	736	1,102
Total	23,252	28,584	45,426	28,958	36,808	57,400

^aData based upon year 2000 Public Service Commission Reports.

^bAs of 2006, the Caddy Vista Sanitary District and the Village of Caledonia Utility District No. 1 have been combined into the Caledonia West Utility District.

°As of 2007, the Crestview Sanitary District and the North Park Sanitary District have been combined into the Caledonia East Utility District.

^dAs of 2007, the Village of Sturtevant Water Utility was purchased by the City of Racine Water and Wastewater Utility and is served by the City Utility on a retail basis. The Village of Sturtevant continues to own and operate its sewer utility facilities.

^eThe Town and Village of Rochester were consolidated as the Village of Rochester in December 2008.

MUNICIPAL WATER SUPPLY SERVICE POPULATION, AREA, WATER DEMAND AND PUMPAGE DATA FOR THE CITY OF RACINE WATER AND WASTEWATER UTILITY WHICH PROVIDES WATER TO MULTIPLE SYSTEMS IN RACINE COUNTY: 2000-2035 (PRELIMINARY REGIONAL WATER SUPPLY PLAN, SEWRPC PLANNING REPORT No. 52)

Utility	2000 Population	2035 Population	2000 Area Served (square miles)	2035 Area Served (square miles)
City of Racine Water and Wastewater Utility Service Area ^b	122,800	143,400	29.9	40.8

		Water Demand				
	Year 2000			Year 2035		
Utility	Average Water Use Demand (gallons per day x 1,000) ^a	Average Daily Pumpage (gallons per day x 1,000) ^a	Maximum Daily Pumpage (gallons per day x 1,000) ^a	Average Use Demand (gallons per day x 1,000)	Average Daily Pumpage (gallons per day x 1,000) ^a	Maximum Daily Pumpage (gallons per day x 1,000)
City of Racine Water and Wastewater Utility Service Area ^b	20,201	25,014	39,022	22,723	29,206	44,241

^aIncludes the City of Racine Water and Wastewater Utility, the Village of Wind Point Municipal Water Utility, and portions of the Caledonia East Utility District and Caledonia West Utility District.

^bBased upon year 2000 Public Service Commission Report data for water sales, with the exception of the Town of Bristol District No. 3 (Kenosha County) for which the data was based upon a year 2005 report.

PRINCIPAL FEATURES AND COSTS FOR NEW, EXPANDED, AND UPGRADED WATER SUPPLY FACILITIES AND PROGRAMS FOR MUNICIPAL WATER UTILITIES IN RACINE COUNTY: 2035 (PRELIMINARY REGIONAL WATER SUPPLY PLAN, PLANNING REPORT No. 52)

Community Utilities	Water Supply Sources Programs and Facilities Description	Capital Cost (\$ x 1.000)	Annual O & M Cost ^a (\$ x 1.000)
City of Burlington Municipal Waterworks	No additions		12.6
City of Racine Water and Wastewater Utility ^c	No additions		45.9
Village of Caledonia West Utility District ^{d,f} (Oak Creek)	No additions		0.4
Village of Caledonia West Utility District ^{d,f} (Racine)	No additions		3.1
Village of Caledonia East Utility District e,f (Oak Creek)	No additions		1.9
Village of Caledonia East Utility District e,f (Racine)	No additions		3.5
Village of Union Grove Municipal Water Utility	Addition of two shallow aquifer wells, 0.40 MG reservoir	1,776	12.1 ^b
Village of Waterford Water and Sewer Utility	Addition of one shallow aquifer well with 0.40 MG reservoir	1,151	15.7
Village of Wind Point Municipal Water Utility	No additions		0.8
North Cape Sanitary District	Addition of one shallow aquifer well with reservoir	155	2.1
Town of Yorkville Water Utility District 1	Lake Michigan supply connection	459	-38.0 ⁹
Northwest Caledonia Area Planned Utility District	9,000 lineal feet of water transmission main	1,557	3.1 ^f
Town of Burlington-Bohner Lake Area Planned Utility District	Addition of two shallow aquifer wells, 0.30 MG elevated tank	1,941	42.1
Town of Dover-Eagle Lake Area Planned Utility District	Addition of two shallow aquifer wells, 0.30 MG elevated tank	1,941	47.0
Town of Norway Area Planned Utility	Addition of four shallow aquifer wells, one with 0.15 MG reservoir, two 0.25 MG elevated tanks	4,024	112.9
Village of Rochester Area Planned Utility ^h	Addition of two shallow aquifer wells, two 0.10 MG elevated tanks	1,844	27.6
Town of Rochester Area Planned Utility ^h	Addition of two shallow aquifer wells, two 0.10 MG elevated tanks	1,844	30.7
Town of Waterford Area Planned Utility	Addition of three shallow aquifer wells, one with 0.15 MG reservoir, two 0.3 MG elevated tanks	3,485	114.4
Land Acquisition for Wells and Storage Tanks	30 acres	2,100	
Countywide	One rainfall infiltration system	495	6.0
Total	19 Wells, 15 Storage Tanks, one Lake Michigan Supply Connection, one Rainfall Infiltration System	22,772	443.9

^aWater utilities which purchase water on a wholesale basis will have continued or increased costs for the purchase of water. For purposes of the cost-effectiveness analyses of the alternative water supply plans, only the incremental operation and maintenance cost associated with any increased water supply facility water production costs are considered. Alternative Plan 1 is being used as the base to which the other alternative plans will be compared. For this base alternative, only the operation and maintenance cost for operation and maintenance of existing facilities which are common to all alternatives are not included for any alternatives.

^bThe annual O&M cost includes a reduction in cost for existing groundwater supply facilities which were needed under Alternative Plan 1, the base condition, but eliminated under the Composite Plan.

^cIncludes the Village of Sturtevant Water Utility which was purchased by the City of Racine Water and Wastewater Utility in 2007 and is now served by the City Utility on a retail basis.

^dIncludes the former Crestview Sanitary District and the former North Park Sanitary Districts which were consolidated in 2007 to form the Caledonia East Utility District.

^eIncludes the former Caddy Vista Sanitary District and the former Caledonia Utility District No. 1 which were consolidated in 2006 to form the Caledonia West Utility District.

¹The annual O&M cost for the Northwest Caledonia Area does not include the incremental cost for water production, as that cost is included in the expanded City of Oak Creek Water Utility costs.

⁹The annual O&M cost for the Town of Yorkville Utility District No. 1 includes an estimated annual water production cost of \$17,000 per year based upon an estimated incremental cost of \$230 per million gallons for water production at the supplier utility. The cost to purchase that water would be expected to be much greater, as it would include consideration of fixed and other costs. The annual O&M costs include a reduction in cost for existing groundwater supply facilities which were needed under Alternative Plan 1, the base condition, but eliminated under Alternative Plan 2. The annual O&M costs also include an expected average reduction of \$28,000 per year for savings associated with residences which would be able to discontinue their point-of-entry water treatment devices. Water distribution system expansion costs are not included, as they are common to all alternative plans.

^hThe Town and Village of Rochester were consolidated as the Village of Rochester in December 2008.

Source: Ruekert & Mielke, Inc. and SEWRPC.

POTENTIAL WATER CONSERVATION PROGRAM MEASURES (PRELIMINARY REGIONAL WATER SUPPLY PLAN, SEWRPC PLANNING REPORT No. 52)

	Potential Reduction in	Estimated Annual Cost	
	Average Daily Water	per Customer ^b Over	
Program Component	Use ^a	a 10-Year Period	Comments
Water System Efficiency Actions	^c	^c	Includes meter testing for accuracy, leak detection and repair, water main maintenance and replacement, water system survey and audits, and water production system refinements. Some of these measures are in place in all communities in the Region
Moderate-Level Public Informational and Educational Program	1-3 percent	\$1.50-\$2.50	Includes redesign of water bill, distribution of educational materials, utility staff training, and presentations to schools and civic groups
Higher-Level Public Informational and Educational Program	2-4 percent ^d	\$2.50-\$3.50	Includes moderate-level program elements, plus development of school curriculum, and broader informational programming involving newspapers, website, and flyers
Outdoor Watering Restrictions	1-2 percent ^e	\$0.50-\$2.00	Cost varies, depending upon level of enforcement
Plumbing Retrofits At No Cost to Customer	1-2 percent ^f	\$0.50-\$1.00 ^f	Includes low-volume shower heads and toilet volume devices
Toilet Replacement Rebate Program	1-3 percent ⁹	\$2.00-\$3.00 ⁹	Toilet flush volumes: pre-1950 = 7.0 gallons; 1950- 1979 = 5.0 gallons; 1980-1993 = 3.6 gallons; 1994 to present = 1.6 gallons
			Not allowed under 2006 Public Service Commission (PSC) policies. Effectiveness may be limited to \$100 rebate due to estimated \$100 cost of new toilet and \$150 cost of installation
Water Softener Replacement Rebate Program	<1-1 percent ^h	\$2.50-\$3.50 ^h	Not allowed under 2006 PSC policies. May be carried out for wastewater utility purposes. Effectiveness may be limited, due to modest rebate of \$150, given cost of new softener and installation of about \$550. Added advantage of reducing chloride in wastewater
Clothes Washing Machine Replacement Rebate Program	1-3 percent ¹	\$3.00-\$5.00 ⁱ	Clothes washer water use per load: pre-1980 = 56 gallons; 1980-1990 = 51 gallons; 1990-present = 40 gallons for conventional; 27 gallons for high- efficiency
			Not allowed under 2006 PSC policies. Effectiveness may be limited, due to modest rebate of \$200, given cost of new clothes washers of \$700 or more
Water Conservation Rate Structure	2-4 percent	\$0.10-\$0.20 ^j	
Rainwater Harvesting	Variable	Variable	Primarily used for outdoor water uses. Retrofitting plumbing for indoor water uses can be expensive and raises concerns over accidental improper use, and dangerous cross connections, and extreme cold water functioning.

^aPotential water savings estimates assume a largely residential water use base. Savings for systems with large commercial, institutional, and industrial components will be variable.

^bCost estimated on a household residential equivalent unit basis.

^cMeasures are utility specific. Costs and effectiveness will vary with extent of current and past practices, condition and type of water supply system, and level of unaccountedfor water.

^dCosts and effectiveness are total for program, including elements in the moderate public informational and educational program.

^eWater savings would be substantially higher on a maximum day or week basis.

^tCost data and effectiveness assumes 25 percent participation spread over 10 years.

^gCost data and effectiveness assumes 25 percent participation spread over 10 years. Rebate amount assumed to be \$100.

^hCost data and effectiveness assumes 20 percent participation spread over 10 years. Rebate amount assumed to be \$150.

¹Cost data and effectiveness assumes 20 percent participation spread over 10 years. Rebate amount assumed to be \$200.

^{*j*}Cost data assumes a one-time contract cost spread over 10 years.





3 MILES

2

FIRE STATION SERVICE RADII IN THE RACINE COUNTY PLANNING AREA: 2008

Source: Racine County and SEWRPC.



Source: Racine County and SEWRPC.

0 1 2 3 MILES

PROPOSED NEW PARK SITES IN THE RACINE COUNTY PLANNING AREA AS IDENTIFIED IN COUNTY AND LOCAL PARK AND OPEN SPACE PLANS: 2008 MILWAUKEE CO.



PROPOSED NEW PARK SITES IN THE RACINE COUNTY PLANNING AREA AS IDENTIFIED IN COUNTY AND LOCAL PARK AND OPEN SPACE PLANS: 2008

Number on Map XIII-6	Acquisition and Development Responsibility	Proposed Park Size (Acres)
1	Racine County	85
2	Racine County	160
3	City of Burlington	21
4	City of Burlington	21
5	Village of Caledonia	15
6	Village of Caledonia	8
7	Village of Caledonia	10
8	Village of Caledonia	7
9	Village of Caledonia	10
10	Village of Caledonia	15
11	Village of Caledonia	4
12	Village of Caledonia	4
13	Village of Caledonia	7
14	Village of Caledonia	8
15	Village of Caledonia	6
16	Village of Caledonia	8

Number on Map XIII-6	Acquisition and Development Responsibility	Proposed Park Size (Acres)
17	Village of Caledonia	15
18	Village of Mt. Pleasant	25
19	Village of Mt. Pleasant	10
20	Village of Mt. Pleasant	15
21	Village of Mt. Pleasant	10
22	Village of Mt. Pleasant	10
23	Village of Mt. Pleasant	10
24	Village of Mt. Pleasant	75
25	Village of Mt. Pleasant	85
26	Village of Mt. Pleasant	10
27	Village of Sturtevant	10
28	Village of Sturtevant	10
29	Village of Union Grove	15
30	Village of Union Grove	10
31	Village of Union Grove	35
32	Village of Waterford	10
Total		744

Source: Racine County and SEWRPC.

RECOMMENDED BICYCLE AND PEDESTRIAN SYSTEM PLAN FOR THE RACINE COUNTY PLANNING AREA: 2035



XIII-45





UTILITIES AND COMMUNITY FACILITIES PROGRAMS APPLICABLE TO RACINE COUNTY

			Available Technical or
Program Type	Program Entity	Program Service and Description ^a	Financial Assistance
Federal	U.S. Department of Agriculture (USDA)	Rural Energy For America Program Grants (REAP) – The REAP program provides grants for energy audits and renewable energy development assistance. It also provides funds to agricultural producers and rural small businesses to purchase and install renewable energy systems and make energy efficiency improvements. REAP is designed to assist farmers, ranchers, rural small businesses, and rural energy cooperatives who can demonstrate financial need. Grants are limited to \$500,000 for renewable energy systems and \$250,000 for energy efficiency improvements, and can cover up to 25 percent of total eligible project costs. Eligible projects include reducing energy use, which result in savings for the agricultural producer or small business, such as retrofitting lighting or insulation.	Financial
		Rural Utilities Service (RUS) – RUS provides loans, guaranteed loans, and grants for water, sewer, stormwater, and solid waste disposal facilities in cities and towns up to 10,000 people and rural areas with no population limits. These funds may be used to construct, repair, modify, expand, or improve water supply and distribution systems and waste collection and treatment systems, including storm drainage and solid waste disposal facilities; acquire needed land, water sources, and water rights; and pay legal costs and engineering fees to develop the facilities.	Financial
	U.S. Environmental Protection Agency (EPA)	The Federal Water Pollution Control Act (also known as the EPA Clean Water Act) provides various grants to communities to assist with planning and construction to upgrade facilities.	Financial
	National Park Services	Land and Water Conservation Fund (L&WCF) – The L&WCF Act consists of two components: the Federal component establishes a funding source for Federal acquisition of authorized national park, conservation and recreation areas; the State component provides grants to State and local governments to help them acquire, develop and improve outdoor recreation areas.	Financial
State	Wisconsin Department of Natural Resources (WDNR)	Aquatic Invasive Species Control Grants – Priorities for funding projects include projects that have any of the following characteristics: involve multiple water bodies, prevent the spread of aquatic invasive species through education and planning, control pioneer infestations of aquatic invasive species, and control established infestations of aquatic invasive species and restore native aquatic species communities.	Financial
		Clean Water Fund Program (CWFP) – The CWFP is a subsidized loan program included in the Environmental Improvement Fund (EIF). The CWFP provides loans to protect water quality by correcting existing wastewater treatment and urban stormwater problems and preventing future problems. Cities, towns, villages, counties, town sanitary districts, public inland lake protection and rehabilitation districts, metropolitan sewerage districts, and Federally-recognized tribal governments are eligible to apply for funding to support projects such as: construction of treatment works, sewer systems and interceptors necessary to prevent violation of discharge permits, meet new or changed discharge limits, and correct water quality or human health problems in unsewered areas.	Financial
		Knowles-Nelson State Stewardship Fund – The main goals of the program are to preserve natural areas and wildlife habitat, protect water quality and fisheries, and expand opportunities for outdoor recreation. In particular, there are four major components of the program: land acquisition, local assistance, property development on state lands, and conservation of hardwood forests. Some grant programs include: Urban and Community Forestry Program, Aids for the Acquisition and Development of Local Parks, Acquisition of Development Rights, Urban Green Space Program, and Urban Rivers Grant Program.	Financial
		Lake Management and Planning Grants – These support the preparation of lake management plans for the collection and analysis of lake-related information.	Financial
		Lake Protection Grants – These grants are intended to protect or restore lakes and their ecosystems.	Financial
		Planning Assistance to States (Section 22) Program – This program provides assistance to develop plans for the development, utilization, and conservation of water and related land resources.	Financial

Program Type	Program Entity	Program Service and Description ^a	Available Technical or Financial Assistance
State (continued)	Wisconsin Department of Natural Resources (WDNR) (continued)	Recreational Boating and Facilities (RBF) – RBF is a State program intended to encourage the development of recreational motorized boating facilities. The Wisconsin Waterways Commission awards RBF grants.	Financial
		River Planning and Protection Grant Program – These grants help river management organizations form, and to increase their capacity to protect rivers, as well as implement river protection and restoration projects.	Financial
		Remediation and Redevelopment (RR) – The Remediation and Redevelopment (RR) program is an environmental cleanup program, designed to assist in the investigation, cleanup and redevelopment of contaminated properties. It is a comprehensive, streamlined cleanup approach which consolidates state and Federal cleanup efforts into a single program, resulting in time and cost savings. Typically, the RR Program is responsible for overseeing the investigation and cleanup at properties that have soil and/or groundwater contamination; including those properties where contamination may have migrated off-site to other properties; contaminated properties that may be cleaned up and redeveloped, i.e. brownfield properties; spills of waste or product materials (both new and historic spills); leaking underground storage tanks (LUSTS); hazardous waste closures and corrective actions; Superfund sites; and closed solid waste landfills.	Technical
		Safe Drinking Water Loan Program (SDWLP) – The SDWLP provides loans to public water systems to build, upgrade, or replace water supply infrastructure to protect public health and address Federal and state safe drinking water requirements. The WDNR is the primary administrator and the Department of Administration is the financial manager for this program. Counties, towns, cities, and villages are eligible to apply for support for projects to plan, design, construct, or modify public water systems.	Financial
		Waste and Materials Management – The Waste and Materials Management program develops policies and offers technical assistance to actively encourage the reduction, recycling and re-use of wastes as raw material for new products. It oversees management of solid and hazardous waste through storage, treatment and disposal, and works with local governments to reclaim mining sites to valued natural resources. The program's overall goal is to increase waste material reuse and recycling in Wisconsin by 30 percent by the year 2015.	Technical
	Wisconsin Community Action Program Association (WISCAP)	 Rural Community Assistance Program (RCAP) – RCAP is administered by the Wisconsin Community Action Program Association (WISCAP) to help rural communities develop and improve water and wastewater infrastructure. RCAP also helps communities develop capacity to manage, operate, and maintain the water and wastewater utilities. The Wisconsin RCAP provides free comprehensive services and technical assistance, from problem identification through implementation of acceptable, affordable solutions. RCAP services are intended to help community staff to develop their capacity to implement water and wastewater projects and to assist the community in coordinating efforts with consultants and government agencies. RCAP works with rural communities that have low- to moderate- incomes, have populations less than 10,000, are rural villages, towns, sanitary districts, or tribal communities, and have drinking water and/or sanitary waste disposal problems or system development needs. 	Financial
	Wisconsin Rural Development	The Wisconsin Rural Development Program, funded by the USDA, provides financial and technical services for water, sewer, storm water, and solid waste disposal facilities in cities and towns up to 10,000 people and rural areas with no population limits.	
		Distance Learning and Telemedicine Loans and Grants – These grants can create or improve telecommunications, computer networks, and related technology for rural communities, to improve access to education and/or medicinal services. Rural schools, libraries, hospitals, healthcare clinics, and related organizations which operate educational or healthcare facilities, Indian Tribes, consortiums or partnerships, and other organizations that operate educational or healthcare facilities in rural areas are eligible for this program; funds are not provided to state or local governments.	Financial

Program Type	Program Entity	Program Service and Description ^a	Available Technical or Financial Assistance
State (continued)	Wisconsin Rural Development (continued)	Emergency Community Water Assistance Grants – These grants may be available to rural communities when disaster strikes. Public bodies (including tribal governments) and nonprofit corporations servicing rural areas must demonstrate that a significant decline in quantity or quality of water occurred within two years of the date of assistance application to qualify for this program. Grant funds may be used to extend, repair, or perform significant maintenance on existing water systems; construct new water lines, wells or other sources of water, reservoirs, and treatment plants; replace equipment; and pay costs associated with connection or tap fees; pay related expenses such as legal and engineering fees and environmental impact analyses, or acquire rights associated with developing sources of treating, storing, or distributing water; achieve compliance with the requirements of the Federal Water Pollution Control Act or with the Safe Drinking Water Act when noncompliance is directly related to a recent decline in quality of potable water.	Financial
		Rural Water Circuit Rider Technical Assistance – This program provides on-site assistance to help assure cost-effective operation of rural water systems. The assistance is provided at no charge and complements supervisory assistance provided by Rural Development personnel.	Financial
		Solid Waste Management Grants – These grants help reduce or eliminate pollution of water resources and to improve planning and management of solid waste sites. Private, non-profit, tax-exempt organizations with proven experience and ability to provide technical assistance are eligible for this program.	Financial
		Technical Assistance and Training Grants –These grants can be used to identify and evaluate solutions to water and waste disposal problems in rural areas, to assist in preparation of Rural Development grants, and to improve operation and maintenance of existing water and waste disposal in rural areas.	Technical
		Water and Waste Disposal Loans and Grants – This program is open to municipalities, counties, special purpose districts, Indian tribes, and corporations not operated for profit, including cooperatives. Loan and grant funds may be used to construct, repair, modify, expand, or otherwise improve water supply and distribution systems and waste collection and treatment systems, including storm drainage and solid waste disposal facilities; acquire needed land, water sources, and water rights; pay costs such as legal and engineering fees when necessary to develop the facilities.	Financial
	Wisconsin Department of Commerce (DOC)	Community Development Block Grants-Public Facilities (CDBG-PF) – CDGB-PF is a versatile financing tool with eligible funding for improvements to: publicly owned utility system, streets, sidewalks, handicap accessibility projects, community centers, downtown improvements, libraries, fire stations, and medical facilities. Eligible projects must meet one of three objectives: 1) the project principally benefits low- and moderate-income persons, 2) the project eliminates slum and blight, and 3), the proposed activity meets an urgent local need (e.g. typically a catastrophic event). Eligible applicants are units of local government including towns, villages, cities and counties. Entitlement cities (populations of 50,000 or more) and Milwaukee and most of Waukesha County are not eligible.	Financial
		Community Development Block Grants-Public Facilities for Economic Development (CDBG-PFED) – The CDBG-PFED program helps underwrite the cost of municipal infrastructure necessary for business development that retains or creates employment opportunities. Eligible activities include improvements to public facilities such as water systems, sewerage systems, and roads that are owned by a general or special purpose unit of government, and which will principally benefit. Eligible applicants include any general purpose unit of government with a population less than 50,000 that is not enrolled in the Community Development Block Grant Entitlement Program.	Financial
		The Wisconsin Fund – This program provides grants to homeowners and small commercial businesses to help offset some of the cost for the repair, rehabilitation, or replacement of existing failing Private Onsite Wastewater Treatment Systems (POWTS). Eligibility is based upon several criteria, including household income and age of the structure. A portion of the money appropriated by the state government for the program is set aside to fund experimental POWTS with the goal of identifying other acceptable technologies for replacement systems.	Financial

Program Type	Program Entity	Program Service and Description ^a	Available Technical or
State (continued)	Wisconsin Board of Commissioners of Public Lands (BCPL)	State Trust Fund Loan Program – School districts and municipalities may borrow money from the State Trust Fund Loan Program for a wide variety of purposes including buildings, roads, water and sewer facilities, equipment, recreation facilities, industrial development, or other public purposes. Unfunded pension liability loans are another category of loans that have been widely used as government units seek to lower their costs by refinancing at a lower rate. These loans are considered a General Obligation Debt of the municipality or school district. Most municipalities are authorized to borrow up to 5 percent of the unit's equalized valuation; school districts have an authorized level of indebtedness of 10 percent of the district's equalized valuation.	Financial
	Wisconsin Rural Water Association (WRWA)	Ground Water/Wellhead Protection Program – Through this program, a Groundwater Technician provides assistance to small public water supply systems throughout the State of Wisconsin. This assistance helps small systems protect their well recharge areas from contamination.	Technical
		Small Water System Training and Technical Assistance Program – This program provides onsite technical assistance to owner/operators of small, privately-owned public water systems, classified as Other-Than-Municipal (OTM or OC) or Non-Transient Non-Community (NTNC or NN) water systems. During onsite visits, small system Water Circuit Riders provide information and assistance in all areas of water system operation and management in an effort to assist them in their efforts to meet regulations and improve the quality of drinking water.	Technical
		Source Water Protection Program – Funded through the USDA Farm Service Agency, this program provides free protection planning and technical assistance to communities. Source water protection plans focus on protecting community drinking water supplies on a multi- jurisdictional basis. Source water protection plans can focus on a region working together or a municipality and its immediate neighboring townships to help safeguard drinking water sources. This program also provides technical assistance to communities and systems having issues regarding their source water, contamination sources, protection ordinances, and other related issues.	Technical
	Wisconsin Department of Administration (DOA)	Division of Intergovernmental Relations – This division of the DOA provides several services to the public and state, local and tribal governments. It supports counties, municipalities, citizens and businesses by providing support services and grant programs in land use planning, land information and records modernization, municipal boundary review, plat review, demography and coastal management programs. It also analyzes Federal initiatives to ensure that Wisconsin residents receive a fair return on the tax dollars they sent to Washington D.C.	Technical
		Division of Energy Services – This division administers programs to assist households with low income to meet their energy needs, including: the Wisconsin Home Energy Assistance Program (assistance for heating costs, electric costs, and energy crisis situations), the Wisconsin Weatherization Program (repairs and upgrades on the homes of low- income Wisconsin households to make them safer, more comfortable, and more energy efficient), and the Lead Hazard Reduction Program.	Financial
		Division of Enterprise Technology – This division manages the state's information technology (IT) assets and uses technology to improve government efficiency and service delivery. It provides computer services to state agencies and local governments, and operates the statewide voice, data and video telecommunications network. In consultation with business and IT managers from state agencies and local governments, the division develops strategies, policies and standards for enterprise use (cross-agency and multi-jurisdictional use of IT resources). The division provides training, research, and print and mail services to other state agencies.	Technical
	Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP)	Wisconsin Clean Sweep – DATCP administers the Wisconsin Clean Sweep Program, which helps local governments to collect agricultural, residential, and business hazardous wastes through a grant program. Most local governments offer farmers and residents free or nearly free hazardous waste services while businesses are usually required to pay for most disposal costs.	Financial

Program Type	Program Entity	Program Service and Description ^a	Available Technical or Financial Assistance
State (continued)	Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) (continued)	Prescription Drug Collection – In 2008, DATCP provided grants to 12 counties and municipalities during the pilot year of its Prescription Drug Collection Program. The collection allows residents to safely dispose of controlled substances such as oxycodone, hydrocodone, and morphine along with more common drugs like Tylenol, aspirin, Claratin, ibuprofen, and Benadryl.	Financial
	Wisconsin Lakes Partnership	 Wisconsin Lakes Partnership (WLP) – WLP is a collaborative effort between the Wisconsin Department of Natural Resources (WDNR), the Wisconsin Association of Lakes (WAL) and the University of Wisconsin- Extension (UWEX). Together these groups ensure the protection of Wisconsin's inland lakes for future generations. Through the Wisconsin Lakes Partnership, numerous educational programs are available, such as: training for citizen lake monitoring groups, the Clean Boats, Clean Waters Program (a volunteer watercraft inspection program intended as a defense against the spread of aquatic invasive species), and the Lake Leaders Institute, which provides leadership education and networking opportunities for elected officials and other interested stakeholders. WLP also provides information about grant opportunities for lake-related programs and projects. 	Technical
	Wisconsin Be SMART (Save Money and Reduce Trash) Coalition	Wisconsin Be SMART – Be SMART is a statewide partnership of local municipalities, state agencies, non-profit and environmental organizations, businesses, and schools dedicated to reducing waste, increasing recycling and conserving resources in Wisconsin. It also works to provide a consistent waste reduction message through print, television, radio, the internet and retail outlets. The City of Racine is a member of the coalition, and participates in education programs under a Department of Natural Resources Recycling Efficiency Incentive grant.	Technical
State and County	University of Wisconsin – Extension	Watch Your Waste: A Guide to Recycling in Kenosha and Racine Counties – The proper disposal of household hazardous waste is extremely important in order to prevent contamination of waterways, soils and the environment in general. "Watch Your Waste" is a guide created and provided by UW-Extension to give the residents of Kenosha and Racine Counties information about the proper disposal of a variety of household items.	Technical
		Rain Gardens – UW-Extension provides written materials to help residents create rain gardens; these can be found online at http://clean- water.uwex.edu/pubs/home.htm#rain.	Technical
County	Kenosha/Racine Land Trust	Land Trusts – Land trusts work to protect and manage lands with scenic, recreational, agricultural, cultural or historic value. This can involve purchasing or obtaining conservation easements for environmentally valuable lands through member contributions, land or easement donations, and grants obtained from other sources; land trusts may also monitor conservation easements to ensure restricts are being followed.	Financial
	Racine County Lake Associations and Districts	Racine County Lake Associations and Districts – There are 11 organizations in Racine County which are dedicated to the maintenance, management and protection of the following lakes: Bohner Lake, Browns Lake, Lake Denoon, Eagle Lake, Demonte Lake, Honey Lake, Tahoe Lake, Tichigan Lake, Long Lake, Waubeesee Lake, and Wind Lake. Programs and services operated by these groups vary significantly; more information about these groups can be found through the UW-Extension Lakes Program website: http://www.uwsp.edu/cnr/uwexlakes/.	Technical
Local	Caledonia Conservancy	Caledonia Conservancy – The Conservancy was founded in 1994 as an effort to protect the Village of Caledonia's network of equestrian trails. Currently, the land trust owns more than 122 acres. In addition to protecting land, the Conservancy partners with landowners to care for 36 miles of trails east of the Root River, including 8.2 miles of trails that are owned by the Conservancy and open to the public.	Financial
	Root-Pike Watershed Initiative Network (WIN)	Rain Garden Initiative – In 2008, the Root-Pike WIN Rain Garden Initiative funded 32 rain gardens in Racine, Kenosha and Milwaukee Counties. The program also included free workshops, ongoing expert advice, and annual monitoring for three years to make sure the gardens are managing storm water runoff. To be eligible for grant funding through Root-Pike WIN, residents must live within the Root-Pike Watershed, attend a workshop, register their rain garden with the organization, and sign a rain garden agreement and submit a site plan.	Financial

Program Type	Program Entity	Program Service and Description ^a	Available Technical or Financial Assistance
Other	We Energies	Energy for Tomorrow – This is a voluntary program that decreases use of power plants fueled by coal and natural gas, thereby reducing greenhouse gas emissions. When residents sign up at the 25, 50 or 100 percent level, We Energies produces or purchases renewable energy to match that percentage of their electric usage, which replaces equal amounts of electric generation from traditional sources.	Technical and Financial
		We Energies also offers competitive grant programs for nonprofit organizations to plan and implement renewable energy projects, as well as for studying the feasibility of installing an alternative energy project at a customer's facility. Grants range from \$10,000 to \$100,000.	
		Energy Incentive Programs – We Energies offers energy incentive programs to assist commercial, government, institutional and industrial customers in implementing projects that reduce electric demand and energy use. Some of these include: Energy Incentives from We Energies/Focus on Energy Prescriptive Incentive Program (rewards eligible customers replacing less efficient equipment on a one-on-one basis with pre-approved, energy-efficient technologies); Education and Awareness Program (targets commercial, nonprofit, and industrial customers through a variety of training programs); and New Construction Program.	Financial
		Energy Stewards Non-Profits – This program has assisted nonprofit organizations to cut their financial and environmental costs with energy efficient furnaces, lighting, insulation and more. This program is open to non-profit organizations, religious congregations and private schools. The program includes a personal energy assessment of the nonprofit's building(s); cost-benefit payback detail for recommended upgrades; access to special program financial incentives from We Energies; participation in an online community to interact with other building owners; and online access to the energy use history for the nonprofit's buildings.	Technical
Community Fac	cilities		
Federal	U.S. Department of Agriculture (USDA)	Community Facilities Grant Program – This program provides grants to assist in the development of essential community facilities in rural areas and towns of up to 20,000 in population. Grants are authorized on a graduated scale, with applicants located in small communities with low populations and low incomes receiving a higher percentage of grants. These grants are available to public entities such as municipalities, counties, and special-purpose districts, as well as non-profit corporations and tribal governments. This program typically funds projects under special initiatives, such as Native American community development efforts; child care centers linked with the Federal government's Welfare-to-Work initiative; and Federally-designated Enterprise and Champion Communities.	Financial
		Rural Emergency Responders Initiative – This initiative is intended to strengthen the ability of rural communities to respond to local emergencies. The community facilities program funds are used to support rural emergency responder efforts by financing needed equipment and services. Funds are available to public entities, non- profit organizations, and recognized Indian tribes. Funds may be used to finance equipment, vehicles, and/or buildings for the following types of projects: Fire Protection, Rescue/Ambulance, Law Enforcement, Civil Defense/Early Warning Systems, Mobile/Stationary Communications, Emergency Responders Training Facilities, Hospitals, Outpatient Care, Physician's Clinics, Migrant Health Centers, Healthcare Office Buildings, County Health Department Offices, Food Preparation Distribution Centers, and Animal Shelters.	Financial
	U.S. Fire Administration	Assistance to Firefighters Grant Program (AFG) – The AFG program awards one-year grants directly to fire departments and nonaffiliated emergency medical services (EMS) organizations of a State to enhance their abilities with respect to fire and fire-related hazards. The goal is to provide assistance to meet fire departments' and nonaffiliated EMS organizations' firefighting and emergency response needs, supporting organizations that lack the tools and resources necessary to protect the health and safety of the public and their emergency response personnel with respect to fire and all other hazards.	Financial
		Fire Prevention and Safety Grants – These grants assist State, regional, national or local organizations in addressing fire prevention and safety. The goal is to reach high-risk target groups including children, seniors and firefighters, with an emphasis on the prevention of fire-related injuries to children.	Financial

Program Type	Program Entity	Program Service and Description ^a	Available Technical or Financial Assistance
Federal (continued)	U.S. Fire Administration (continued)	Staffing for Adequate Fire and Emergency Response (SAFER) – The SAFER program awards grants directly to volunteer, combination, and career fire departments to help the departments increase their cadre of firefighters. The goal is for SAFER grantees to enhance their ability to attain 24-hour staffing and thus assuring their communities have adequate protection from fire and fire-related hazards. The SAFER grants have two activities that will help grantees attain this goal: 1) hiring of firefighters and 2) recruitment and retention of volunteer firefighters.	Financial
	U.S. Department of Homeland Security Federal Emergency Management Agency (FEMA)	Assistance to Firefighters Grants (AFG) Program – Through the AFG program in Wisconsin, this grant enables local fire departments and emergency medical services organizations to purchase or receive training, conduct first responder health and safety programs, and buy equipment and response vehicles.	Financial
Federal and State	Wisconsin Department of Public Instruction (DPI)	Student Safety/Prevention and Wellness (SSPW) Programs and Initiatives – In addition to supporting academic achievement, DPI administers and supports several statewide SSPW Programs and Initiatives, such as Alcohol and Other Drug Abuse (AODA) Program, Community Learning Centers, Coordinated School Health Programs, Environmental Health, Health Education and Physical Activity, School- Aged Parent Program, School Tobacco Prevention Program, Suicide Prevention, Youth Risk Behavior Survey, and Youth Violence Prevention.	Financial
		National School Lunch Program – Administered by the U.S. Department of Agriculture—Food and Nutrition Service (USDA FNS) and Wisconsin DPI, the National School Lunch Program is a Federally assisted meal program that provides nutritionally balanced, low-cost or free lunches. Children from families with incomes at or below 130 percent of the poverty level are eligible for free meals. Those with incomes between 130 percent and 185 percent of the poverty level are eligible for reduced-price meals, for which students can be charged no more than 40 cents.	Financial
		Of Racine County's 12 public school districts, 11 participate in the National School Lunch Program. (Union Grove High School District is the exception.) Thirteen of Racine County's private schools also participate in the program.	
State and County	Wisconsin Department of Health Services	Community-Based Residential Facilities (CBRF): CBRFs are defined by the State as a place where five or more adults reside: who are not related to the operator or administrator; who do not require care above intermediate level nursing care; and who receive care, treatment or services that are above the level of room and board, but includes no more than three hours of nursing care per week per resident. CBRFs can admit people of advanced age, persons with dementia, developmental disabilities, mental health problems, physical disabilities, traumatic brain injury, AIDS, Alcohol and Other Drug Abuse (AODA) issues, correctional clients, pregnant women needing counseling and/or the terminally ill. As of December 2008, there are 36 CBRFs located in Racine County; they range in capacity from five to 176 beds, and have a minimum age requirement of 18 years for residents.	Technical
County	211 Racine	211 Racine – The 211 Racine Program is the national abbreviated dialing code for access to health and human services information and referral (I&R). This free service connects individuals and families in need and the appropriate community based organizations and government agencies. This program also provides human services information and referral, supportive listening and crisis intervention services. More information can be found online: http://www.211racine.info.	Technical
	Racine County W-2 Children's Services Network and Racine County University of Wisconsin – Extension	Family Resource Directory – This directory focuses on community services and resources that are available throughout Racine County for families with children under age 18, and primarily provides information about nonprofit organizations. The directory is updated annually and can be found on the Racine County UW-Extension website: http://racine.uwex.edu or at various public locations throughout the County such as the Workforce Development Center.	Technical

Program Type	Program Entity	Program Service and Description ^a	Available Technical or Financial Assistance
County (continued)	4C (Community Coordinated Child Care)	4C (Community Coordinated Child Care) – This nonprofit organization serves Racine and Kenosha counties, as well as Milwaukee, Ozaukee, Washington and Waukesha counties. It assists the community in all child care issues, including: help in finding child care, referrals to funding and other support services, and respite care referrals to families having children with special needs. For child care providers, 4C provides assistance with financial questions and other business issues, and continuing education and support group assistance. For employers, 4C provides an assessment of employee child care needs, options for offering child care services and assistance with implementing child care options. For the community at large, 4C provides data regarding supply and demand for child care in the area and brings together a variety of individuals and agencies interested and involved in early childhood care and education in order to best meet the needs of all children.	Technical
	Aging & Disability Resource Center of Racine County (ADRC)	Aging & Disability Resource Center of Racine County (ADRC) – ADRC works to support seniors, adults with disabilities and their families and caregivers by offering easy access to services and by fostering a caring community that values lifelong contributions, maximum independence and individual dignity. ADRC offers information and assistance, options counseling, benefits specialists, senior services, entry to long-term care, and prevention and wellness.	Technical and Financial
	Racine County Public Health Departments	Public Health Departments – Public health departments offer a variety of services such as immunizations, special health needs, home safety, lead testing, prenatal care coordination, mom and baby visits, elderly home visits, smoking cessation classes, sexually transmitted diseases testing and follow-up, radon, air and water quality testing. In Racine County, public health departments are located in the Cities of Racine and Burlington, as well as a joint Department for the Villages of Mt. Pleasant and Caledonia. In addition, many communities conduct local immunization clinics throughout the year.	Financial
	Racine County Workforce Development Center (WDC)	Workforce Development Center (WDC) – The WDC provides subsidized child care funding for eligible families. Families need not be participating in any other type of public assistance program to qualify for funding, but applications must be completed at the WDC facility, with locations in the Cities of Racine and Burlington.	Technical

^aThis table provides a general description of the various utilities and community facilities programs. Other applicable programs can be found in Chapters X, XI, and XIV.