

CMAP



Facility Planning Area Process and Procedures Manual and Amendment Application

December 2015

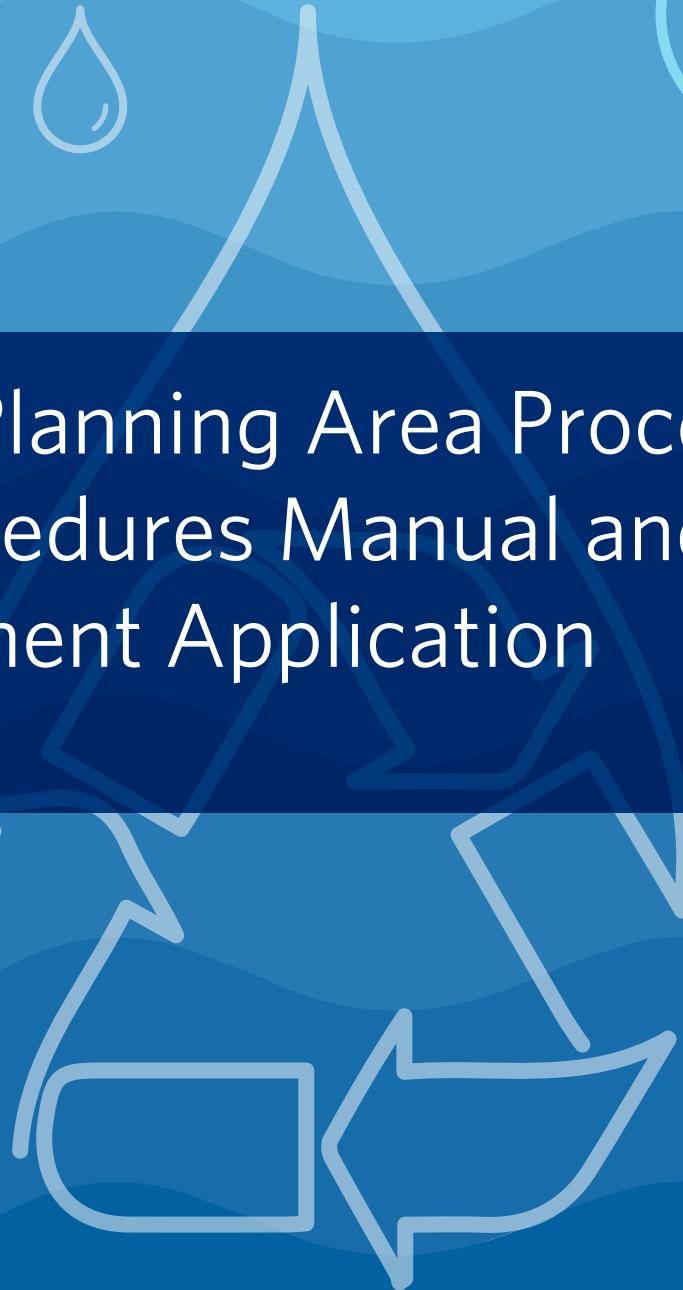


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Introduction

Wastewater collection and treatment systems are important components of the public infrastructure that support growth and development and protect environmental. Development in many communities is built with the expectation of adequate wastewater service, which is generally provided by a municipality, a sanitary district, or a private utility. In addition to enabling development, adequate and appropriate investment in wastewater treatment is a key part of protecting the environment and ultimately the quality of life in northeastern Illinois.

Under federal and state law, the Chicago Metropolitan Agency for Planning (CMAP) is charged with reviewing proposed investments in wastewater infrastructure to ensure that they meet regional goals. These proposals require amending the region's long-time strategy for controlling water pollution, which is contained within the *Areawide Water Quality Management Plan* (AWQMP) and the state *Illinois Water Quality Management Plan* (IWQMP). Designated Management Agencies (DMA)¹, which are responsible for wastewater treatment, have been given responsibility to protect natural resources by controlling both point and nonpoint sources of water pollution. More information about these plans and responsibilities can be found in **Appendix VI. Legislative and Regulatory Background**.

The investments in question include constructing or modifying wastewater treatment plants and changes to areas that may be provided with wastewater service within a 20 year planning horizon (the Facility Planning Area or FPA). CMAP's reviews are advisory in nature. Although it considers recommendations from CMAP, the Illinois Environmental Protection Agency (IEPA) is ultimately responsible for approval of AQWMP amendments.²

More broadly, CMAP has worked with an array of partners in local government, businesses, and other sectors to establish policies to guide growth and investment in the region. The resulting recommendations are contained in GO TO 2040, the region's long-range plan.³ CMAP makes programming decisions, including its assessment of wastewater infrastructure investments, consistent with the recommendations of GO TO 2040.

1 A DMA is an agency identified by the Illinois or Areawide Water Quality Management Plan which has authority for wastewater planning, wastewater treatment and wastewater conveyance rights. Some examples of a DMA include a municipality or a sanitary district.

2 As of September 2, 2010, the IEPA concluded that FPA boundaries do not hinder an applicant's ability to secure a sewer extension permit. Applicants requesting an FPA boundary extension now have the option of going directly to the IEPA to receive a sewer extension permit, thereby eliminating the need for an FPA review.

3 GO TO 2040, <http://www.cmap.illinois.gov/about/2040>.



How this Manual is Organized

This manual describes the process and applicant expectations for CMAP's review of plan amendment requests. It includes three sections: A) Facility Planning Area Amendment Process and Procedures, which outlines administrative procedures, an overview of application fees, and criteria used to assess applications; B) Facility Planning Area Amendment Application Checklists, the items required for review of application materials; and, C) the Facility Planning Area Amendment Application materials. Supporting materials such as a description of the legislative and regulatory authority under which CMAP and the IEPA conduct water quality reviews are included in the appendices.



Section A: Facility Planning Area Amendment Process and Procedures

Applicant Submittal Procedures

Checklist items outlining all required information to be included in the application may be found in **Section B** of this document. Applicants seeking to do one or more of the three actions listed below must complete an **application package found under Section C of this document** or on CMAP's website at <http://www.cmap.illinois.gov/livability/water/water-quality/wastewater-planning>.

- a) Construct or modify a wastewater treatment plant;
- b) Change the boundaries of a FPA; or
- c) Create a new FPA boundary.

Application deadlines may be found by visiting <http://www.cmap.illinois.gov/about/involvement/committees/other-groups/wastewater-committee>. The completed application along with the applicable amendment application fee should be submitted to:

Wastewater Committee
c/o Local Planning Group
Chicago Metropolitan Agency for Planning
233 South Wacker Drive, Suite 800, Chicago, Illinois 60606
Email: dthompson@cmap.illinois.gov (for electronic submissions)

Failure to submit all of the required application documents will result in delays in processing and consideration by CMAP staff and the Wastewater Committee. Applicants are encouraged to discuss the criteria and the application with CMAP before submission. A pre-application meeting may be arranged by contacting CMAP FPA staff at (312) 454-0400.



Administrative Procedures

Amendment requests must be initiated by a DMA or the IEPA. The procedure for handling amendment requests is as follows:

1. Upon receipt of an application, CMAP issues an electronic public notice requesting comments on the requested water quality plan amendment within 30 days. Notice of the meeting and a copy of the application are sent to affected parties, including sanitary districts, environmental groups, state agencies, watershed planning groups, counties and municipalities, local governments, members of the Wastewater Committee, and other interested parties.
2. CMAP prepares a review based on the Facility Planning Area Review Criteria described below and on comments submitted by affected parties. On occasion, additional information may be requested from the applicant to respond to issues raised or to fill gaps where needed. CMAP's review indicates whether the amendment request is consistent with each of the criteria or whether the information provided by the applicant is insufficient to determine consistency. CMAP's review is distributed to the applicant at least two weeks prior to the Wastewater Committee meeting and posted on the CMAP website for other affected/ interested parties one week prior to the meeting of the Wastewater Committee at <http://www.cmap.illinois.gov/about/involvement/committees/other-groups/wastewater-committee/minutes>.⁴
3. The Wastewater Committee considers the requested amendment at its first scheduled monthly meeting following the 30 business day processing and public notice period. The Committee may offer support or non-support for the requested amendment. If additional supporting material is needed, the Committee may defer consideration for one month or until the next scheduled Wastewater Committee meeting (Appendix I: Deferral Guidelines). Both the Wastewater Committee and CMAP recommendations are forwarded to the IEPA and the applicant.
4. If the application is approved by the IEPA, the IWQMP is updated (on an annual basis) to reflect approval. FPA base maps depicting FPA boundaries are updated quarterly to reflect approved requests. Maps may be found on CMAP's website at: <http://www.cmap.illinois.gov/livability/water/water-quality/wastewater-planning>.

FPA amendment requests that do not involve policy changes but only changes or corrections in the factual basis of the plan and its supporting tables will be processed by staff within 15 days of receipt and will not require Wastewater Committee action. These changes typically include re-designation of management agencies, correction of wastewater facility maps, or FPA

⁴ A description of the Wastewater Committee is found in Appendix V: State and Regional Responsibilities.



name changes.

Water Quality Fee for FPA Modifications

FPA amendment requests to the IWQMP are assessed a \$10.00 per acre fee⁵ to recover the costs of conducting boundary amendment changes. This fee is in accordance with Section 33.5(b) of the Northeastern Illinois Plan Act, as amended (70 ILCS 1705).⁶ The fee does not apply to submittals involving the construction and/or expansion of facilities located within existing FPAs, provided no accompanying change in FPA boundary is involved. No fees are charged for FPA name changes or correction of FPA maps.

Payment of fees must be made by check payable to CMAP, independently for each amendment request affecting facility planning area boundaries, and shall be submitted along with the amendment request application.

⁵ This fee was established on June 9, 1994 and has not changed.

⁶ Section 33.5(a) and (b) of the Northeastern Illinois Planning Act, as amended (70 ILCS 1705) <http://www.ipcb.state.il.us/SLR/IPCBandIEPAEnvironmentalRegulations-Title35.aspx>, also <http://www.ilga.gov/commission/jcar/admincode/035/03500399sections.html> (accessed June 3, 2014).



Facility Planning Area Review Criteria

The following four criteria are used to review FPA amendment requests and issue a recommendation.

Review Criterion 1

The households for which the proposed amendment is designed to serve should be consistent with the long range forecasts most recently produced and adopted by CMAP. CMAP staff may agree to harmonize regional and local forecasts as provided in the Water Quality Management Plan Amendment Process and Procedures Manual.

Population, Household and Employment Forecasts

CMAP's 2040 *Forecast of Population, Households and Employment* (GO TO 2040 forecast)⁷ reflects the implementation of GO TO 2040, the comprehensive regional plan. The forecast was developed by first establishing a reference scenario based on current population and land use trends, then employing mathematical modeling techniques to estimate how the distribution of population and employment would change in response to policies that would increase or dampen the type and amount of development within a given area.

Unless unforeseen local conditions arise, the number of households for which the proposed amendment is designed should fall within the forecasts most recently produced and adopted by CMAP for the relevant area. The applicant should provide its service population forecast and compare it to the GO TO 2040 forecast for the same area. If the applicant's forecast exceeds the GO TO 2040 forecast by 15 percent or more, the applicant will need to show that its alternative forecast adheres to CMAP's Forecast Principles,⁸ which include articulating the reasoning and the mathematics behind the alternative forecast. If CMAP determines the alternative forecast is reasonable for the area, it may accept the alternative and recommend a finding of consistency. However, approved household estimates are not considered revisions to the GO TO 2040 forecasts, which are addressed during plan updates.

The applicant should also include existing and projected wastewater flows that will be generated from its service area. Wastewater flow projection guidance should be based on Title 35: of the Environmental Protection Administrative Code. See the Joint Committee Administrative Rules for additional clarification

<http://ilga.gov/commission/jcar/admincode/035/03500370sections.html>.

⁷ GIS files for the GO TO 2040 forecasts are available online at <http://www.cmap.illinois.gov/data/demographics/population-forecast>

⁸ Chicago Metropolitan Agency for Planning's Forecasting Principles http://www.cmap.illinois.gov/documents/10180/13313/CMAP-Forecast-Principles_10-16-12_REV.pdf/0dcb43a9-819a-4e03-80b5-ca79f3550a88 (accessed October 29, 2015).



Review Criterion 2

The proposed amendment should not reduce the effectiveness of the water quality improvement strategy contained in the original plan, either for point source or nonpoint source control.

Water Quality and Nonpoint Source Control

An objective of the AWQMP is the “maintenance of present levels of quality in all waterways in which water quality is better than state standards.”⁹ In addition to nonpoint source control ordinances, communities and sanitary districts maintain water quality by limiting the levels of pollutants in their point source discharges of wastewater.

Applicants should demonstrate that they are taking steps to maintain water quality within their service areas. An applicant can demonstrate this by providing details on 1) the treatment practices they plan to employ at wastewater plants to minimize any increases in pollutant discharges (including biochemical oxygen demand (BOD), total suspended solids (TSS), ammonia, nutrients (P and N), metals and toxins, as well as personal care and pharmaceutical products and their breakdown products), and 2) an evaluation of the impact which an expansion of or new point source discharge of wastewater will have on the levels of pollutants in the receiving water body.

Both the AWQMP and the IWQMP indicate that the control of nonpoint source pollution is necessary to prevent impairment of surface waters and include specific recommendations for construction site runoff, urban runoff, and other potential pollution sources. The plans indicate that DMAs, including municipal and county governments, are responsible for the control of nonpoint sources and areawide planning agencies, such as CMAP, are responsible for providing technical assistance.

In previous versions of this manual, applicants were asked to show that they enforced ordinances consistent with CMAP’s *Model Soil Erosion and Sediment Control Ordinance*, *Model Stormwater Drainage and Detention Ordinance*, *Model Flood Plain Ordinance*, and *Model Stream and Wetland Protection Ordinance* as a condition for the approval of a new FPA or an FPA modification. Through their countywide ordinances, most counties within northeastern Illinois have adopted standards that are generally consistent with CMAP’s model ordinances.¹⁰ The exception is Will County, whose ordinance has no provisions for stream and wetland protection.

For amendment areas within Will County, the applicant should complete the checklist of nonpoint source, drainage, and other standards found in **Appendix II. Nonpoint Source Control Provisions for Will County Amendment Requests**. For any standards that are not

⁹ Areawide Water Quality Management Plan, Section 2.03.a.

¹⁰ Facility Planning Area Requests <http://www.cmap.illinois.gov/livability/water/water-quality-management/about-fpa-requests> (accessed February 12, 2015).



met, the applicant should provide a village board or city council resolution indicating its intention to pass ordinance requirements that meet these standards within six months. CMAP will request a status of this resolution following the six-month time frame. Sanitary district applicants should provide such resolutions from the local government units that have land use and building permit authority within the amendment area. Applicants who decline to provide such a resolution must clearly state their reason for refusal, which will be included in the public record.

It will not be necessary for the applicant to adopt verbatim the CMAP model ordinance and all relevant technical criteria; rather the local ordinances and/or regulations should be generally consistent with the checklist of nonpoint source standards contained in the amendment application to receive a recommendation of support.

Water Conservation

An objective of the AWQMP is the “reduction, by all practical means, of wastewater volumes in the region.”¹¹ GO TO 2040 and Water 2050 indicate that water conservation is important to protecting the region’s water supply. One way to reduce wastewater volumes is to reduce water use by residents, businesses, and institutions. While consideration of a water conservation ordinance as part of the FPA amendment process is relatively new, some local governments have already adopted protections comparable to CMAP’s *Model Water Conservation Ordinance*.

Applicants should demonstrate that they are taking steps to reduce water consumption by residents, businesses, and institutions within their service areas. An applicant can demonstrate this by:

1. Adopting standards comparable to CMAP’s Model Water Conservation Ordinance¹², which describes a number of strategies for achieving greater water-use efficiency and conservation (see Appendix III: Model Water Conservation Ordinance Components) for a listing of these strategies); or
2. Showing that water conservation programs with standards similar to the Model Water Conservation Ordinance are being undertaken by the water utility serving the area.

An applicant choosing the first option should provide a copy of the water conservation ordinance language for review, along with any commentary needed. An applicant choosing the second option should summarize the conservation measures the relevant water utility is undertaking.

11 Areawide Water Quality Management Plan, Section 20.02.i.

12 The need for a Model Water Use Conservation Ordinance resulted from various federal acts, advances in water efficiencies, and the findings of Water 2050: Northeastern Illinois Regional Water Supply/Demand Plan adopted by CMAP in 2010. Water 2050 was the result of a three-year planning effort undertaken by CMAP and the Regional Water Supply Planning Group (RWSPG) in response to Executive Order 2006-1 issued in January 2006 by the Governor of Illinois. For more information, visit http://www.cmap.illinois.gov/moving-forward-in-detail/-/asset_publisher/Q4En/content/model-water-conservation-ordinance?isMovingForward=1 (accessed May 7, 2014).



It should be noted that water conservation ordinances may need to be updated as local conditions change and water efficient technologies continue to advance. Governing bodies in the region may benefit from using the model ordinance as a marketing tool to educate their residents and businesses on the various aspects of water conservation and to form partnerships for addressing sustainable water use.

Water Reuse

Wastewater reuse is the practice of reusing “treated wastewater for beneficial purposes such as agricultural and landscape irrigation, industrial processes, toilet flushing, and replenishing a ground water basin (referred to as ground water recharge).”¹³ Wastewater reuse falls into two categories: direct non-potable reuse and indirect potable reuse. Direct non-potable reuse, in the context of wastewater treatment, refers to the reuse of wastewater from a centralized plant for uses such as power plant cooling and agricultural irrigation. Indirect potable reuse includes using reclaimed water which has first been discharged to a stream or lake before it is withdrawn and reused for landscape irrigation purposes.

Wastewater reuse has many benefits. It can replenish aquifers, reduce energy consumption related to water production, and reduce nutrient loads to receiving waterbodies. Some examples of wastewater reuse applications in northeastern Illinois include the Village of Richmond and the Elk Grove Village Park District. The Village of Richmond developed a water reuse ordinance which required applicable water users (e.g. new developments) to use municipal treated wastewater. The Elk Grove Park District’s reuse efforts, initiated in 1982, include using treated effluent to irrigate a local golf course.¹⁴

More stringent future nutrient standards intended to reduce nutrient-related impairments of streams and rivers will likely require wastewater treatment facilities to reduce nutrient loads to receiving waters. Applicants are encouraged to consider the application of a no-discharge system such as land application or partial reuse as alternatives to conventional wastewater treatment where feasible.

Applicants are encouraged to provide a description of water reuse opportunities that they have evaluated. These may include partial reuse or full land application¹⁵ of wastewater. Applicants considering land application should submit a summary describing the reuse alternative being considered, a map depicting the area where reuse will be applied, and an evaluation of soils and summary of costs for the alternative. For additional information on wastewater reuse

13 U.S. EPA, Region 9 Water Recycling and Reuse: The Environmental Benefits, <http://www.epa.gov/region9/water/recycling/> (accessed March 30, 2015).

14 Anderson, P. and Y. Meng (2011). Assessing opportunities for municipal wastewater reuse in the metropolitan Chicago area. Illinois Sustainable Technology Center Report. http://www.istc.illinois.edu/info/library_docs/TR/TR047.pdf (accessed June 2, 2014).

15 Land application of treated wastewater is not applicable on all sites and must meet certain criteria (depth to ground water, location to surface water, etc.) Illinois Pollution Control Board. Title 35: Environmental Protection, Part 372. <http://www.ipcb.state.il.us/documents/dsweb/Get/Document-12046/> (accessed June 3, 2014).

including case studies and guidance documents, see **Appendix IV. Helpful Planning Resources**.

Review Criterion 3

The proposed amendment should not adversely affect adjoining units of government.

Intergovernmental Cooperation

This review criterion considers potential impacts on adjacent communities. Applicants should provide a map indicating the location of the proposed FPA, municipal boundaries, and boundary agreements with neighboring communities if the FPA has not been annexed. The proposed FPA should be contained within the boundary agreements. CMAP encourages applicants to meet with adjacent communities as well as county officials and other interested parties to present and discuss their FPA proposals prior to submittal of their amendment application. The applicant should provide documentation of notification to and comments from all municipalities and the county within and adjacent to the existing FPA and requested amendment area.

If the proposed FPA amendment is not consistent with existing boundary agreements, CMAP is not likely to recommend approval of the request. CMAP and IEPA believe that boundary agreements should be supported and that the FPA amendment process is not the proper way in which to invalidate a boundary agreement.

Review Criterion 4

The proposed amendment should be consistent with other county and regional plans or state policies.

Regional, State, and Local Plan Consistency

A decision to invest in a major community facility such as a wastewater treatment plant should be the outcome of a deliberative, participatory local planning process that broadly considers community needs. In evaluating compliance with this criterion, CMAP considers applicable resource protection plans and land use plans from the local, county, regional, and state level. The applicant should demonstrate that the amendment is directly recommended by, or is at least consistent with GO TO 2040,¹⁶ as well as a local plan published within the past five years.

Regional Green Infrastructure

It is a goal of GO TO 2040 to ensure that wastewater and other “gray infrastructure”¹⁷ expansion does not compromise local and regional green infrastructure networks, which are important, strategically planned, and interconnected natural areas and open spaces.

¹⁶ Chicago Metropolitan Agency for Planning’s GO TO 2040 Plan, <http://www.cmap.illinois.gov/about/2040> (accessed June 3, 2014).

¹⁷ Gray Infrastructure often refers to infrastructure built (water tanks, pipes) to transport wastewater: U.S. EPA Green and Gray Infrastructure Research <http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm> (accessed May 7, 2014).



Using an overlay analysis, the applicant should indicate the extent to which the regional green infrastructure network falls within the proposed amendment area. If a minimum of 10 percent of the amendment area is part of a regional, county, or local green infrastructure network, then the applicant should describe the local government strategy for ensuring that the regional green infrastructure network is protected from future disturbance. Protection strategies can include such measures as an overlay ordinance for green infrastructure protection, a local open space acquisition fund, a conservation design ordinance that permits higher densities in exchange for protecting sensitive areas, as well as other strategies. The applicant should provide a city council or village board resolution indicating the strategies it will adopt (or has already adopted) to conserve the regional green infrastructure network.

Upon request, CMAP will provide technical assistance for identifying green infrastructure within an amendment area and developing protective measures. In the instance where a county or city green infrastructure plan exists, an applicant should describe protection strategies and/or adopt the local green infrastructure vision in place of the regional green infrastructure vision. For background information and green infrastructure data, please visit <https://datahub.cmap.illinois.gov/dataset/green-infrastructure-vision-2-2-giv-refinement> and <https://datahub.cmap.illinois.gov/group/green-infrastructure-vision>.

Livable Communities

GO TO 2040 encourages the development a high quality of life in the region through the creation of *livable communities*. These places tend to be attractive communities that offer a range of housing options, diverse transportation and recreation choices, and access to employment, education, health care, and other assets. GO TO 2040 encourages investment that strengthens existing communities and supports new development and redevelopment that is focused and supports a mix of uses.

CMAP encourages applicants to consider how the proposed investment promotes the livability principles of GO TO 2040. As part of the FPA review, an applicant is encouraged to provide a statement describing how the proposed investment or change in wastewater service promotes livability in a community. Refer to the Livable Communities section of GO TO 2040,¹⁸ which recommends a variety of ways that local governments can improve livability, such as:

- A. New development that supports the use of transit
- B. Increased housing diversity and affordability
- C. Multijurisdictional planning, service sharing, or other improvements in governance
- D. Improved efficiency in infrastructure or services
- E. Increases in jobs and employment

¹⁸ Chicago Metropolitan Agency for Planning's GO TO 2040 Plan, <http://www.cmap.illinois.gov/2040/livable-communities> (accessed June 3, 2014).



- F. Better stormwater management through the use of green stormwater infrastructure
- G. Full cost water pricing or other water utilities, such as stormwater utilities
- H. Increase in park space and access in a community
- I. Protection of groundwater recharge and sensitive aquifer recharge areas

Energy Efficiency and Wastewater

One way to support GO TO 2040's goal to "manage and conserve water and energy resources" is to increase energy efficiency at wastewater treatment plants, which are major energy consumers. Consequently, performing energy audits at wastewater facilities is one management strategy to help decrease the demand for natural resources. Audits also lay the groundwork for improved efficiency at wastewater facilities and may reduce operating costs.

Implementing energy efficiency strategies is best done during wastewater treatment plant upgrades and expansions. As such, an applicant requesting an expansion of their wastewater facility is encouraged to perform an energy audit. The audit should include a summary of the highest energy use components at their wastewater facility, and describe approaches that will be used to improve energy efficiency. The audit should, at a minimum, include a desktop analysis.

The EPA's energy strategy guide for wastewater facilities suggests that energy efficient upgrades may fall into one of three basic categories: operational modifications, upgrading equipment, and facility modifications. Operational changes might include reducing peak demand to decrease the amount of energy needed to operate specific functions. Upgrading equipment can include replacing items including pumps and blowers with more efficient equipment. Facility modifications involve installing energy efficient lighting, sealing leaks, and installing efficient windows.

Other energy efficient upgrades include combining heat and power (CHP) to generate reliable sources of power and heat for the wastewater treatment plant. In such cases, anaerobic digesters may use biogas flow in a CHP system to energy electricity for heating for power purposes.¹⁹ Currently, 139 CHP units exist in Illinois and include the Fox Lake wastewater treatment plant and the Downers Grove Sanitary District WWTP.^{20, 21}

19 U.S. EPA's Municipal Wastewater Treatment Facilities: <http://www.epa.gov/chp/markets/wastewater.html> (accessed June 3, 2014).

20 Combined Heat and Power Units located in Illinois: <http://www.eea-inc.com/chpdata/States/IL.html> (accessed June 19, 2014).

21 Illinois Government News Network: <http://www3.illinois.gov/PressReleases/ShowPressRelease.cfm?SubjectID=29&RecNum=10557> (accessed June 19, 2014).



Long-term costs savings can also be achieved in addition to reduced energy consumption and upfront installation costs by accessing a variety of incentives available at the state and federal level. Potential funding sources, case studies, and energy audit guidance documents are included in **Appendix IV. Helpful Planning Resources.**

Agricultural Preservation Areas

As part of the Farmland Preservation Act (505 ILCS 75/1 et seq), an Illinois Department of Agriculture (IDOA) review of an FPA amendment is included in the FPA review process. When an FPA request is proposed to be extended into areas that include agricultural land, the applicant must provide information that will allow the IDOA to conduct a study of the potential farmland conversion impacts associated with the FPA boundary change request. If land within the FPA boundary amendment area has been permanently preserved as farmland through acquisition, easement or other mechanism, the applicant should ensure that future development within the proposed FPA will be or has been planned in a manner that will minimize adverse impacts on agricultural resources, businesses, and activities. This may include using conservation development approaches to minimize encroachment of development on agricultural land and activities and communicating the status of the preserve farmland to future residents, landowners, or tenants. A recommendation by the Wastewater Committee will be based on the degree to which the proposal satisfies the IDOA's guidelines for FPA requests, which may be found by visiting

<http://www.agriculture.illinois.gov/Environment/LandWater/FPABoundarychangerequest.pdf>.



Section B: Facility Planning Area Amendment Application Checklists

The FPA amendment checklists were developed to assist an applicant with submitting a complete application for review. Applicants should enclose the completed checklist(s) with the application submittal. Items listed in Table 1 are required for review by both the Wastewater Committee and CMAP. The additional items listed in Table 2 will be reviewed by CMAP staff and are important elements to consider in determining benefits, impacts, and quality of life issues in surrounding communities and the region overall. CMAP requests that these items be submitted in the spirit of promoting sound planning and development in the region.

Items Required for Wastewater Committee Review

Items required for submittal help achieve the principal goal of the Clean Water Act to “restore and maintain the chemical, physical, and biological integrity of the Nations’ waters.”²² They are also identified in meeting regional, state, and areawide water quality planning objectives.

Table 1. Items Required for Wastewater Committee Review

Information Requested for all Applicants
1. Completed Applicant’s Signature Page
2. Contact Information
3. Type of Amendment Requested
4. Water Quality Fee for Requested FPA Modification (at \$10 per acre of expansion)
5. Description and Boundary maps of Existing FPA and Requested Amendment Area
6. Identification of all Facility Planning Areas within 1.5 miles
7. Existing and Future Population and Households, and Assessment of Consistency with GO TO 2040 Forecast of Population and Households for Amendment Area
8. Nonpoint Source Control Ordinance Checklist (applicable for amendment requests within Will County)
9. Applicable Resolutions Including Intent to Adopt Comparable Standards within Six Months (applicable for amendment requests within Will County)

²² Clean Water Act & 101(a) 33 U.S.C. & 1251(a).



Items for CMAP Review

When municipalities plan for wastewater treatment services, they are planning for growth and development over a 20-year period that will inevitably result in impacts to communities and quality of life. Infrastructure investments, the loss of open space and agricultural land, and the pattern and density of new residential and commercial development will directly and indirectly affect not only the quality of surface waters but also other natural and community resources throughout a much broader area. It is essential that the regional agency work with local communities to ensure the best possible outcome for affected communities and the region overall.

The items in Table 2 represent elements vital to regional and local planning and to protecting a high quality of life for the region's communities. Growth that does not consider the impact on water supply can be shortsighted and result in shortages and long term fiscal challenges. Considering water reuse is an important option to help protect the finite water supply that many communities rely on to serve new development. The regional green infrastructure network provides valuable benefits and services, including waterway protection, habitat, water quality improvement, flood control, and recreation, that are highly expensive if not impossible to replicate once lost. Livability, which includes many factors such as access to daily necessities, safe and secure communities, and adequate housing and employment opportunities, should remain a top priority during development decisions. Understanding energy demands of wastewater treatment and opportunities to reduce it have both financial and environmental benefits, including reducing greenhouse gas emissions.

These are local and regional issues that require consideration in development decisions, and applicants are encouraged to submit the following items as part of their amendment submittal. Upon request, CMAP will provide technical support to assist applicants in responding to this request.



Table 2. Items for CMAP Review

Information Requested for all Applicants
1. Completed Applicant's Signature Page
2. Contact Information
3. Type of Amendment Requested
4. Water Quality Fee for Requested FPA Modification (at \$10 per acre of expansion)
5. Description and Boundary maps of Existing FPA and Requested Amendment Area
6. Identification of all Facility Planning Areas within 1.5 miles
7. Existing and Future Population and Households, and Assessment of Consistency with GO TO 2040 Forecast of Population and Households for Amendment Area
8. Nonpoint Source Control Ordinance Checklist (applicable for amendment requests within Will County)
9. Applicable Resolutions Including Intent to Adopt Comparable Standards within Six Months (applicable for amendment requests within Will County)
10. Water Conservation Codes Enforced within the Amendment Area or Description of Conservation Program
11. Summary of Water Reuse Opportunities Examined, e.g., Land Application
12. Summary of Wastewater Treatment Practices
13. Description of Existing Receiving Stream Water Quality and Use Impairments
14. Analysis of Water Quality Impacts
15. Documentation of Notification to and Comments from all Municipalities and the County within the Existing FPA and Requested Amendment Area
16. Applicable Boundary Agreements with Neighboring Communities
17. Summary Indicating How the Proposed Amendment Promotes Livability
Additional Information Requested for Facility Construction or Expansion
18. Most Recent Plan including Section of Plan Recommending Wastewater Infrastructure Expansion
19. Energy Assessment Produced Using, at Minimum, a Desktop Analysis
Additional Information Requested for FPA Boundary Amendments
20. Legal Descriptions of Existing FPA or List of Parcel PIN Numbers



21. Existing Land uses and Zoning within and Adjacent to the Amendment Area
22. Map Indicating the Location of Green Infrastructure
23. List of Protection Strategies Proposed for Amendment Requests Impacting Green Infrastructure
24. Resolution Indicating Protection Strategies that Have Been or Will Be Adopted for Amendment Requests Impacting Green Infrastructure



Section C: Facility Planning Area Amendment Application

Completion of the application is required for CMAP to initiate its advisory water quality amendment review. All required sections and questions must be answered by the applicant. The accompanying Facility Planning Area Application Process and Procedures (Section A of this manual) and Amendment Application Checklists (Section B of this manual) provide additional background and information for completing the application. Incomplete applications will be returned to the applicant and will delay initiation of the CMAP staff and the Wastewater Committee's advisory water quality amendment.

Amendment requests for the construction of new, or the expansion of existing wastewater treatment facilities (including land treatment systems) must also complete the section titled **"Additional Information Requested for Facility Construction or Expansion."** Amendment requests for the creation and/or modification of a facility planning area boundary also require the completion of the section titled **"Additional Information Requested for FPA Boundary Amendments."**

The completed amendment application should be submitted to:

Wastewater Committee
c/o Local Planning Group
Chicago Metropolitan Agency for Planning
233 South Wacker Drive, Suite 800, Chicago, Illinois 60606
Email: dthompson@cmmap.illinois.gov (for electronic submissions)



Information Requested from All Applicants

Completed Applicant Signature Page

(Checklist Item No. 1)

This amendment request is filed pursuant to the Chicago Metropolitan Agency for Planning requirements for revising water quality management plans. I certify that I am familiar with the information contained in the application, and to the best of my knowledge, such information is true, complete, and accurate. I further certify that I possess the authority to request and submit an amendment petition.

Applicant Printed Name

Applicant Signature

Entity of Applicant

Date

Contact Information

(Checklist Item No. 2)

Applicant's Authorized Agent and Contact Person

Name:

Title:

Entity:

Address:

City:

State:

Zip:

Phone:

Fax:

Email:

Has the elected board of the applicant entity formally endorsed the submittal of this water quality amendment application?

Yes

If yes, please attach resolution, minutes or other documentation of action.

No

If no, please indicate when board action is scheduled to occur.



Type of Amendment Requested

(Checklist Item No. 3)

Type of Request (Check all that apply)	Additional Info
New Treatment Facility/Discharge ____	Capacity requested ____ mgd
Expanded Plant Capacity ____	Capacity requested ____ mgd
Dissolution of FPA ____	Acreage of existing FPA ____
FPA Name Change ____	Proposed Name ____ Current Name ____
FPA Boundary Change	Acreage requested ____
FPA Creation ____	Acreage requested ____
Land Treatment System ____	Acreage to be served ____
Plant Phase Out ____	Capacity (mgd) ____
FPA Map Correction ____	

Water Quality Fee for Requested FPA Modification

(Checklist Item No. 4)

- Indicate the Total Amendment Request Fee (\$10 per acre) _____



Description and Boundary Maps of Existing FPA and Requested Amendment Area

(Checklist Item No. 5)

A. Provide a summary description of and need for the requested amendment. The summary should include a discussion of existing and future wastewater treatment needs in the amendment area.

B. Size of the existing FPA (in acres). _____

Attach a map that clearly delineates the existing facility planning area, municipal boundaries, the amendment area or location of the wastewater treatment plant facility, and the area the facility will serve (at a scale of 1 inch = 2,000 feet.) A map of the service area should be provided even if a boundary change is not requested. (FPA maps may be downloaded by visiting <http://www.cmap.illinois.gov/livability/water/water-quality-management/about-fpa-requests/maps.>)

C. Provide the following information regarding the environmental characteristics of the requested amendment area. Use the most recent data for the requested information.

- a. Surface Waterbodies (streams, lakes): Map attached? No ___ Yes ___
- b. Maps should identify all surface waterbodies located within both the current FPA boundaries and the requested amendment area.
- c. Wetlands: Map attached? No ___ Yes ___
- d. Maps should provide size and location of any identified wetlands located within or immediately adjacent to the requested amendment area.
- e. Floodplains: Map attached? No ___ Yes ___
- f. Maps should give size and location of all IDNR/OWR – Federal Emergency Management Agency regulatory floodplains located in or immediately adjacent to the requested amendment area.
- g. Watershed Boundaries: Map attached? No ___ Yes ___
- h. Maps should provide size and location of the watersheds of all surface waterbodies located within the current FPA and the requested amendment area.
- i. Other: Map attached? No ___ Yes ___
- j. Attach maps identifying any aquifer, groundwater recharge area, wellhead protection zones, and state designated natural areas located on or immediately adjacent to the requested amendment area.



Identification of All Facility Planning Areas within 1.5 miles

(Checklist Item 6)

- A. Identify (on a map) all FPAs within 1.5 miles of the requested amendment area or new or existing wastewater treatment plant.

Population and Household Forecasts

(Checklist Item 7)

- A. Provide the following information for the existing and proposed service area for amendment requests and/or new/proposed wastewater facility.

	Existing Service Area	Proposed Service Area	Target Year	CMAP Forecast
Population				
Number of Households				
Household Population Equivalent (PE) ¹				
Employment				
Employment Population Equivalent (PE) ²				
Total Population Equivalent (PE)				
¹ Assume: 3.5 PE per Household. ² Assume: 0.15 PE per worker.				

Daily Average Wastewater Flow	Current (min/max)	Forecasted (min/max)	Target Year for Proposed Flows
Domestic			
Industrial			
Total			

- B. How did you derive the residential and employment population equivalents?
- C. Are the applicant’s population projections consistent with the projections for the 20-year planning period set forth in the currently approved facility plan or with CMAP’s 20 year forecasts for the facility planning area?

No ___ Yes ___



D. If the applicant's population projection are inconsistent and exceed CMAP's forecasts by 15% or more, describe the reason for the inconsistency and calculations behind the explanation. See CMAP's Forecasting Principles for additional clarification <http://www.cmap.illinois.gov/data/demographics/population-forecast>.

E. How did you derive wastewater design flow information for the amendment request?

F. Are the wastewater flow forecast calculations consistent with Title 35 of the Illinois Administrative Code?

No ____ Yes ____

Nonpoint Source Control Ordinances and Applicable Resolutions (Will County Applicants only)

(Checklist Items 8 and 9)

A. Will County applicants must complete the Nonpoint Source Control Ordinance Section found in Appendix II. Nonpoint Source Control Provisions for Will County Amendment Requests

Water Conservation Codes Enforced within the Amendment Area

(Checklist Item 10)

A. Is the amendment area subject to a Water Conservation Ordinance?

Yes ____ No ____ If yes, attach a copy.

B. Date the Water Conservation Ordinance was adopted: _____

C. Is there an anticipated date to update the Water Conservation Ordinance?

Yes ____ No ____ If yes, please provide an anticipated date.



- D. Describe the strategy the relevant water utility will undertake to achieve greater water-use efficiency and conservation if such an ordinance does not exist. (See **Appendix III: Model Water Conservation Ordinance Components**) for a list of example strategies).

Summary of Water Reuse Opportunities

(Checklist Item 11)

- A. Describe water reuse options that have been evaluated as an alternative to conventional treatment (e.g. zero discharge system including land application or partial reuse).

- B. Provide a summary of the selected water reuse alternative.

- C. If a water reuse alternative was selected, attach a topographic or aerial map of the area that identifies the present and proposed land uses and the area where the selected reuse alternative will be applied.

- D. If water reuse strategy includes land application, irrigation, or other discharge to the land surface or subsurface, include an evaluation of soils including soils classifications and characteristics such as permeability, depth to groundwater, and any other known relevant soil and groundwater data.

- E. Provide a summary of cost for the selected water reuse alternative.



Wastewater Treatment Practices and Water Quality Impacts

(Checklist Items 12, 13 and 14)

A. Facility Name and Address

B. Facility Owner: _____

Public ____ Private ____ Other ____ (If other, specify)

C. Facility Operator: _____

D. Describe treatment process currently utilized by wastewater treatment plant.

E. NPDES Permit Number: _____ Status of Permit: _____

Attach copy of valid NPDES permit.

F. Provide the last 12 months of influent and effluent data (in tabulated form) on all monitored parameters with daily maximum and monthly average values including flow.

G. Type of receiving waterbody: Stream: ____ Lake: ____ Well Injection: ____ Other: ____

If other, please describe.

H. Name of receiving waterbody: _____

I. Discharge location

County: _____ Township Name: _____

Geographic Township: _____ Range: _____ Section: _____

J. Average annual flow of receiving stream upstream of the discharge location: ____ cfs

Information source: _____



K. 7-day, 10-year low flow of receiving stream: ____ cfs

Information source: _____

L. Description of current water quality in receiving waterbody:

Information source: _____

M. Is receiving waterbody listed in most recent Illinois EPA impaired waterways (303d) list?

No ____ Yes ____

If yes, for which parameters? _____

What are the identified causes and sources of impairment? _____

Provide a copy of Illinois EPA Stream Assessment Report.

N. Summarize the ability of the receiving water body to receive high pollutant loads from a point discharge. Include a description of the impacts that the receiving waterbody will experience due to increased discharges.

O. What measures will be taken to mitigate the impacts?



Documentation of Notification

(Checklist Items 15 and 16)

- A. Name the affected designated management agencies.
- B. Do the designated management agencies endorse the requested amendment?
No ___ Yes ___ (Attach letters, resolutions or other documentation of endorsement.)
- C. Do all municipalities within the FPA and/or the requested amendment area endorse the proposed amendment?
No ___ Yes ___ (Attach letters, resolutions or other documentation of endorsement).
- D. Do adjoining municipalities and townships endorse the requested amendment?
No ___ Yes ___
Provide documentation of notification to and comments from adjoining units of government. Attach letters, boundary agreements, a location map of relevant boundary agreements, resolutions, or other documentation of endorsement.
- E. If adjoining units of government do not endorse the requested amendment, document any discussions or other efforts made by the applicant to resolve the issue.
- F. Does the county (or counties) where the FPA and/or requested amendment area lie endorse the proposed amendment?
No ___ Yes ___ (Attach letters, resolutions or other documentation of endorsement).
- G. If the County does not endorse the requested amendment, document any discussions or other efforts made by the applicant to resolve the issues.



Summary of How the Proposed Amendment Promotes Livability

(Checklist Item 17)

- A. Provide a copy of county and/or local plans or maps, published within the last five years, which identify the area of the amendment request, and note the location within the plan where the amendment request is referenced.
- B. Does the Applicant or relevant municipality within which the Applicant operates have a recently adopted comprehensive plan that promotes livability? No ____ Yes ____

Examples of livability include:

- Mobility options such as walking, biking, and transit
- A diversity of housing options
- Multi-jurisdictional cooperation such as planning, service sharing, or other improvements in governance
- Local jobs and employment
- Natural resource management, including stormwater management and groundwater and aquifer recharge area protection
- Access to parks and open space

- C. Provide a statement describing how the proposed investment promotes livability in one or more of the topic areas listed above.



Additional Information Requested for Facility Construction or Expansion

(Checklist Item 18)

Amendment requests for the construction of new, or the expansion of existing wastewater treatment facilities (including land treatment systems) must complete this section.

Most Recent Plan including Section of Plan Recommending Wastewater Infrastructure Expansion

- A. Attach a complete copy of the most recent facility plan recommending wastewater infrastructure expansion for the affected wastewater treatment plant including all maps, exhibits and attachments.

Note: A new or expanded treatment facility involving a capacity increase of 0.25 mgd or 10 percent, should be accompanied by an up-to-date facility plan. The facility plan should be no more than five years old and should include planning for the entire anticipated service area of the wastewater treatment plant, including the requested amendment area, if applicable. An up-to-date facility plan should also consider all currently applicable water quality regulations.

- B. NPDES (National Pollution Discharge Elimination System) Permit applied for:

No ___ Yes ___ Date applied for: ___

- C. Land Application Construction Permit Number: _____ Attach copy.

- D. Land Application Construction Permit applied for:

No ___ Yes ___ Date applied for: ___

- E. Existing effluent standards: _____

- F. Proposed effluent standards: _____

- G. Describe the anticipated quality from the new and/or expanded treatment plant. Include a discussion of the treatment process to be utilized by the proposed or expanded wastewater treatment plant that will prevent additional nutrient loading (e.g. biochemical oxygen demand, total suspended solids, ammonia, nutrients, metals and



toxins, personal care and pharmaceutical products.) to the receiving stream. Attach additional sheets as needed.

- H. Are there any ongoing environmental studies (e.g. watershed studies, TMDLs, etc.) that may impact the anticipated effluent limits, discharges, and/or proposed treatment processes of the proposed treatment plant?

No ____ Yes ____ Unknown ____ If yes, list and describe the anticipated impacts.

- I. Have the anticipated impacts been considered in designing the requested treatment plant?

No ____ Yes ____ If yes, describe how; if no, explain why not:

Energy Efficiency and Wastewater

(Checklist Item 19)

- A. Describe any energy efficiency or conservation improvements made to the wastewater treatment plant facility or operations in the last five years (e.g. more efficient lighting, improved HVAC equipment.)
- B. Provide a copy of an energy assessment produced for the wastewater treatment plant using, at minimum, a desktop analysis. If an audit has not been completed, please describe steps that will be taken to conduct an audit. (See
- C. Appendix IV. Helpful Planning Resources for energy assessment guidance and funding sources).
- D. Describe energy efficiency upgrades that are planned.



Additional Information Requested for FPA Boundary Amendments

Amendment requests for the creation of or the amendment to an FPA boundary must complete this Section.

Legal Description of Existing FPA and Requested Amendment Area

(Checklist Item 20)

- A. Is the amendment area currently part of an existing facility planning area?
No ____ Yes ____ If yes, provide the name(s) of the FPA (s).
- B. Size of the requested amendment area (acres). _____
- C. Location of requested amendment area.
County/Countries: _____
Township(s): _____
PLS Township/Range: _____ Section: _____
PLS Township/Range: _____ Section: _____
- D. Include legal description or PIN numbers of the amendment area.
- E. Describe how wastewater services will be provided to the subject amendment area?
- F. Describe and map any existing wastewater sewer/interceptor and/or treatment facility located within or adjacent to the subject amendment area. Include route of interceptors and sewers, pump stations or gravity flow, location of wastewater treatment plant, etc. Attach additional sheets as needed.



- G. Attach a complete copy of the most recent facility plan for the affected FPA amendment request area. Include all maps, exhibits and attachments of the facility plan.

Note: A substantial change in the facility planning area (100 or more acres) should be accompanied by an up-to-date facility plan (a plan no more than five years old that includes planning for the requested amendment area. An up-to-date facility plan should also consider all currently applicable water quality regulations.

- H. Will the amendment include, require, or result in modification (i.e. filing, dredging, channelization, disposal, or similar activity) of any lake, stream, wetland, or floodplain area?

No ____ Yes ____ (If yes, describe.)

Existing Land Uses and Zoning within and adjacent to the Amendment Area

(Checklist Item 21)

- A. Describe and provide a map of current municipal and/or county zoning within the amendment area.
- B. Date zoning received: _____
- C. Zoning body: _____
- D. Anticipated future zoning: _____
- E. Anticipated date of re-zoning: _____
- F. Describe the current municipal and county zoning adjacent to the amendment area for a distance of 1.5 miles. Provide a map identifying current zoning.
- G. Provide a map identifying developments within the amendment area that are contingent upon receiving the proposed boundary amendment. Attach map.
- H. Describe and provide a map of current and proposed land use of the amendment area



including: proposed future development, development project name, developer name, expected number and type of units (for residential development), expected number of employees (for non-residential development), and total acreage. Please indicate project status (i.e., planned, proposed, approved, annexed, zoned, under construction, construction completed, etc.)

- I. Describe and provide a map of current and proposed land use adjacent to the amendment area within a distance of 1.5 miles.
- J. Provide a map identifying developments constructed adjacent to the amendment area that are contingent upon receiving the proposed boundary amendment. Attach map.
- K. Will additional treatment plant capacity be required in the future if the amendment area is added to the existing FPA?²³
No ____ Yes ____

Map Indicating the Location of Green Infrastructure

(Checklist Item 22)

- A. Provide a map indicating the location of [green infrastructure](#) within and within 1.5 miles of the amendment area. If a local or county green infrastructure plan exists for the area, please include that map as well.

(Regional Green Infrastructure Vision Data is available at:

<https://datahub.cmap.illinois.gov/dataset/green-infrastructure-vision-2-2-giv-refinement>).

- B. Is 10 percent or more of the amendment area within the area designated in the Green Infrastructure Vision? No ____ Yes ____ If yes, what percent? ____

List of Protection Strategies Proposed for Amendment Requests Impacting Green Infrastructure

(Checklist Item 23)

²³ To determine whether additional capacity will be needed at the wastewater treatment plant, the applicant must consider the existing excess capacity at the treatment plant, an ongoing, pending or proposed construction in the existing treatment plant service area and any additional undeveloped areas within the existing FPA that will be developed in the future. If the treatment plant capacity is not sufficient to meet both the needs of the existing FPA and the requested amendment area, then additional plant capacity will be required to serve the amendment area.



- A. List and describe protection strategies that will ensure the regional green infrastructure network is protected from future disturbance (e.g. overlay ordinance, local open space acquisition fund, conservation design ordinance that permits higher densities in exchange for protecting sensitive areas, etc.)

Resolution Indicating Protection Strategies that Have Been or Will Be Adopted for Amendment Requests Impacting Green Infrastructure

(Checklist Item 24)

- A. Attach city council or village board resolution indicating the protection strategies it will adopt or has adopted to conserve the regional green infrastructure network.

Note: In instances where a county or green infrastructure plan exists, an applicant should describe protection strategies and/or adopt the green infrastructure vision in place of the regional green infrastructure vision.



Agricultural Preservation Areas

The following items are required by the Illinois Farmland Preservation Act (505 ILCS 75/1 et seq.)

A. Attach recommendation letter from the Illinois Department of Agriculture (IDOA).
See www.agriculture.illinois.gov/Environment/LandWater/FPAboundarychangerequest.pdf
for IDOA requirements.

B. Is any of the requested amendment area in an Agricultural Conservation and Protection Area (505 ILCS 5/1 et seq.)

www.agriculture.illinois.gov/Environment/LandWater/AgArea2002.pdf

No Yes



Appendices

The appendices included in the Water Quality Management Plan Amendment Process and Procedures Manual are intended to assist applicants in understanding and responding to the review criteria. The appendices also guide CMAP and Wastewater Committee evaluation and recommendations to the IEPA.

Appendix I: Deferral Guidelines

Initial deferrals can be given at the discretion of the Wastewater Committee for one meeting cycle (approximately 30 days) based upon, but not limited to, the following situations. Necessary actions to be accomplished and responsible parties would be clearly specified to the applicant.

- Absence of IDOA's statutorily required review;
- Request of applicant;
- Need for further information required to ascertain amendment's consistency with criteria;
- Request of the DMA for the affected facility planning area; or
- Request of an adjoining unit of government.

Deferrals for one additional meeting cycle to accomplish specific tasks will be considered if:

- There is a need for IEPA clarification of a particular point, policy, etc.; or
- Major "new or clarifying" information is submitted that addresses one of the criteria.



Appendix II. Nonpoint Source Control Provisions for Will County Amendment Requests

Requests from applicants within Will County should complete the questions below and include with amendment application. For any standards not met a village board or city council resolution indicating the applicant's intent to pass ordinance requirements within six months is required and should be attached.

Stormwater Management

1. Are the amendment area and/or facility planning area subject to a municipal and/or county stormwater drainage and detention ordinance? No ___ Yes ___ Unknown ___

If yes, give name(s) of municipality(s) or county(s) and attach copy of the ordinance.

2. Does the applicable storm management ordinance:
 - a. Include control of runoff volume, rate, and quality in the purpose statement?
No ___ Yes ___
 - b. Promote the use of natural drainage practices (e.g., swales, filter strips, infiltration devices, and natural depressions over storm sewers to minimize runoff volumes and enhance pollutant filtering)?
No ___ Yes ___
 - c. Require that peak post-development discharge from events less than or equal to the two-year, 24-hour event be limited to 0.04 cfs per acre of watershed?
No ___ Yes ___
If no, what does it require for storms smaller than the 100-year event?
 - d. Require detention design standards which maximize water quality mitigation benefits, with a preference for wet bottom and/or wetland basins over dry basins?
No ___ Yes ___
 - e. Prohibit detention in the floodway?
No ___ Yes ___



f. Prohibit on-stream detention, unless it provides regional stormwater storage and is accompanied by other water quality BMPs upstream?

No ___ Yes ___

g. Prohibit the direct discharge of undetained stormwater into wetlands?

No ___ Yes ___

h. Require formal maintenance contracts for new detention facilities?

No ___ Yes ___

Soil Erosion and Sediment Control

1. Are the amendment area and/or facility planning area subject to a municipal and/or county soil erosion and sediment control ordinance?

No ___ Yes ___ Unknown ___

If yes, give name(s) of municipality(s) or county(s) and attach copy of the ordinance.

2. Does the applicable soil erosion and sediment control ordinance:

a. Include a comprehensive purpose statement which limits sediment delivery, as close as practicable, to pre-disturbance levels and minimizes effects on water quality, flooding, and nuisances?

No ___ Yes ___

b. Include a comprehensive set of principles which minimize sediment transport from the site for all storms up to the ten-year frequency event? No ___ Yes ___

(These principles should include provisions to minimize the area and time of disturbance, follow natural contours, avoid sensitive areas, require that sediment control measures be in place as part of land development process before significant grading or disturbance is allowed, and require early implementation of soil stabilization measures on disturbed areas).

c. Require ordinance applicability for any land disturbing activity in excess of 5,000 square feet, or 500 square feet if adjacent to stream, lake, or wetland?

No ___ Yes ___ Other ___ (Describe)



- d. Include explicit site design requirements for sediment control measures, conveyance channels, soil stabilization, construction adjacent to waterbodies, construction entrances, etc.?

No ___ Yes ___

- e. Adopt by reference the most recent "Illinois Urban Manual" published by the Natural Resources Conservation Service and the Illinois Environmental Protection Agency and the most recent "Illinois Procedures and Standards for Urban Soil Erosion and Sedimentation Control" (<http://www.aiswcd.org/illinois-urban-manual>)?

No ___ Yes ___

- f. Require routine maintenance of all erosion and sediment control practices?

No ___ Yes ___

- g. Require inspection by appropriately trained personnel of construction sites at critical points in the development process to ensure that measures are being correctly installed and maintained?

No ___ Yes ___

- h. Provide effective enforcement mechanisms including performance bonds, stop-work orders, and penalties, as appropriate?

No ___ Yes ___



Floodplain Management

1. Is the affected area/facility planning area subject to a municipal and/or county floodplain management ordinance? No ___ Yes ___ Unknown ___

If yes, give name(s) of municipality(s) or county(s) and attach copy of the ordinance.

2. Does the applicable floodplain management ordinance:

- a. Include protection of hydrologic functions, water quality, aquatic habitat, recreation, and aesthetics in the purposes for the ordinance?

No ___ Yes ___

- b. Restrict modifications in the floodway to the following appropriate uses: public flood control projects, public recreation and open space uses, water dependent activities, and crossing roadways and bridges?

No ___ Yes ___

(The ordinance should prohibit new treatment plants and pumping facilities; detached garages, sheds, and other non-habitable structures; parking lots and aircraft parking aprons; and roadways which run longitudinally along a water course.)

- c. Discourage stream channel modification and require mitigation of unavoidable adverse water quality and aquatic habitat impacts?

No ___ Yes ___

- d. Discourage onstream impoundments unless public interest and environmental mitigation criteria are met?

No ___ Yes ___

- e. Require effective soil erosion and sediment control measures for all disturbances in the floodway?

No ___ Yes ___

- f. Require protection of a minimum 25 foot native vegetation buffer along the channel?

No ___ Yes ___



Stream and Wetland Protection

1. Is the affected area/facility planning area subject to a municipal and/or county stream and wetland protection ordinance?

No ___ Yes ___ Unknown ___

If yes, give name(s) of municipality(s) and attach a copy of the ordinance.

2. Does the applicable stream and wetland protection ordinance:

- a. Include a comprehensive purpose statement which addresses the protection of hydrologic and hydraulic, water quality, habitat, aesthetic, and social and economic values and functions of wetlands?

No ___ Yes ___

- b. Protect the beneficial functions of streams, lakes, and wetlands from damaging modifications, including filling, draining, excavating, damming, impoundment, and vegetation removal?

No ___ Yes ___

- c. Prohibit the modification of high quality, irreplaceable wetlands, lakes, and stream corridors?

No ___ Yes ___

- d. Discourage the modification of wetlands for stormwater management purposes unless the wetland is severely degraded and nonpoint source BMPs are implemented on the adjacent development?

No ___ Yes ___

- e. Designate a minimum 75 foot setback zone from the edge of identified wetlands and water bodies in which development is limited to the following types of activities: minor improvements like walkways and sign, maintenance of highways and utilities, and park and recreational area development?

No ___ Yes ___

- f. Establish a minimum 25-foot wide protected native vegetation buffer strip along the



edge of identified wetlands and waterbodies.

No Yes

- g. Prohibit watercourse relocation or modification except to remedy existing erosion problems, restore natural conditions, or to accommodate necessary utility crossings; and require mitigation of unavoidable adverse water quality and aquatic habitat impacts?

No Yes

- h. Discourage the armoring of channels and banks unless natural vegetation and gradual bank sloping are inadequate to prevent severe erosion?

No Yes

- i. Discourage culvert crossings of streams unless necessary for allowing access to a property?

No Yes

- j. Discourage onstream impoundments unless public interest and environmental mitigation criteria are met?

No Yes

- k. Require adequate mitigation measures for approved wetland and waterbody modifications, including 1.5 to 1 acreage replacement for destroyed wetlands, maintenance and monitoring for at least 5 years, and full restoration of natural wetland or waterbody functions?

No Yes



Appendix III: Model Water Conservation Ordinance Components

Municipalities should adopt the entire CMAP Model Water Use Conservation Ordinance into their codes, adopt portions of it, modify existing ordinances to include relevant items, or demonstrate that water conservation and protection measures are being undertaken in at least one of the following ways.

- Availability of water use efficiency goals for various classes/categories of users either through a community-wide water conservation plan or through the use of water budgeting processes.
- Implementation of universal metering for all new and existing services.
- Implementation of irrigation water audits to detect leaks for private water lines.
- Rainwater harvesting for either landscape irrigation or indoor nonpotable use (e.g., toilet flushing).
- Adoption of irrigation landscape ordinances that limit irrigation on areas that causes substantial water to fall on impervious areas.
- Adoption of irrigation ordinances that limit landscape irrigation (using automatic sprinkler systems) to twice a week and two hours per irrigation day.²⁴
- Implementation of conservation pricing that encourages suitable water management practices.
- Adoption of landscape ordinances that limit turf area or recommend low-water-using plants (e.g., native plants).
- Implementation of an annual water audit by the utility that follows the American Water Works Association protocol.²⁵
- Implementation of public information programs that increase awareness of the benefits of water use conservation including the use of native plants or low-water-use plants.²⁶

²⁴ More information on this requirement, as well as on variances, can be found in the Model Water Use Conservation Ordinance, CMAP, 2010. <http://www.cmap.illinois.gov/plans-and-guides> (accessed June 3, 2014).

²⁵ American Water Works Association Software, <http://www.awwa.org/home/awwa-news-details/articleid/2641/awwa-free-water-audit-software-version-5-0-now-available.aspx> (accessed October 29, 2015).

²⁶ Plants that, generally, once established can survive on two irrigations per month during the summer months. See EPA, Green Landscaping, Green Acres, Plant List, Midwest: http://www3.epa.gov/watersense/outdoor/what_to_plant.html#_ga=1.135731697.115845153.1410464074 (accessed June 3, 2014).



Examples of such programs include development of indoor and outdoor water conservation literature and employing various means of dissemination such as utility bill inserts, distribution by governing body to customers applying for a building permit and those initiating new service, distribution by retail plant nurseries, landscape contractors and architects, etc.

- Implementation of water budgeting for large users.²⁷
- Collaborations with landscape contractors, retailers and other relevant bodies to promote water efficiency.

²⁷ Ibid 1



Appendix IV. Helpful Planning Resources

Land Application of Wastewater

- Water 2050: Northeastern Illinois Regional Water Supply/Demand Plan: <http://www.cmap.illinois.gov/livability/water/supply-planning>.

Water Quality

- IEPA's Illinois Integrated Water Quality Report and Section 303(d) List provides a list of impaired waters and Total Maximum Daily Load information for waterbodies within northeastern Illinois: <http://www.epa.state.il.us/water/tmdl/303d-list.htm>.
- United States Environmental Protection Agency (EPA) Surf Your Watershed: provides access to watershed maps, watershed plans, and contact information for local watershed planning groups: <http://cfpub.epa.gov/surf/locate/index.cfm>.
- CMAP's Watershed Planning webpage: gives an overview of CMAP's role in watershed planning and provides a map and links to watershed plans developed by CMAP: <http://www.cmap.illinois.gov/livability/water/water-quality-management/watershed-planning>.
- Illinois-Indiana Sea Grant and University of Illinois Extension: provides information on its program to address property disposal of pharmaceuticals and personal care products that impact water quality: <http://web.extension.illinois.edu/unusedmeds/>.

Water Conservation

- Illinois-Indiana Sea Grant: provides information about a pollution prevent campaign enabling communities to achieve significant water conservation from reduced lawn watering requirements, as well as a reducing the amount of polluted runoff: <http://www.iisgcp.org/l2l.php>.

Wastewater Reuse

- 2012 Guidelines for Water Reuse: <http://nepis.epa.gov/Adobe/PDF/P100FS7K.pdf>.
- Village of Richmond Municipal Code: <http://richmond-il.com/govt/code/mun-code-toc.php>.

Energy Efficiency

- Combined Heat and Power Case Study – U.S. EPA: <http://files.harc.edu/Sites/GulfCoastCHP/CaseStudies/TucsonAZMillionHour.pdf>.
- U.S. Department of Energy's Save Energy Now Program - provides industrial companies with a no-cost assessment of their energy supplies: <http://energy.gov/eere/amo/ta>.



- U.S. Department of Agriculture's Rural Development Rural Energy for America Program Grants/Energy Audit and Renewable Energy Development Assist (REAP/EA/REDA). The program provides financing for energy audits: <http://www.rd.usda.gov/programs-services/all-programs/energy-programs>.
- Rural Assistance Center (RAC) offers funding to help rural communities: <http://www.raconline.org/funding>.
- EPA's Clean Water and Drinking Water State Revolving Funds (SRF). SRF funds may be used to conduct an energy audit: http://water.epa.gov/grants_funding/dwsrf/index.cfm.
- Clean Water State Revolving Fund: http://water.epa.gov/grants_funding/cwsrf/cwsrf_index.cfm.
- SEDAC – Smart Energy Design Assistance Center: <http://smartenergy.illinois.edu/energy-incentives.html>.
- Illinois Clean Energy: <http://www.illinoiscleanenergy.org/water-energy-efficiency-program/>.

Energy Audits

- Performing an Energy Audit: U.S. EPA: <http://www.epa.gov/region9/waterinfrastructure/audit.html>.
- Determining Energy Usage: http://water.epa.gov/infrastructure/sustain/energy_use.cfm.
- Case Study: Ohio Wastewater Facility Energy Audit: http://www.ohioewa.org/docs/Wed1100Green_Energy_Audits_Case_Studies.pdf
- Municipal Wastewater Treatment Facilities: <http://www.epa.gov/chp/markets/wastewater.html>.

U.S. Environmental Protection Agency Resources

- Clean Water State Revolving Loan Fund: http://water.epa.gov/grants_funding/cwsrf/cwsrf_index.cfm.

Illinois Environmental Protection Agency Resources

- Illinois Water Quality Management Plan, revised annually.
- Illinois Water Quality Report: <http://www.epa.illinois.gov/topics/water-quality/watershed-management/resource-assessments/index>.
- Procedures and Requirements for Conflict Resolution in Revising Water Quality Management Plans (35 Ill. Administrative Code, Title 35, Ch. II, Part 351).
- Procedures and Requirements for Contested Case Hearings (35 Ill. Administrative Code, Title 35, Ch. II, Part 168).



CMAP Resources

- Areawide Water Quality Management Plan for Northeastern Illinois, January 1979: (Available for examination in CMAP library and on CMAP's website at <http://www.cmap.illinois.gov/livability/water/water-quality/wastewater-planning>).
- Facility Planning Area (FPA) boundary maps for northeastern Illinois (updated quarterly) with accompanying tabular listings show permitted wastewater facilities and facility planning area boundaries as contained in the Illinois Water Quality Management Plan. Tabular tables also delineate designated management agencies by FPA with current and planned public and private treatment facilities and discharge points (updated annually).
- Population, Households and Employment in Northeastern Illinois for 2010: <http://www.cmap.illinois.gov/population-forecast>.
- Model Floodplain Ordinance, 1989; Model Soil Erosion and Sediment Control Ordinance, 1991; Model Stormwater Drainage and Detention Ordinance, updated 1994; Model Stream and Wetland Protection Ordinance, 1988.
- Regional Septage Disposal Plan, An Element of the Areawide Water Quality Management Plan for Northeastern Illinois, September 1981.
- Stormwater Detention for Water Quality Benefits, 1986.
- Illinois Water Quality Management Plan – Facility Planning Area Amendment Manual and Application, revised 2015: <http://www.cmap.illinois.gov/livability/water/water-quality/wastewater-planning>.
- CMAP's Water 2050 and Water Conservation Model Ordinance: The documents include a compilation of the best available information for consistent groundwater protection, CMAP's Water 2050: Northeastern Illinois Regional Water Supply/Demand Plan. <http://www.cmap.illinois.gov/livability/water> and CMAP's Model Water Use Conservation Ordinance. <http://www.cmap.illinois.gov/livability/water/supply-planning>.

Illinois Department of Agriculture

- Illinois Department of Agriculture Farmland Preservation checklist and review procedures: <http://www.agr.state.il.us/Environment/LandWater/FPAboundarychangerequest.pdf>.



Appendix V: State and Regional Responsibilities

Illinois Environmental Protection Agency

The IEPA is the state's lead agency for federal and state environmental protection programs and initiatives. The Illinois Environmental Protection Act designated the IEPA as the pollution control agency for the State of Illinois for all purposes of the federal Clean Water Act. In addition, the Act specifically authorized the Agency "to engage in planning processes and activities to develop plans in cooperation with units of local government, other state agencies and persons, and to promulgate procedural regulations for the holding of public hearings on the planning process."

IEPA works with a variety of state agencies, local governments, and the EPA to monitor pollutant discharges and to assist in the enforcement and formulation of environmental standards and policies. IEPA has the authority to issue National Pollutant Discharge Elimination Systems (NPDES) permits for pollution sources and ensure compliance with permit requirements.

Chicago Metropolitan Agency for Planning

The Chicago Metropolitan Agency for Planning (CMAP) is the official areawide regional planning organization for the northeastern Illinois counties of Cook, DuPage, Kane, Kendall Lake, McHenry, and Will. The responsibility of water quality management planning is shared between the IEPA and CMAP, and plan implementation is the responsibility of Designated Management Agencies such as municipalities and sanitary districts. As such, subsequent to the completion of the IWQMP, the Governor designated the areawide planning agencies as the continuing planning agencies to undertake the planning and coordination process and areawide review of the IWQMP and to oversee revisions to the plan. CMAP's predecessor, NIPC was designated as the areawide water quality planning agency for the six- county northeastern Illinois Metropolitan area by an Executive Order by Governor Walker on May 13, 1975. CMAP now assumes this role for the seven-county northeastern Illinois region.

CMAP maintains and provides IEPA with annual updates of facility planning area boundaries, designated management agency status, and the current and planned treatment capacity for permitted discharges located in the seven county northeastern Illinois area. CMAP also develops and issues consistency reviews and recommendations, respectively, to IEPA, "without constraint or obligation the counsel of the Wastewater Committee." (IEPA/CMAP Financial Assistance Agreement No. FAA604121).



Wastewater Committee

CMAP's enabling legislation²⁸ required the CMAP Board to create a Wastewater Committee. The Wastewater Committee has the responsibility of recommending directly to the IEPA the appropriateness of the following:

- Requests for modifications and amendments to the established boundaries of FPAs;
- Requests for the creation of new FPAs;
- Requests for the elimination of existing FPAs;
- Requests for new or expanded sewage treatment facilities; and,
- Any other amendments to the State of Illinois Water Quality Management Plan required under the federal Clean Water Act.

The Wastewater Committee shall consist of the following members:

- One CMAP Board Member appointed by either DuPage, Kane/Kendall, Lake, McHenry, or Will Counties;
- One CMAP Board Member appointed from the City of Chicago;
- One CMAP Board Member appointed by Cook County, outside of the City of Chicago;
- One Person appointed by the President of Metropolitan Water Reclamation District of Greater Chicago (MWRDGC); and,
- One person appointed by the president of the largest statewide association of wastewater agencies.

Chairmanship of the Wastewater Committee rotates every 24 months between the appointees of MWRDGC and the largest statewide association of wastewater agency.

28 Regional Planning Act, 70 ILCS 1707, <http://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=2731&ChapterID=15> (accessed February 12, 2015).

Appendix VI. Legislative and Regulatory Background

Clean Water Act and the Environmental Protection Act

The Federal Water Pollution Control Act Amendments of 1972 (33 U.S.C. 1251 *et seq.*), also known as the Clean Water Act, and subsequent amendments set forth the framework for establishing water quality management programs in each state. The goal of Clean Water Act is “to restore and maintain the chemical, physical and biological integrity of the Nation’s waters.”²⁹ State programs to implement the Clean Water Act address both point source discharges (such as wastewater treatment plants) and nonpoint source runoff from land (such as urban stormwater runoff from streets and parking lots). Section 208 of the Clean Water Act required that states develop comprehensive areawide water quality management plans that address all sources of pollution generated within an urban-industrial area such as the Chicago metropolitan area. These 208 plans also were required to include alternatives for wastewater treatment management. It is within these requirements and other sections of the Clean Water Act that both the *Areawide Water Quality Management Plan* and the *Illinois Water Quality Management Plan* are rooted (an overview of both plans is included below).

The Illinois Environmental Protection Act addresses all aspects of environmental protection in the State of Illinois, including water pollution. This Act states that “air, water, and other resource pollution, public water supply, solid waste disposal, noise, and other environmental problems are closely interrelated and must be dealt with as a unified whole in order to safeguard the environment.” (Environmental Protection Act, Section 2(a) (3)). Section 2(b) of the Environmental Protection Act states that “It is the purpose of this Act ... to establish a unified, state-wide program supplemented by private remedies, to restore, protect and enhance the quality of the environment, and to assure that adverse effects upon the environment are fully considered and borne by those who cause them.”

The Illinois Environmental Protection Act designates the IEPA as the pollution control agency for the State of Illinois for all purposes of the federal Clean Water Act. While federal laws and regulations set forth the minimum requirements for IEPA’s programs and activities, state laws and regulations are, in some instances, more stringent than federal requirements and are, in all cases, designed to coordinate with and implement all federal requirements.

²⁹ Clean Water Act, Section 101(a))



Areawide Water Quality Management Plan

In accordance with the provisions of Title II of the Clean Water Act, the former Northeastern Illinois Planning Commission (NIPC) assumed certain responsibilities under the Clean Water Act. Section 208(b)(1)(A) of the Clean Water Act states that “[n]ot later than one year after the date of designation ... [NIPC] shall have in operation a continuing areawide waste treatment management planning process consistent with section 201 of this Act.”³⁰ Section 208 further states that all areawide waste treatment plans “prepared in accordance with this process shall contain alternatives for waste treatment management, and be applicable to all wastes generated within the area involved.” As such, NIPC developed the Areawide Water Quality Management Plan for Northeastern Illinois (AWQMP), which was approved on May 1, 1980. The plan’s goals include reducing water pollution in northeastern Illinois including restoring and maintaining the quality of the regions waters, eliminating pollutant discharges, improving and/or protecting water quality habitat, and eliminating waste discharges into the region’s waters.

The AWQMP contains river-basin-specific water quality management plans for the river basins wholly or partially within northeastern Illinois. The basin plans contain similar information, including: description of the basin (physical and socio-economic characteristics); impacts of projects (such as dams); water quality (applicable state standards and designations, existing conditions, and results of modeling); existing point sources (including dischargers and local facilities planning); existing nonpoint sources; disposal of residuals; existing management programs; modeling processes (future conditions); problem assessment; recommendations (for point sources, nonpoint sources, residuals, groundwater and mining); costs of the recommended plan; and anticipated water quality conditions. These elements are specified in 40 CFR Part 130, Water Quality Planning and Management.³¹

Objectives of the AWQMP aimed at addressing water quality issues in the region are specified in Section 2.03 of the plan and include:

- a. Maintenance of present levels of quality in all waterways in which water quality is better than state standards;

³⁰ Section 201(a) states that it “is the purpose of this title to require and to assist the development and implementation of waste treatment management plans and practices which will achieve the goals of this Act.” Subsections (b) through (f) further specify those waste treatment management practices that are to be encouraged: (b) application of best practicable waste treatment technology, including reclaiming and recycling of wastewater; (c) “To the extent *practicable, waste treatment management shall be on an areawide basis and provide control or treatment of all point and nonpoint sources of pollution*”; (d) waste treatment management that results in the construction of revenue producing facilities that recycle potential pollutants through agricultural production, reclamation of wastewater and ultimate disposal of sludge; and (f) “waste treatment management which combines “open space” and recreational considerations with such management.”

³¹ Section 130.1(a) states that 40 CFR Part 130 “applies to all State...areawide and regional and local CWA water quality management planning and management activities. Including all updates and continuing certifications for approved Water Quality Management (WQM) plans developed under section 208 and 303 of the {Clean Water Act.”



- b. Elimination of all discharges of toxic pollutants in toxic amounts;
- c. Compliance with appropriate effluent standards established by the U.S. EPA and the State of Illinois, as soon as it is technologically and financially possible to achieve compliance until recommendations for changes are developed in the course of 208 planning efforts;
- d. Compliance, with in-stream water quality standards oxygen, a temporary standards be authorized accepting 5.0 mg/l for 95 of the time in water bodies classified for General Use;
- e. Compliance, in all underground waters, with Illinois Standards for General Use and Public Food Processing Water Supplies, except with standards are violated as a result of natural conditions;
- f. Reduction of urban and rural stormwater runoff, and pollution carried into waterways by runoff, by all practical means;
- g. Provision of Best Management Practices for all nonpoint sources of pollution according to the implementation schedules recommended in the Plan;
- h. Introduction of wastes into wastewater systems only when such wastes can be adequately treated without adversely affecting the systems;
- i. Reduction, by all practical means, of wastewater volumes in the region;
- j. Cost-effective operation of all technical and management components of the region's wastewater system;
- k. Regionalization of wastewater treatment systems wherever economies of scale can be achieved and benefits of regionalization outweigh negative impacts;
- l. Assignment of costs for wastewater collection and treatment primarily to those generating the need for such service;
- m. Assessment of management and implantation responsibilities to general purpose units of local government, whenever possible, in order to insure maximum accountability to the electorate;
- n. Participation of all implementing agencies, directly or by representative, in the continuing development of areawide polices for water quality management;
- o. Reliance on local governments to implement the plan, with state or federal sanctions to be imposed only when local governments fail to meet their responsibility as primary management agencies;
- p. Equitable assignment of all costs for water pollution control;



- q. Basinwide consistency in: regulatory and performance standards for water quality; performance under these standards; and enforcement of these standards;
- r. Consideration, in all decisions on water quality planning and implementation, of environmental impacts of proposed actions;
- s. Reduction, to a minimum, of adverse environmental impacts that cannot be avoided as a result of the implantation of this areawide plan;
- t. Compatibility among local, county, areawide and state plans for air, water, land and other resources;
- u. Incorporation of uniform forecasts of pollution, employment and land use, based on the comprehensive general plan (CGP), into areawide clean water planning and all other elements of the regional planning program;
- v. Consistency, in areawide planning and implementation with the CGP and supporting functional plans of the Northeastern Illinois Planning Commission (NIPC) ;
- w. Flexibility in the water quality management system sufficient to respond to changing conditions, problems and opportunities;
- x. Adequate funding for implementation for the areawide plan and for the continuing planning program established by the plan; and,
- y. Citizen involvement in continuing planning for water quality management.

Illinois Water Quality Management Plan

The IEPA is the pollution control agency planning agency for the State, as specified in Section 208(a) (6) of the Clean Water Act. As such, IEPA developed the water quality management plan for all non-designated areas of the State. After IEPA and the three designated areawide planning agencies in Illinois (including NIPC) completed their respective areawide water quality management plans, IEPA determined that the four plans should be combined into one statewide plan, simplifying administration and implementation of these plans. The four areawide planning agencies (IEPA, NIPC, Greater Egypt Regional Planning and Development Commission and the Southwestern Illinois Metropolitan and Regional Planning Commission) as well as other governmental entities and interested parties engaged in a lengthy process that resulted in the *Illinois Water Quality Management Plan (IWQMP)*, which was certified by the Illinois Governor in May 1983 and approved by the U.S. EPA in May 1984.

The IWQMP is to be used to direct implementation of water quality management activities, which include identifying priority point and nonpoint source water quality problems, considering alternative solutions for those problems, and recommending control solutions.³² The IWQMP “addresses the control of pollution sources, maintenance of stream uses and water

³² 40 CFR 130.6(b)).



quality standards, protection of groundwater resources, and control of hydrographic modifications.”³³ It is also intended to assure “sound economical and environmental decision making.”³⁴ The plan identifies the following items as base data for water quality consistency reviews that will ensure effective implementation of the IWQMP:

- Geographic location of wastewater facility planning areas (FPA) boundaries;
- Designated management agencies for collection, treatment and transport within each facility planning area; and
- Current and planned facility treatment capacity, including the identification of all facility locations and discharge points.

IEPA conducts annual updates and amendments to the IWQMP and publishes these in its Division of Water Pollution Control Program Plan. The Facility Planning Area process and amendments to FPA boundaries serve as a vehicle to implement amendments to this plan.

Supporting Legislation, Regulations, Plans, and Policies

1. The population and employment for which the proposed amendment is designed must fall within the long range forecasts most recently produced by CMAP for the facility planning area. CMAP staff may agree to adjustments as provided in the Process and Procedures Manual.
 - Illinois Water Quality Management Plan: Used to direct implementation of water quality management activities, which includes identifying priority point and nonpoint source water quality problems, considering alternative solutions for those problems and recommending control solutions.
 - Ill. Administrative Code: Title 35, Subtitle C, Chap. II, Part 351, Subpart A, Section 351.103(i).
 - Demographic Forecasts Reflecting Regional Planning Efforts: CMAP GO TO 2040: The CMAP 2040 Forecast of Population, Households and Employment, which was developed in support of the GO TO 2040 comprehensive regional plan adopted on October 13, 2010. These forecasts will be updated to reflect plan updates, the availability of more recent data, etc.
2. The proposed amendment should not reduce the effectiveness of the water quality improvement strategy contained in the original plan, either for point source or nonpoint source control.
 - *Illinois Water Quality Management Plan: (Revised July 1991)*, CMAP policies and procedures for determining consistency with point and nonpoint management policies is delineated in Appendices IV and V.

³³ IEPA, IWQMP Amendment Application Package.

³⁴ Ibid.



- Clean Water Act: Section 402(p), *Construction Site Runoff, Urban Runoff*.
 - Illinois Administrative Code: (Floodplain Management), *An Act Related to the Regulation of the Rivers, Lakes and Streams of the State of Illinois* (615 ICLS 5/5), Ill. Admin. Code, Title 92, Chap. I, Subchap. i, Pt. 706.
 - *Illinois Water Quality Management Plan* and the U.S. Clean Water Act: These documents provide guidelines to ensure Stream and Wetland Protection, *U.S. Clean Water Act - § 401 & 404, Illinois Interagency Wetland Protection Act and the Illinois Water Quality Management Plan*.
 - CMAP's Water 2050 and Water Conservation Model Ordinance: The documents include a compilation of the best available information for consistent groundwater protection, CMAP's *Water 2050: Northeastern Illinois Regional Water Supply/Demand Plan*. <http://www.cmap.illinois.gov/livability/water> and CMAP's Model Water Use Conservation Ordinance. <http://www.cmap.illinois.gov/livability/water/supply-planning>.
 - Local Watershed Plans: These documents assess watershed conditions and outline a course of action to protect both the quality and quantity of water resources within a specific geographic area, IEPA Watershed Management <http://www.epa.illinois.gov/topics/water-quality/watershed-management/index>.
3. The proposed amendment should not adversely affect adjoining units of government and should be consistent with local boundary agreements.
- *Illinois Water Quality Management Plan* and Ill. Admin. Code: Provides procedures and requirements for conflict resolution in revising water quality management plans, Ill. Adm. Code Title 35, Subtitle C, Chap. II, Part 351, Subpart B, Section 351.202, 5. <http://www.ipcb.state.il.us/SLR/IPCBandIEPAEnvironmentalRegulations-Title35.aspx>
4. The proposed amendment should be consistent with other county and regional plans or state policies.
- Agricultural/Farmland Protection: Farmland Protection Policy Act (7 USC 4201 et seq.), the Illinois Farm Land Preservation Act (Public Act 82-945) (505 ILCS 75/1), and 8 Illinois Administrative Code 700.10 et seq. (CMAP Procedures and Criteria for Proposed FPA).
 - Regional Planning: The Chicago Wilderness Green Infrastructure Vision (GIV) was the basis of the open space recommendations in GO TO 2040. GO TO 2040 recommends that "sewer service should not be permitted in especially sensitive areas of the green infrastructure network. These especially sensitive areas should be precisely defined and identified in a refined version of the GIV, after which they should be specifically excluded from the incremental new area added to expanding facility planning areas" (p. 134).



- Water Supply Planning: CMAP's Water 2050 and CMAP's Model Water Use Conservation Ordinance: The documents provide guidance on the best available information for consistent groundwater protection, provides numerous studies on water demand and supplies, and provides over 240 recommendations for water efficiency.
<http://www.cmap.illinois.gov/livability/water>.
- CMAP's GO TO 2040 Regional Comprehensive Plan: A comprehensive regional plan to help the region and its communities plan for sustainable region.
<http://www.cmap.illinois.gov/about/2040>.



Appendix VII. Commonly Used Acronyms

AWQMP	Areawide Water Quality Management Plan
CMAF	Chicago Metropolitan Agency for Planning
CGP	Comprehensive General Plan
CHP	Combined Heat and Power
BOD	Biochemical Oxygen Demand
DMA	Designated Management Agency
FPA	Facility Planning Area
GIV	Green Infrastructure Vision
HVAC	Heating, Ventilating, and Air Conditioning
IDNR	Illinois Department of Natural Resources
IDOA	Illinois Department of Agriculture
IEPA	Illinois Environmental Protection Agency
IWQMP	Illinois Water Quality Management Plan
MWRDGC	Metropolitan Water Reclamation District of Greater Chicago
NIPC	Northeastern Illinois Planning Commission
NPDES	National Pollution Discharge Elimination System
OWR	Office of Water Resources
PE	Population Equivalent
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
U.S. EPA	United States Environmental Protection Agency
WQM	Water Quality Management
WWTP	Wastewater Treatment Plant





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