FINDINGS FOR THE ILLINOIS COASTAL NONPOINT PROGRAM

FOREWORD

The Coastal Nonpoint Source Pollution Control Program, set forth in Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), 16 U.S.C. § 1455b, addresses nonpoint source pollution problems in coastal waters. Section 6217 requires that states and territories with approved coastal zone management programs also develop coastal nonpoint pollution control programs.

The State of Illinois submitted the *Illinois Coastal Nonpoint Pollution Control Program* for review by the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA) in July of 2014. NOAA and the EPA reviewed Illinois' program and evaluated whether it meets the requirements of CZARA.

APPROVAL DECISION

Pursuant to CZARA, NOAA and the EPA approve the Coastal Nonpoint Pollution Control Program submitted by the State of Illinois subject to certain conditions explained in this document. In summary, Illinois' program is in conformity with, or is excluded from meeting, 47 management measures under CZARA, and is not yet in conformity with nine other CZARA management measures and two programmatic requirements.

This document provides the specific findings used by NOAA and the EPA as the basis for the decision to approve Illinois' program. It also provides the rationale for the findings and includes conditions that Illinois will need to meet for full approval of its program. The timeframes associated with conditions are effective on the date of the approval letter for these findings.

INTRODUCTION

CZARA directed the EPA to develop technical guidance to assist states and tribes in designing coastal nonpoint pollution control programs. On January 19, 1993, the EPA issued that document, captioned *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters*, 840-B-92-002 (January 1993), which addresses five major source categories of nonpoint pollution: (1) urban runoff, (2) agriculture runoff, (3) forestry runoff, (4) marinas and recreational boating, and (5) hydromodification. This guidance is commonly referred to as the Section 6217(g) guidance because the statutory direction to the EPA appears in CZARA section 6217(g).

This document is organized by the major nonpoint source categories and subcategories and administrative elements (including the boundary for the coastal nonpoint management area). Where appropriate, NOAA and the EPA have grouped categories and subcategories of management measures into a single finding. The structure of each finding follows a standard format. Generally, the finding articulates whether the state program includes or does not include

management measures in conformity with the guidance and includes or does not include enforceable policies and mechanisms to ensure implementation.

For further understanding of terms in this document, please refer to the following:

- Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters (EPA, January 1993)
- Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance (NOAA/EPA, January 1993)
- Flexibility for State Coastal Nonpoint Programs (NOAA/EPA, March 1995)
- Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance for Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) (NOAA/EPA, October 1998) (Final Administrative Changes)

The references in this document to the "program submittal" refer to the *Illinois Coastal Nonpoint Pollution Control Program, July 2014.* NOAA and the EPA have relied upon, but do not repeat here, the extensive information that the State included in its submittal. Further information and analysis is contained in the administrative record for this proposed approval decision and is available upon request at the following locations:

U.S. EPA Headquarters, Office of Water Nonpoint Source Control Branch 1200 Pennsylvania Ave., NW (4503-T) Washington, DC 20460 Contact: Don Waye (202/566-1170)

NOAA/Office for Coastal Management SSMC-4, N/OCM6 1305 East-West Highway Silver Spring, MD 20910 Contact: Allison Castellan (240/533-0799)

U.S. EPA Region 5 Water Division Watersheds & Wetlands Branch 77 West Jackson Street Chicago, IL 60604 Contact: Janette Marsh (312/886-4856)

BOUNDARY

FINDING: Illinois' proposed boundary is sufficient to control the land and water uses that have, or are reasonably expected to have, a significant impact on the coastal waters of Illinois.

RATIONALE: Illinois' coastal nonpoint management area, which includes portions of 16 subwatersheds (12-digit hydrologic unit codes, or HUCs), is sufficient to control the land and water uses that have, or are reasonably expected to have, significant impact on the waters along Illinois' Lake Michigan coast. This boundary aligns with the Illinois coastal zone boundary, Wisconsin's approved coastal nonpoint management area to the north, and Indiana's approved coastal nonpoint management area to the east.

The 96.5-square-mile boundary is comprised of two distinct areas: the Lakeshore Boundary area and the Inland Waterways Boundary area. The Lakeshore Boundary includes approximately 85 square miles of land that drain into Lake Michigan as that watershed has existed since the early 1900s. The Lakeshore Boundary area thus excludes some land areas that historically were part of the Lake Michigan watershed but now drain outside of this watershed as a result of the engineered flow reversal of the Chicago, Little and Grand Calumet River systems, as well as urbanization, paving, and directing of storm sewers away from Lake Michigan. The Inland Waterways Boundary area includes approximately 11.5 square miles of land along segments of the Chicago River, North Shore Channel, and Little Calumet and Grand Calumet Rivers. The Inland Waterways Boundary area is included within Illinois' coastal nonpoint management area principally because, in the past, the lock gates have been opened during times of heavy precipitation (and associated runoff) such that these inland waterways have been released to Lake Michigan and have at times contributed to major water quality issues along portions of the lakeshore. Illinois' entire coastal nonpoint management area is confined to two counties: Lake County to the north and Cook County to the south.

I. <u>AGRICULTURE</u>

FINDING: Illinois has provided sufficient justification to support a categorical exclusion of agriculture from its coastal nonpoint program.

RATIONALE: According to the National Agricultural Statistics Service (a component of the United States Department of Agriculture (USDA), only 425 acres of cropland (less than 0.7% of the coastal zone) are in production and another 299 acres (0.5% of the coastal zone) exist as pasture across Illinois' coastal nonpoint management area. Additionally, there is no commercial rearing of livestock in the State's coastal nonpoint management area. Importantly, Illinois' 2014 Integrated Water Quality Report shows that cropland and livestock rearing are not sources of water quality impairment of any lake or stream in the Illinois coastal nonpoint management area.

Given the insignificant amounts of cropland and pastureland that is in agricultural production within Illinois' coastal nonpoint management area, and the diminishing prospects for agricultural production in this area in the foreseeable future, NOAA and the EPA approve Illinois' exclusion request for the agricultural management measures.

II. <u>FORESTRY</u>

FINDING: Illinois has provided sufficient justification to support a categorical exclusion of forestry from its coastal nonpoint program.

RATIONALE: Approximately 2,398 acres of land are classified as forest throughout Illinois' coastal nonpoint management area. More than half of this acreage is public land used as state and local parks and forest preserves. The remaining 1,101 acres are small tracts of undeveloped forest, which are divided among an increasing number of private owners. Illinois attributes this fragmentation to ongoing urbanization, which diminishes the efficiency of potential timber harvests.

In addition, there are currently no sawmills or other commercial forestry operations in Illinois' coastal nonpoint management area. As the metropolitan Chicago area continues to undergo urbanization, Illinois Department of Natural Resources (IDNR) does not reasonably foresee future development of commercial forestry within the Illinois coastal nonpoint management area. These findings are consistent with Illinois' 2014 Integrated Water Quality Report, which shows that forestry management and timber harvesting are not sources of water quality impairment of any lake or stream in the Illinois coastal nonpoint management area.

Given the absence of any silviculture-related impairments and insignificant forestry activities, forestry does not, and is not reasonably anticipated to, present significant adverse impacts to coastal waters. NOAA and the EPA approve Illinois' exclusion request for the forestry management measures.

III. <u>URBAN</u>

A. <u>NEW DEVELOPMENT and SITE DEVELOPMENT</u>

FINDING: (1) Illinois' program is exempt from the new development management measure. (2) Illinois' program includes management measures in conformity with the Section 6217(g) guidance and enforceable policies and mechanisms to implement the site development management measure.

RATIONALE: NOAA and the EPA do not require communities and municipalities with Municipal Separate Stormwater Sewer Systems (MS4s) regulated under NPDES permits for MS4s to implement the new development management measure. *See* NOAA/EPA memorandum, *Policy Clarification on Overlap of 6217 Coastal Nonpoint Programs with Phase I and II Stormwater Regulations* (Dec. 20, 2002). NOAA and the EPA rely on the NPDES program to manage urban runoff from new development in these jurisdictions. Because the entire Illinois coastal nonpoint management area falls within the geographic scope of NPDES permits for MS4s, NOAA and the EPA do not require the State to separately demonstrate conformity with the new development management measure for any portion of its coastal nonpoint management area.

The intent of the site development management measure is to plan, design, and develop sites to protect areas that are important for the protection of water quality and to control the adverse

impacts to water quality from future development. Given that much of Illinois' 96.5-square-mile coastal nonpoint management area is already fully developed, and that most of the remaining undeveloped area is already protected open space, there is very little land that is left to be developed, particularly in Cook County. Illinois relies on several tools and authorities to control runoff associated with site development across its coastal nonpoint management area. In Cook County, the principal tool is the county's Watershed Management Ordinance, which mandates protections for floodplains, wetlands, wetland buffers, and riparian areas, and provides for erosion and sediment control, with an emphasis on preventative source controls. In Lake County, the local Watershed Development Ordinance (WDO) was established to conserve the beneficial functions of the county's flood-prone areas and wetlands. The WDO generally requires a Watershed Development Permit for developments in floodplains, wetlands, or depressional storage areas (non-riverine depressions where stormwater collects) with a storage volume of 0.75 acre-feet or more. The WDO requires protection of stream channels, overland flows of stormwater, and water quality treatment areas, and regulates activities in floodplains by restricting modification and disturbance of natural riverine floodplains to protect existing hydrologic and environmental functions. The WDO further requires that land disturbances be minimized and negative impacts mitigated. No developments are permitted that alone or cumulatively create a damaging or potentially damaging increase in flood levels. For any development which disturbs 5,000 square feet or more, the WDO requires that certain performance standards for soil erosion and sediment control be met.

At the State level, the Green Infrastructure for Clean Water Act (415 Ill. Comp. Stat. 56), requires the Illinois Environmental Protection Agency (IEPA) to assess and evaluate the use of green infrastructure to help manage stormwater across the State. Illinois has established financial and technical programs to support green infrastructure programs to mitigate nonpoint source pollution from stormwater. For example, Public Act 98-0782 makes the State Revolving Loan funding program available for stormwater projects, including green infrastructure and other projects to control nonpoint source pollution (for example, projects eligible for funding under Clean Water Act section 319, 33 U.S.C. § 1329). Finally, the IEPA is responsible for the review of Joint Permit applications and issuance of Water Quality Certifications under section 401 of the federal Clean Water Act. 33 U.S.C. § 1341. If the IEPA determines that any discharge subject to the requirement for a Water Quality Certification will affect the quality of its waters so as to violate any water quality standards in Illinois, the IEPA has the authority to impose conditions or refuse to issue a license or permit.

B. WATERSHED PROTECTION and EXISTING DEVELOPMENT

FINDING: (1) Illinois' program is exempt from the existing development management measure. (2) Illinois' program includes management measures in conformity with the Section 6217(g) guidance and enforceable policies and mechanisms to implement the watershed protection management measure.

RATIONALE: NOAA and the EPA do not require communities and municipalities with Municipal Separate Stormwater Sewer Systems (MS4s) regulated under NPDES permits for MS4s to implement the existing development management measure. *See* NOAA/EPA memorandum, *Policy Clarification on Overlap of 6217 Coastal Nonpoint Programs with Phase I* *and II Stormwater Regulations* (Dec. 20, 2002). NOAA and the EPA rely on the NPDES program to manage polluted runoff from existing development in these jurisdictions. Because the entire Illinois coastal nonpoint management area falls within the geographic scope of NPDES permits for MS4s, NOAA and the EPA do not require the State to separately demonstrate conformity with the existing development management measure for any portion of its coastal nonpoint management area.

The intent of the watershed protection management measure is to provide comprehensive watershed protection to plan for the placement of new development or redevelopment including construction of new and relocated roads, highways, and bridges that generate nonpoint source pollution. Given that much of Illinois' 96.5-square-mile coastal nonpoint management area is already fully developed, and that most of the remaining undeveloped area already is protected open space, there is very little land that is left to be developed, particularly in Cook County.

Illinois relies on several tools and authorities to control new development and redevelopment across its coastal nonpoint management area. In Cook County, the principal tool is the county's Watershed Management Ordinance, which mandates protections for floodplains, wetlands, wetland buffers, and riparian areas, and provides for erosion and sediment control, with an emphasis on preventative source controls. In Lake County, the local Watershed Development Ordinance (WDO) was established to conserve the beneficial functions of the county's flood-prone areas and wetlands. The WDO generally requires a Watershed Development Permit for developments in floodplains, wetlands, or depressional storage areas (non-riverine depressions where stormwater collects) with a storage volume of 0.75 acre-feet or more. The WDO requires protection of stream channels, overland flows of stormwater, and water quality treatment areas, and regulates activities in floodplains by restricting modification and disturbance of natural riverine floodplains to protect existing hydrologic and environmental functions. The WDO further requires that land disturbances be minimized and negative impacts mitigated. No developments are permitted that alone or cumulatively create a damaging or potentially damaging increase in flood levels.

The Chicago Metropolitan Agency for Planning (CMAP) serves as a regional watershed coordinator for various communities in Cook and Lake Counties, and has developed several nine-element watershed-based plans in the northeastern Illinois region. None of the watershed-based plans, however, apply in the coastal nonpoint management area. Through its Local Technical Assistance program, CMAP does provide assistance to communities across the Chicago metropolitan region to undertake planning projects that advance the principles of GO TO 2040, the comprehensive regional plan for greater Chicago. NOAA and the EPA recommend that Illinois's coastal localities work through CMAP to develop nine-element watershed-based plans across the coastal nonpoint management area.

C. <u>CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL, and</u> <u>CONSTRUCTION SITE CHEMICAL CONTROL</u>

FINDING: Illinois' program is exempt from management measures for: (1) construction site erosion and sediment control; and (2) construction site chemical control.

RATIONALE: NOAA and the EPA no longer require that state coastal nonpoint control programs include either the Construction Site Erosion and Sediment Control Management Measure or the Construction Site Chemical Control Management Measure because the NPDES permit application regulations for stormwater associated with industrial activities, including construction activity, apply nationwide (including the coastal nonpoint management areas of the various coastal states and territories). *See* NOAA/EPA memorandum, *Policy Clarification on Overlap of 6217 Coastal Nonpoint Programs with Phase I and II Stormwater Regulations* (Dec. 20, 2002).

D. <u>NEW AND OPERATING ONSITE DISPOSAL SYSTEMS</u>

FINDING: (1) Illinois has provided sufficient justification to support an exclusion of the new Onsite Disposal Systems (OSDS) management measure from its coastal nonpoint program. (2) Illinois has not yet provided sufficient justification to support an exclusion of the operating OSDS management measure from its coastal nonpoint program, although it may do so in the future.

CONDITION: Within three years, Illinois shall either demonstrate that it has programs in place to meet the operating OSDS management measure, as described below, or provide sufficient justification to support an exclusion of the operating OSDS management measure from its coastal nonpoint program. An exclusion justification shall include more definitive information on the number of systems within the coastal nonpoint management area, as well as information on the status of these systems, so that NOAA and the EPA can determine whether the State would be eligible for an exclusion of the operating OSDS management measure. NOAA and the EPA would require information sufficient to determine whether the State or the counties have identified the extent to which these systems are being operated and maintained to prevent water quality problems or public health risks.

If Illinois does not pursue an exclusion request for the operating OSDS measure, or if NOAA and the EPA deny this request, Illinois shall then need to demonstrate that State or local programs, enforceable policies, and mechanisms are in place in order to: (1) establish and implement policies and systems to ensure that existing OSDS are operated and maintained to prevent the discharge of pollutants; and (2) inspect OSDS at a frequency adequate to ascertain whether OSDS are failing.

RATIONALE: Illinois' coastal nonpoint management area is nearly completely sewered. Any new development in this area would include connection to existing or new sewerage. Therefore an exclusion from the new OSDS management measure is justified.

NOAA and the EPA do not have sufficient information to accept Illinois' proposed exclusion from the operating OSDS management measure at this time. Information is still needed from the State on the number of existing OSDS in the coastal nonpoint management area and the operational integrity of these OSDS. Although records indicate the number may be approximately 400 OSDS, Illinois has not been able to explain its methodology to confirm this number or to determine the condition of these systems. Illinois has the option to demonstrate that there will be no significant impacts to its coastal waters from OSDS, or to describe its strategy (or Lake County's strategy) for ensuring that these systems will be inspected, operated, and maintained to prevent the discharge of pollutants.

If NOAA and the EPA determine that Illinois' existing OSDS do not qualify for an exclusion and the State must demonstrate conformity with the operating OSDS management measure, Illinois will not need to meet the third element of this measure—to consider replacing or upgrading OSDS to treat influent so that total nitrogen loadings in the effluent are reduced by 50 percent—because Lake Michigan is not nitrogen-limited. That is, nitrogen loadings contributed by Illinois' OSDS do not degrade water quality in Lake Michigan.

E. POLLUTION PREVENTION

FINDING: (1) Illinois has demonstrated that it has programs in place across its coastal nonpoint management area to reduce pollutants generated from household hazardous chemicals. (2) Illinois has not yet demonstrated that it has programs in place across its coastal nonpoint management area to reduce pollutants generated from improper disposal of pet excrement; lawn and garden activities; and turf management on golf courses, parks, and recreational areas. (3) Illinois does not need to demonstrate that it has programs in place across its coastal nonpoint management area to reduce pollutants generated from the discharge of pollutants into storm drains or commercial activities such as parking lots and gas stations, as these discharges are regulated under NPDES permits for MS4s.

CONDITION: Within three years, Illinois shall demonstrate that it has programs in place across the coastal nonpoint management area to reduce pollutants generated from improper disposal of pet excrement and turf management on golf courses, parks, and recreational areas. Within three years, Illinois shall demonstrate that it has programs in place across the coastal nonpoint management area, but outside the jurisdiction of Chicago, to reduce pollutants generated from lawn and garden activities.

RATIONALE: Illinois has several education efforts underway to implement portions of this management measure. The IEPA coordinates ongoing comprehensive household hazardous waste collections in Lake and Cook Counties and statewide. The City of Chicago has special requirements for disposal of lawn and garden wastes, with biweekly pickup by the Department of Streets and Sanitation. Illinois should demonstrate, however, how the State or County programs reduce pollutants generated from lawn and garden activities outside Chicago. Although Illinois has provided information on pet waste ordinances for three municipalities in the coastal nonpoint management area, it has not yet described how compliance is encouraged in these jurisdictions or how pet waste is managed in the other localities that share the coastal nonpoint management area. Finally, Illinois has not yet described how it is reducing pollutants generated from turf management on golf courses, parks, and recreational areas.

F. <u>PLANNING, SITING, AND DEVELOPING ROADS AND HIGHWAYS; SITING,</u> <u>DESIGNING, AND MAINTAINING BRIDGES; ROAD, HIGHWAY, AND</u> <u>BRIDGE OPERATION AND MAINTENANCE; ROAD, HIGHWAY, AND</u> <u>BRIDGE RUNOFF SYSTEMS</u>

FINDING: (1) Illinois has programs and enforceable policies and mechanisms in place to implement the management measure for planning, siting, and developing roads and highways with regard to local roads, but not for state roads. (2) Similarly, Illinois has programs and enforceable policies and mechanisms in place to implement the management measure for siting, designing, and maintaining bridges with regard to local bridges, but not for state-owned or operated bridges. (3) Illinois' program is exempt from the management measure for operation and maintenance of roads, highways, and bridges, as well as the management measure for road, highway, and bridge runoff systems, because nonpoint source pollution from these sources is regulated by NPDES permits for MS4s.

CONDITION: Within three years, Illinois shall demonstrate that it has programs and enforceable policies and mechanisms in place across the coastal nonpoint management area to implement: (1) the management measure for planning, siting, and developing roads and highways with regard to state roads; and (2) the management measure for siting, designing, and maintaining bridges with regard to state-owned or operated bridges.

RATIONALE: Through aspects of the Cook County Watershed Management Ordinance (55 Ill. Comp. Stat. 5/5-1062.1; 70 Ill. Comp. Stat. 2605/1 et. seq.) and the Lake County Watershed Development Ordinance (55 Ill. Comp. Stat. 5.5-1062), Illinois has programs in place to implement the management measure for planning, siting, and developing roads and highways with regard to local roads and highways, and the management measure for siting, designing, and maintaining bridges with regard to local bridges. These ordinances, however, do not apply to state roads, highways, and bridges.

Under the Cook County Watershed Management Ordinance (WMO), local developments, including local roads and bridges, cannot increase flood velocity, impair hydrologic function, or degrade water quality. Article 5 of the WMO mandates that all developments incorporate erosion and sediment control practices into their initial site plans and places primary emphasis on erosion control practices as preventative source controls. Article 6 of the WMO mandates special protections for floodplains, wetlands, wetland buffers, and riparian areas. Development that impacts wetlands is discouraged by the WMO, but mitigation is allowed in some cases. The WMO encourages existing riparian functions to be protected. Further, the WMO requires mitigation practices such as streambank stabilization and native vegetation planting.

The Lake County Watershed Development Ordinance (WDO) serves to prevent flood damages to life and property; to assure that local development, including local roads and bridges, does not increase flood and drainage hazards or create unstable conditions susceptible to erosion; and to conserve the natural hydrologic, hydraulic, water quality, and other beneficial functions of flood-prone areas and wetlands in Lake County. Specifically, the WDO establishes a Watershed Development Permit system that includes mandates to protect stream channels, overland flows of stormwater, and water quality treatment areas. If natural channels are proposed for modification, a mitigation plan is required that demonstrates conservation of the physical characteristics of the existing channel, including length, cross-section, slope, sinuosity, and carrying capacity. The WDO requires revegetation using local native plants. The ordinance also regulates activities in floodplains by restricting modification and disturbance of natural riverine floodplains to protect existing hydrologic and environmental functions. It requires minimization of disturbances and

mitigation of negative impacts. No developments are permitted that alone or cumulatively create a damaging or potentially damaging increase in flood levels. Additionally, the WDO regulates activities in jurisdictional and non-jurisdictional wetlands and requires delineations, impact assessments, alternatives analyses, and mitigation plans. Further, mitigation is required to provide for replacement of lost wetland at rates proportional to the quality of the impacted wetlands, with a 6-to-1 mitigation ratio required for impacting forested wetlands. Buffer areas for mitigation wetlands are required and mitigation is not allowed within detention facilities.

NOAA and the EPA no longer require that state coastal nonpoint control programs include the management measures for road, highway, and bridge operation and maintenance and runoff systems in NPDES-regulated urbanized areas because those sources are regulated under NPDES permits for MS4s. *See* NOAA/EPA memorandum, *Policy Clarification on Overlap of 6217 Coastal Nonpoint Programs with Phase I and II Stormwater Regulations* (Dec. 20, 2002). Because nonpoint source pollution from these sources across the entire Illinois coastal nonpoint management area, including all state roads, is subject to NPDES permits for MS4s, the State does not need to separately demonstrate conformity with the road, highway and bridge operation and maintenance and runoff system management measures for state and local roads.

G. <u>ROAD, HIGHWAY, AND BRIDGE CONSTRUCTION PROJECTS AND ROAD,</u> <u>HIGHWAY, AND BRIDGE CONSTRUCTION SITE CHEMICAL CONTROL</u>

FINDING: Illinois' program is exempt from management measures for: (1) the road, highway, and bridge construction projects; and (2) construction site chemical control, because pollution from these sources is regulated by NPDES permits for discharges associated with construction activity nationwide.

RATIONALE: NOAA and the EPA no longer require that state coastal nonpoint control programs include these two management measures because the NPDES permits for discharges associated with construction activity apply nationwide, including the coastal nonpoint management areas of states and territories. *See* NOAA/EPA memorandum, *Policy Clarification on Overlap of 6217 Coastal Nonpoint Programs with Phase I and II Stormwater Regulations* (Dec. 20, 2002).

IV. MARINAS AND RECREATIONAL BOATING

A. MARINA SITING AND DESIGN

FINDING: Illinois has the necessary authority to prevent nonpoint source pollution and require implementation of the following management measures: (1) marina flushing; (2) water quality assessment; (3) habitat assessment; (4) shoreline stabilization; and (5) stormwater runoff management. Illinois has provided a description of the regulatory programs the State will use to require implementation of these measures. Illinois has described programs that may be in conformity with the management measure for (6) fueling station design. However, Illinois has not yet described how it will require proper siting and design of fueling stations in the site planning phase. The State has not yet described programs in conformity with the management measure for (7) vessel sewage facility management.

CONDITION: Within three years, Illinois shall (1) demonstrate how its proposed programs will provide for siting and design of fueling stations in ways to effectively contain potential spills. The State shall also (2) identify how it will address ease of access and signage for vessel sewage facility management. The State shall (3) demonstrate how it promotes proper siting of vessel sewage facilities as part of a marina development plan to ensure facilities are designed to adequately handle expected use and to provide ease of access to minimize the risk of releasing vessel sewage to surface waters.

RATIONALE: With the exceptions noted in the condition above, the Illinois program meets the management measures for the siting and design of marinas through several permitting and certification requirements, including permits issued with the Army Corps of Engineers under the Joint Permit Program. The Joint Permit Program is founded on multiple state and federal authorities, including the Illinois Rivers, Lakes, and Streams Act), Water Quality Certifications under Section 401 of the Clean Water Act and Illinois Environmental Protection Act (415 Ill. Comp. Stat. §5), and State NPDES permits for discharges associated with industrial activity and with construction activity. Although these authorities adequately address the management measures for: (1) marina flushing; (2) water quality assessment; (3) habitat assessment; (4) shoreline and bank stabilization; and (5) stormwater runoff, Illinois has not yet demonstrated how these authorities ensure the implementation of management measures for vessel fueling station design and vessel sewage facility management.

With regard to vessel fueling station design, the State has proposed to meet the management measure through the Illinois Gasoline Storage Act (430 Ill. Comp. Stat. §15), the State Fire Marshal's authority to promulgate regulations for marine motor fuel dispensing facilities, and the State's promotion of best management practices (BMPs) to prevent and respond to fueling station spills. These authorities and programs may prove to be sufficient to meet the fueling station design management measure once Illinois demonstrates how they are used to design fueling stations to allow for ease in cleanup of spills.

Regarding vessel sewage facility management, the Illinois Sewage Management Rule (77 IAC 800.1300) requires that "facilities for disposal of sewage from the boat holding tanks shall be provided" and that restrooms be available within 500 feet of the marina. However, the State has not explained whether the rule includes ease of access and signage, as required in the corresponding CZARA management measure. In addition, although the Clean Marina Initiative (a voluntary, incentive-based state program that encourages marina operators and recreational boaters to protect coastal water quality) promotes adequate BMPs to apply to vessel sewage facility management at existing marinas, the State has not described how it promotes the siting of these facilities as part of a marina development plan to ensure they are designed to adequately handle expected use and to provide ease of access to minimize the risk of releasing sewage to surface waters.

B. MARINA AND RECREATIONAL BOAT OPERATION AND MAINTENANCE

FINDING: Illinois's program includes management measures in conformity with the Section 6217(g) guidance for marina and recreational boat operation and maintenance.

RATIONALE: The Illinois Coastal Management Program administers the Illinois Clean Marina Initiative, a voluntary, incentive-based program that encourages marina operators and recreational boaters to protect coastal water quality. The Illinois Clean Marina Initiative offers formal certification to marina operators as well as expanded education, outreach, and technical assistance. The Illinois Clean Marina Initiative has developed a comprehensive marina guidebook that informs the certification process as well as ongoing operations and best management practices for marina operators and boaters. Launched in June 2013, the Illinois Clean Marina Initiative has already certified six of 32 marinas in the coastal nonpoint management area, and the initiative has received pledges from five additional marinas, representing a commitment to certain practices and to proceed through the full certification process. To date, nearly 75% of slip capacity (6,904 slips of 9,306 in the coastal nonpoint management area) has been either certified or pledged under the Illinois Clean Marina Initiative. The certification requirements are in conformity with all eight of the operation and maintenance management measures in the Section 6217(g) guidance. Certification is conferred on a participating marina only when 100% of legally mandated practices have been met, 100% of Illinois Clean Marina Program-required best management practices (BMPs) have been met, and at least 50% of recommended BMPs have been met. In order to maintain certification, marinas must annually submit in writing that their facilities continue to meet the designation requirements described on the certification checklist. Additionally, every three years a representative from the Illinois Clean Marina Initiative visits the marina to reaffirm its clean marina status.

NOAA and the EPA support the Illinois Coastal Management Program's stated intention in its submittal to emphasize implementation of, and improvements to, marinas and recreational boating management measures, including certification of additional marinas in the coastal nonpoint management area, improved compliance with existing authorities (e.g., fish waste regulations, vessel sewage discharge laws), and education and outreach efforts.

The State has identified a back-up enforceable policy that can ensure implementation of the applicable management measures for marinas and recreational boating operation and maintenance throughout the coastal nonpoint management area. *See* Title III of the Illinois Environmental Protection Act, 415 Ill. Comp. Stat. 5/11 et seq. Section 12(a) of the Illinois Environmental Protection Act makes it unlawful for any person to "cause or threaten or allow the discharge of any contaminants into the environment in any State so as to cause or tend to cause water pollution in Illinois..."

V. <u>HYDROMODIFICATION</u>

FINDING: Illinois' program includes management measures and enforceable policies and mechanisms to meet the Section 6217(g) guidance, with two exceptions. It does not include management measures for: (1) improving surface water quality and instream and riparian habitat through the operation and maintenance of existing modified channels; and, (2) developing a process to identify where shoreline erosion is a nonpoint source pollution problem and stabilize the streambanks or shorelines.

Where the State is relying on voluntary approaches to meet the hydromodification measures, it has identified a back-up enforceable policy to ensure their implementation throughout the coastal nonpoint management area. Illinois has not adequately described the monitoring and tracking methods it will use as part of its voluntary approach to meet the measure for improving surface water quality and instream and riparian habitat through the operation and maintenance of existing modified channels, and element one of the measure for eroding streambanks and shorelines.

NOAA and the EPA do not require Illinois' program to meet management measures for erosion and sediment control for dams and chemical and pollutant control for dams since NPDES permits for discharges associated with construction activity apply to these sources of pollution. Illinois has provided sufficient justification to support a categorical exclusion of the management measure for protection of surface water quality and instream and riparian habitat for dams.

CONDITION: Within three years, Illinois: (1) shall develop a process to improve surface water quality and instream and riparian habitat through the operation and maintenance of existing modified channels, and (2) shall develop a process to fully address the streambank and shoreline erosion management measure. The State shall show that it has an operation and maintenance program with specific timetables for existing modified channels that includes identification of opportunities to restore instream and riparian habitat in those channels and shall demonstrate that it has programs or processes in place to stabilize eroding streambanks and shorelines.

RATIONALE: As described below, Illinois relies on a mix of federal, state, and local regulatory programs to implement most elements of the management measures for channelization and channel modification, and eroding streambanks and shorelines, including: the Rivers and Harbors Act (33 U.S.C. § 403); the State's Rivers, Lakes, and Streams Act (17 IAC Parts 3704 and 3708); the Water Quality Certification process under Clean Water Act section 401, 33 U.S.C. § 1341; the Cook County Watershed Management Ordinance; the Lake County Watershed Development Ordinance; and the Chicago River Corridor Design Guidelines and Standards.

The Rivers and Harbors Act requires a permit from the U.S. Army Corps of Engineers for any obstruction or alteration of a navigable waterbody, including shoreline protection, construction of bulkheads, dredging, and beach nourishment projects. These permits are subject to water quality certification under Clean Water Act Section 401 by the IEPA. The State's Rivers, Lakes, and Streams Act requires a permit for any proposed project that is likely to cause an impairment to the natural resources in any public body of water or that will cause bank or shoreline instability on other properties. The permit, in turn, requires the applicant to mitigate certain negative impacts. Although the law requires maintenance and repair to existing channelized waterways, the mandated practices do not fully address flow alteration. Specifically, while practices under the Act address restrictions of flood flows, other types of flow concerns (e.g., distribution, amount and timing) and related nonpoint source water quality concerns are not sufficiently addressed.

The IEPA, through its Clean Water Act section 401 Water Quality Certification process, ensures that all projects which may result in any discharge into navigable waters, including channel

modifications and those impacting streambanks and shorelines, comply with applicable water quality standards, effluent limitations, and other appropriate requirements under State law. Individual water quality certification reviews under the State's program to implement Clean Water Act section 401 consider all potential water quality impacts of the proposed activity, both direct and indirect, over the lifetime of the project, which is consistent with the first two elements of the management measures for channelization and channel modification ((1) evaluate the potential effects of proposed channelization and channel modification on the physical and chemical characteristics of surface waters and on instream and riparian habitat, and (2) plan and design channelization and channel modification to reduce undesirable impacts), as well as the second two elements of the management measure for eroding streambanks and shorelines ((1) protect streambank and shoreline erosion features with the potential to reduce nonpoint source pollution, and (2) protect streambanks and shorelines from erosion).

At the local level, the Cook County Watershed Management Ordinance (WMO) and the Lake County Watershed Development Ordinance (WDO) provide additional support for the second two elements of the management measure for eroding streambanks and shorelines. In Cook County, the WMO mandates protections for floodplains, wetlands, wetland buffers, and riparian areas; and provides for erosion and sediment control, with an emphasis on preventative source controls. In Lake County, the WDO generally requires a Watershed Development Permit for developments in floodplains, wetlands, or depressional storage areas (non-riverine depressions where stormwater collects) with a storage volume of 0.75 acre-feet or more. No developments are permitted that alone or cumulatively create a damaging or potentially damaging increase in flood levels. However, these authorities do not address protection of eroding streambanks or shorelines in the absence of proposed new work. Illinois should describe how it identifies where streambank or shoreline erosion is a nonpoint source pollution problem and stabilizes these streambanks or shorelines.

The manual, *Chicago River Corridor Design Guidelines and Standards*, outlines the requirements for planned development in and adjacent to the setback area along the Chicago River and its branches within the city limits of Chicago. Specific requirements are in place regarding maximum riverbank steepness and appropriate bank stabilization techniques. This manual includes requirements that riverfront property owners maintain riverbanks, seawalls, and other attached structures on their property from deterioration that may endanger the health or safety of individuals or impair river navigation. This required maintenance is expected to have the added benefit of reducing nonpoint source pollution from failing channelization structures.

Illinois has many voluntary education, public outreach, and technical and financial assistance resources, such as technical guidance manuals, cost-share and grant programs, and a water quality technical support center, focused on minimizing the impacts of nonpoint source pollution due to channelization in the Illinois coastal nonpoint management area. These resources promote the importance of smart planning, design, operation, and maintenance, as well as the evaluation of potential impacts from channelization projects. To support these voluntary efforts, the State has provided a legal opinion asserting that Title III of the Illinois Environmental Protection Act, 415 Ill. Comp. Stat. 5/11 et seq., at Section 12(a), provides adequate back-up authority to ensure implementation of the hydromodification management measures. The State has not yet fully described, however, how it promotes these outreach, technical and financial assistance programs

or how program implementation will result in operation and maintenance programs for existing modified channels that identify opportunities to: (1) restore instream and riparian habitat; and (2) improve surface water quality for existing modified channels and stabilize eroding streambanks. In addition, Illinois has not yet demonstrated it has programs in place to monitor and track the implementation of these voluntary programs or demonstrated a commitment to use its back-up authority when needed.

NOAA and the EPA no longer require that state coastal nonpoint control programs include the dam management measures for erosion and sediment control and chemical and pollutant control because those sources of nonpoint source pollution are subject to NPDES permits for stormwater associated with industrial activity, storm water associated with construction activity, or for MS4s. *See* NOAA/EPA memorandum, *Policy Clarification on Overlap of 6217 Coastal Nonpoint Programs with Phase I and II Stormwater Regulations* (Dec. 20, 2002).

With regard to the management measure for protection of surface water quality and instream and riparian habitat for dams, Illinois does not have any impoundments within the coastal nonpoint management area that are above the minimum size and capacity threshold for this measure and no new qualifying dam construction within the area is likely in the future. Therefore, the Illinois program is excluded from this measure.

VI. WETLANDS, RIPARIAN AREAS AND VEGETATED TREATMENT SYSTEMS

FINDING: Illinois' program includes management measures for the protection and restoration of wetlands and riparian areas and for vegetated treatment systems.

RATIONALE: The Illinois program meets the management measure for protection of wetlands and riparian areas primarily through local county ordinances and a variety of additional authorities and programs. In Cook County, the primary authority is the county's Watershed Management Ordinance (WMO), which mandates protections for floodplains, wetlands, wetland buffers and riparian areas, and provides for erosion and sediment control, with an emphasis on preventative source controls. In Lake County, the local Watershed Development Ordinance (WDO) was established to conserve the beneficial functions of the county's flood-prone areas and wetlands. The WDO generally requires a Watershed Development Permit for developments in floodplains, wetlands, or depressional storage areas (non-riverine depressions where stormwater collects) with a storage volume of 0.75 acre-feet or more. The WDO requires protection of stream channels, overland flows of stormwater, and water quality treatment areas, and regulates activities in floodplains by restricting modification and disturbance of natural riverine floodplains to protect existing hydrologic and environmental functions. The WDO further requires that land disturbances be minimized and negative impacts mitigated. No developments are permitted that alone or cumulatively create a damaging or potentially damaging increase in flood levels. For any development which disturbs 5,000 square feet or more, the WDO requires that certain performance standards for soil erosion and sediment control be met.

With regard to the management measure for restoration of wetlands and riparian areas, Cook County's WMO mandates specific mitigation requirements where impacts to wetlands or

riparian areas from development are unavoidable. Similarly, Lake County's WDO requires that disturbances to wetlands are minimized and negative impacts are mitigated in accordance with specific wetland mitigation plan requirements. The WDO requires protective buffers around all streams that are waters of the United States and isolated water bodies that are either waters of the United States or isolated waters of Lake County.

Additional authorities used to protect and restore wetlands and riparian areas include: the federal Clean Water Act permitting program for dredged and fill material under Section 404, the Rivers and Harbors Act of 1899, and State authorities such as Illinois' Rivers, Lakes, and Streams Act (615 Ill. Comp. Stat. § 5) and the Interagency Wetland Policy Act of 1989 (20 Ill. Comp. Stat. § 830). Illinois' Rivers, Lakes, and Streams Act regulates construction to prevent water impairment (Section 3704) and requires the minimization of erosion and sedimentation during construction (Section 3708). Projects affecting waterways, floodplains, or wetlands in the Illinois coastal nonpoint management area that are not regulated under the regional permit are required to apply for a Joint Permit mandating a description of avoidance, minimization, and compensatory activities. Illinois Department of Natural Resources (IDNR) has authorized the Lake County Stormwater Management Commission to issue permits for development in regulatory floodplains and floodways with drainage areas less than one square mile. The Interagency Wetland Policy Act of 1989 (20 Ill. Comp. Stat. § 830) directs State agencies to "preserve, enhance, and create wetlands" and sets a goal of zero net loss of existing wetlands, or their value, from State supported activities.

Additionally, Illinois has several voluntary and incentive programs, including the "Go To 2040" planning initiative, the Illinois Urban Manual, open space acquisition programs, and IDNR landowner assistance programs, that help promote the restoration of wetland and riparian areas. Illinois also participates in the NRCS wetland reserve easement program that helps promote the restoration of wetland and riparian areas.

To implement the vegetated treatment systems management measure, the State relies on Cook County's WMO and Lake County's WDO, both of which require that adverse impacts to riparian areas and wetlands be mitigated. Mitigation options include the use of vegetated treatment systems. Illinois also has several publications, BMP manuals and outreach/technical assistance programs that promote vegetated swales, constructed wetlands, buffer strips and other vegetated treatment methods to control polluted runoff. For example, the Illinois Urban Manual serves as a technical reference on best management practices for soil erosion and sediment control, stormwater management, and special area protection. It is used by developers, planners, engineers, government officials and others involved in land use planning, building site development, and natural resource conservation in communities across the Illinois coastal nonpoint management area. Examples of funded projects include vegetated swales, stormwater wetlands, green roofs, tree infiltration boxers, rain gardens, and vegetated filter strips.

VII. ADMINISTRATIVE COORDINATION

FINDING: Illinois' program contains mechanisms to improve coordination among State agencies and between State and local officials.

RATIONALE: Numerous mechanisms ensure that the Illinois Coastal Nonpoint Pollution Control Program is coordinated among State and local agencies. Several State statutes mandate such coordination, including the Illinois Clean Water Act; Rivers, Lakes, and Streams Act; and Lake Michigan Shoreline Act. These statutes are supplemented by the Illinois Nonpoint Source Management Program and other mechanisms, which include collaboration among state agencies and the Metropolitan Water Reclamation District and Lake County Stormwater Management Commission. The Illinois Coastal Management Program (ICMP) also established a Coastal Advisory Group (composed partly of representatives from all municipalities in the Illinois coastal nonpoint management area) to oversee direction and implementation of the Coastal Nonpoint Pollution Control Program. Finally, as noted below in the Public Participation section, the ICMP established a Coastal Nonpoint Source Advisory Panel to help guide program development and implementation.

VIII. PUBLIC PARTICIPATION

FINDING: Illinois' program provides for ongoing public participation in its development and implementation.

RATIONALE: Illinois used extensive public involvement processes in developing its Coastal Nonpoint Pollution Control Program. The State established a Coastal Nonpoint Program Advisory Panel to help guide program development. This panel is composed of federal, State, and local officials, as well as several non-governmental partners. The panel has advised the ICMP and the IEPA on how the Coastal Nonpoint Pollution Control Program can best fill gaps and complement current efforts to control nonpoint source pollution entering Lake Michigan.

In addition, the ICMP developed the Illinois Lake Michigan Implementation Plan, which is another forum for public input on protecting Lake Michigan. These efforts, combined with frequent presentations given by ICMP staff, show extensive public input during program development. Ongoing public engagement is planned through the Illinois Lake Michigan Implementation Plan and Coastal Nonpoint Source Advisory Panel.

IX. <u>TECHNICAL ASSISTANCE</u>

FINDING: Illinois' program includes sufficient efforts to provide technical assistance across all management measures.

RATIONALE: Illinois has demonstrated that well-established programs, functions, and partnerships among federal, State and local government units; academia; and industry and nonprofit organizations exist in Illinois to deliver technical assistance for planning and implementation of BMPs to protect and improve water quality, including development and implementation of any additional management measures that may prove necessary. For example, one entity for delivering local technical assistance is the Lake County Stormwater Management Commission, which provides technical assistance to communities on stormwater issues and implementation of the Lake County Watershed Development Ordinance.

Technical assistance for additional management measures in the Illinois' coastal nonpoint management area will be provided through these programs, functions, and partnerships. Information and education is an integral part of the technical assistance delivery system for conservation and nonpoint pollution control in Illinois. NOAA and the EPA conclude that Illinois has an effective strategy for providing technical and other assistance to local governments and the public to further the objectives of its Coastal Nonpoint Pollution Control Program.

X. <u>ADDITIONAL MANAGEMENT MEASURES</u>

FINDING: Illinois has not yet described how it will use monitoring and assessment information to determine which additional management measures will be considered and, if required, developed and implemented.

CONDITION: Within three years, Illinois shall demonstrate that it has a monitoring framework in place to measure effectiveness of the State's Coastal Nonpoint Pollution Control Program's management measures, as well as to document and assess sources of impairment that are currently unidentified. At that time, the State shall also identify any additional management measures which would be needed to attain and maintain water quality standards and, if required, develop a strategy to meet these additional measures.

RATIONALE: Based on the most recent data available, Illinois has identified coastal waters that are impaired for at least one designated use and has documented that more than 40 percent of the impairments are a result of unidentified sources. Due to the highly urbanized nature of the Illinois coastal nonpoint management area, the vast majority of Illinois' coastal waters that have been sampled are considered impaired for at least one use. All harbor units are considered impaired for fish consumption due to polychlorinated biphenyls (PCBs) and atmospheric deposition of mercury. Waukegan Harbor had been listed as impaired for aquatic life due to a combination of contaminated sediments, industrial point source discharges, and urban runoff/storm sewers, but recent dredging of Waukegan Harbor sediments resulted in the removal of this impairment. All 63 miles of Illinois' Lake Michigan shoreline are impaired for fish consumption and 51 of 52 assessed Lake Michigan beaches are impaired for primary contact recreation. The fish consumption impairment is caused by atmospheric deposition of mercury and by PCBs. Primary contact issues result from E. coli contamination due, in part, to combined sewer overflows and urban runoff/storm sewers, as well as unknown sources. A TMDL that addresses "manageable" nonpoint sources has been completed and approved for all Lake Michigan beaches.

Illinois has already begun implementing many programs and regulations to manage nonpoint source pollution into the State's portion of Lake Michigan. Numerous monitoring programs, which include both data collection and data analysis, are in place to determine water quality conditions. As deficiencies are identified, the State of Illinois has robust mechanisms for determining additional steps which need to be taken to address shortcomings. However, these monitoring efforts do not appear to measure effectiveness of the State's Coastal Nonpoint Pollution Control Program's management measures.

As stated in the State's program submittal, Illinois has developed a process for selecting and implementing additional management measures. However, since more than 40 percent of the impairments are a result of unidentified sources, the process lacks sufficient data to adequately assess the need for additional management measures.

XI. <u>CRITICAL COASTAL AREAS</u>

FINDING: Illinois' program identifies and includes a process for the continuing identification of critical coastal areas adjacent to impaired and threatened coastal waters.

RATIONALE: Largely as a result of intensive urban land use over time, nearly all of the waters within or adjacent to the State's coastal nonpoint management area are impaired in some manner, although most are not due to nonpoint sources. Therefore, Illinois is identifying a critical coastal area based on applying a buffer strip along the shoreline adjacent to impaired coastal waters. Illinois considers the entire 63-mile length of the Lake Michigan coast to be a critical coastal area and includes a buffer length of 0.25 mile from the shoreline, which in many places will include the full width of the coastal nonpoint program management area.

XII. MONITORING

FINDING: Illinois' monitoring approach does not demonstrate the ability to assess over time the success of the management measures in reducing pollution loads and improving water quality.

CONDITION: Within three years, Illinois shall develop an approach that enables the State to assess, over time, the extent to which implementation of management measures is reducing pollution loads and improving water quality. Illinois shall have a framework in place that will track the implementation of required management measures in relation to the scheduled monitoring activities.

RATIONALE: Although Illinois has produced a comprehensive list and description of monitoring activities and trackable measures for most categories of nonpoint source pollution in the Section 6217(g) guidance, Illinois has not yet described how it is monitoring improvements in water quality and how the specific monitoring activities will be linked to implementation of management measures and changes in water quality over time. NOAA and the EPA recommend that Illinois provide a description of how data from monitoring/assessment activities will be integrated and analyzed to assess: (1) changes in pollution loads over time; and (2) changes in water quality over time. Illinois' most recent Water Monitoring Strategy, which follows its 2007-2012 Water Monitoring Strategy, should be modified to provide the necessary foundation to evaluate the performance and effectiveness of the section 6217(g) management measures and to determine if additional management measures are needed.

NOAA and the EPA encourage the State to proceed with developing a monitoring and tracking strategy to meet the CZARA program monitoring requirement.