

**FINDINGS FOR THE INDIANA  
COASTAL NONPOINT PROGRAM**

**FOREWORD**

This document contains the findings for the coastal nonpoint pollution control program submitted by the State of Indiana pursuant to Section 6217(a) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA). The findings are based on a review of *Indiana Coastal Nonpoint Pollution Control Program, February 2005*. The National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA) reviewed this information and evaluated the extent to which it conforms with the requirements of CZARA.

NOAA and EPA commend Indiana on the substantial amount of time and effort put into developing the program and we appreciate the commitment the State of Indiana has shown to complete an ambitious task with limited resources. We will continue to work with Indiana to ensure that these findings represent an accurate assessment of current state abilities and efforts to address coastal nonpoint source pollution.

**APPROVAL DECISION**

NOAA and EPA approve the coastal nonpoint pollution control program submitted by the State of Indiana pursuant to Section 6217(a) of the Coastal Zone Act Reauthorization Amendments of 1990, subject to certain conditions.

This document provides the specific findings used by NOAA and EPA as the basis for the decision to approve Indiana's program. It also provides the rationale for the findings and includes conditions that will need to be met for Indiana to receive final approval of its program. The timeframes associated with conditions become effective on the date of the approval letter for these findings.

**INTRODUCTION**

This document is organized by the major nonpoint source categories and subcategories identified in the section 6217(g) guidance and the administrative elements identified in the program guidance (including the boundary for the 6217 management area). Where appropriate, NOAA and 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 is that the state program includes or does not include management measures in conformity with the (g) guidance and includes or does not include enforceable policies and mechanisms to ensure implementation. In some cases, the finding reflects that the state has identified a back-up

## *Indiana Coastal Nonpoint Program Findings*

enforceable policy, but has not yet demonstrated the ability of the authority to ensure implementation. For further understanding of terms in this document, the reader is referred 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 and EPA, January 1993)

*Flexibility for State Coastal Nonpoint Programs* (NOAA and 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 and EPA, October, 1998) (*Final Administrative Changes*)

The references in this document to text refer to the *Indiana Coastal Nonpoint Pollution Control Program, February 2005* (“program submittal”). We have relied upon, but do not repeat here, the extensive information that the State included in the program submittal. Further information and analysis is contained in the administrative record for this approval decision and may be reviewed by interested parties at the following locations:

EPA/Office of Wetlands, Oceans and Watersheds  
Assessment & Watershed Protection Division  
Nonpoint Source Control Branch  
401 M St., SW (4503-F)  
Washington, DC 20460  
Contact: Don Wayne (202/566-1170)

NOAA/Office of Ocean and Coastal Resource Management  
Coastal Programs Division  
SSMC-4, N/ORM3  
1305 East-West Highway  
Silver Spring, MD 20910  
Contact: Allison Castellan (301/713-3155, x125)

U.S. EPA  
Office of Watersheds & Nonpoint Source Programs  
Water Division  
77 West Jackson Street  
Chicago, IL 60604  
Contact: Tom Davenport (312/886-0209)

### **I. BOUNDARY**

**FINDING:** Indiana’s proposed boundary is sufficient to control the land and water uses that

## *Indiana Coastal Nonpoint Program Findings*

have or are reasonably expected to have a significant impact on the coastal waters of Indiana.

**RATIONALE:** Indiana's proposed 6217 management area, defined as the Calmut-Galien watershed, is sufficient to control the land and water uses that have or are reasonably expected to have significant impact on the waters along Indiana's Lake Michigan coast. This boundary aligns with the State's coastal management boundary and Michigan's already approved 6217 management area to the north.

## **II. AGRICULTURE**

**FINDING:** Indiana's program may include management measures in conformity with the 6217(g) guidance, however additional clarification is needed. The State has identified a backup enforceable authority but has not yet demonstrated the ability of the authority to ensure implementation throughout the 6217 management area by submitting a legal opinion, demonstrating the authority and commitment to use the enforcement mechanisms where necessary, describing the laws and processes linking the implementing agencies with the enforcement agency, and describing the monitoring and tracking mechanisms the State will employ to ensure that the voluntary programs are being implemented sufficiently. Indiana has presented sufficient justification to grant an exclusion of the irrigation water management measure for irrigated agricultural lands.

**CONDITION:** Within five years, Indiana will demonstrate that it has programs in place to conform with the 6217 (g) guidance. Within five years, Indiana will submit a legal opinion and other supporting documents as described in the *Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance* (October 1998) to demonstrate that it has adequate back-up authority to implement the agricultural management measures throughout the 6217 management area.

**RATIONALE:** Indiana currently has a number of voluntary programs that utilize the Indiana Natural Resource Conservation Service's Field Office Technical Guide (FOTG), which provides the technical basis for implementing the identified agricultural management measures. For example, as of 2005, approximately 52% of cropland within the 6217 management area is under conservation tillage. The State also sponsors technical assistance, education, training and financial incentive programs through the Purdue University Cooperative Extension Service, local Soil and Water Conservation Districts and Department of Agriculture, Division of Soil Conservation but has not described how these programs specifically help farmers implement the 6217(g) measures for agriculture. These programs are supported by federal assistance programs such as Section 319, USDA's Conservation Reserve and Environmental Quality Incentives Programs, and Indiana's Lake and River Enhancement Program (LARE).

## *Indiana Coastal Nonpoint Program Findings*

Several authorities provide for partial implementation of the management measures. For example, pesticides are regulated under the Pesticide Registration Law (IC-15-3-3.5) and the Pesticide Use and Application Law (IC 15-3-3.6), which, among other requirements, calls for commercial pesticide applicators, as well as farmers and private applicators, to obtain training in proper pesticide use prior to receiving a permit to apply restricted-use pesticides. In addition, under Indiana's Confined Feeding Law (327 IAC 16) combined animal feeding operations (CAFOs) consistent with the size requirements for CAFOs under the large CAFO 6217 (g) measure are required to obtain NPDES permits. However, not all manure storage and design requirements under the Confined Feeding Law are sufficient to meet the (g) management measure requirements for large and small CAFOs. For example, 327 IAC 16-8-4 Sec. 4 (4) states that "if applicable," the storage capacity should be designed to hold rainfall and runoff from only a 25-year, 24-hour storm event. Furthermore, liners and other protective measures are only required for new storage facilities if "determined to be necessary to protect human health or the environment . . ." (327 IAC 16-8-3 Sec. 3 (c)(2) and (5)). NOAA and EPA understand that Indiana's Confined Feeding Law is being revised. Indiana should ensure that the revisions comply with the 6217 (g) measures for large and small CAFOs and the State needs to supply NOAA and EPA with a copy of the final rule language to review when it is approved.

Indiana has proposed that its Water Quality Standards (327 IAC-2) can be used to require implementation of the agriculture management measures. However, the State has not yet demonstrated the ability to ensure implementation of the management measures throughout the 6217 management area through the use of voluntary programs and its back-up enforcement authority (327 IAC-2). The State needs to submit a legal opinion, demonstrating the authority and commitment to use the enforcement mechanisms where necessary, describing the laws and processes linking the implementing agencies with the enforcement agency, and describing the monitoring and tracking mechanisms the State will employ to ensure that the voluntary programs are being implemented sufficiently (See *Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance*, October 1998).

Given the insignificant amount of cropland that is irrigated within Indiana's 6217 management area (estimated at only 380 acres, less than 0.5% of all cropland), NOAA and EPA approve Indiana's exclusion request for the irrigation management measure.

### **III. FORESTRY**

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

**RATIONALE:** Only 5,823 acres of land (less than 1%) are classified as forest throughout Indiana's three coastal counties (Lake, LaPorte and Porter). Furthermore, the 6217 management area, which contains the highest percentage of urban/suburban/commercial land for these coastal counties, only comprises 30.1% of the total land area (343,124 acres) of these counties.

## *Indiana Coastal Nonpoint Program Findings*

Commercial timber harvesting is rare. No major tracks of commercial forest land exist within the 6217 boundary. Most of the forest land is owned by individuals in low-density suburban settings that have no desire to log. The two small sawmills within this management area receive all their timber from outside of the coastal nonpoint management area. Finally, forestry is not identified as a source of impairment for waters within the 6217 boundary on the State's recent 305(b) report findings.

Given the absence of any silviculture-related impairments and limited forestry activities, forestry does not, and is not reasonably anticipated to, present significant adverse impacts to coastal waters. NOAA and EPA therefore grant Indiana an exclusion for the forestry management measures. However, it should be noted that the Indiana DNR Division of Forestry's publication, *Logging and Forestry Best Management Practices Field Guide for Water Quality in Indiana*, is a comprehensive voluntary BMP guidebook that is consistent with all 6217 (g) forestry measures except for fire management. In addition, the Division of Forestry operates several technical and financial assistance programs to encourage implementation of these practices.

### **IV. URBAN**

#### **A. NEW DEVELOPMENT and SITE DEVELOPMENT**

**FINDING:** Indiana may have programs in place to implement the site development management measure, but additional clarification, with a few examples, is needed. The State does not have programs in place to ensure implementation of the new development management measure outside of urbanized areas subject to National Pollutant Discharge Elimination System (NPDES) Phase II municipal separate storm sewer system (MS4) permits. The State has identified back-up enforceable authority, but has not yet demonstrated the ability of the authority to ensure implementation of the new and site development measures throughout the 6217 management area by submitting a legal opinion, demonstrating the authority and commitment to use the enforcement mechanisms where necessary, describing the laws and processes linking the implementing agencies with the enforcement agency, and describing the monitoring and tracking mechanisms the State will employ to ensure that the voluntary programs are being implemented sufficiently.

**CONDITION:** Within five years, Indiana will demonstrate it has programs in place to implement the site development measure throughout the 6217 management area and demonstrate that areas within the 6217(g) management area not subject to NPDES Phase II MS4 permits will implement the new development management measure. Also within five years, Indiana will submit a legal opinion and other supporting documents as described in the *Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance* (October 1998) to demonstrate that it has adequate back-up authority to implement the new and site development management measures throughout the 6217 management area.

## *Indiana Coastal Nonpoint Program Findings*

**RATIONALE:** Indiana may implement the site development management measure through several voluntary programs, BMP manuals, and other outreach documents. Indiana's NPDES Phase II storm water regulations for construction activities of one acre or greater (Rule 5) do not require practices that meet all elements of this measure; however, the rules helpfully note that riparian zone preservation, minimizing land disturbance and surface imperviousness and maximizing open space can be among the practices incorporated into the post-construction storm water pollution prevention plan required of all permitted construction activities (327 IAC 15-5-6.5(a)(8)(C)).

Another potential tool, Planning with POWER (Protecting our Water and Environmental Resources), which follows the Nonpoint Education for Municipal Officials (NEMO) model, has produced several publications consistent with the (g) guidance for site development. The publications emphasize the need to minimize impervious surfaces and land disturbance, preserve natural drainage patterns and vegetation and protect areas that provide important water quality benefits. While Indiana has explained how POWER provides technical assistance to local governments through workshops, training and one-on-one interaction to adopt natural resource protection ordinances, it has not provided an example(s) of how this technical assistance has led to ordinances that address the site development measure.

Indiana guidance documents such as the *Indiana Handbook for Erosion Control for Developing Areas* may also address aspects of the site development measure; however, this document is currently being updated. We encourage Indiana to complete its revision and ensure that the new version is consistent with the (g) guidance for both new and site development. Indiana needs to also explain how this guidance is used and/or promoted throughout the 6217 boundary to ensure that developers, contractors and other appropriate people consult them prior to engaging in development activities.

With regard to the new development management measure, none of Indiana's BMP guidance documents or programs appear to directly address its requirements. Specifically, Indiana needs to develop programs that will either reduce average annual total suspended solid (TSS) loadings by 80 percent or ensure that TSS in post-development runoff is no greater than pre-development loads. The programs must also maintain the post-development peak runoff rate and volume at levels that are similar to pre-development levels.

Urbanized areas subject to NPDES Phase II MS4 permits are no longer required to include the new development management measure per NOAA and EPA's 2002 memorandum, *Policy Clarification on Overlay of 6217 Coastal Nonpoint Programs with Phase I and II Storm Water Regulations*. Therefore, Indiana is exempt from implementing the new development measure within designated MS4 areas, which include 23 municipalities within the State's 6217 boundary.

Indiana has proposed that its Water Quality Standards (327 IAC-2) can be used to require implementation of the new and site development management measures. However, the State has

## *Indiana Coastal Nonpoint Program Findings*

not yet demonstrated its ability to ensure implementation of the management measures throughout the 6217 management area through the use of voluntary programs and its back-up enforcement authority (327 IAC-2). The State needs to submit a legal opinion, demonstrating the authority and commitment to use the enforcement mechanisms where necessary, describing the laws and processes linking the implementing agencies with the enforcement agency, and describing the monitoring and tracking mechanisms the State will employ to ensure that the voluntary programs are being implemented sufficiently. Indiana needs to also describe the programs it will use to implement the measures. (See the *Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance*, October 1998.)

### **B. WATERSHED PROTECTION and EXISTING DEVELOPMENT**

**FINDING:** Indiana's program has measures in place to address the watershed protection measure and the second two elements of the existing development measure. The State does not have programs to identify priority local and/or regional watershed pollutant reduction opportunities nor does it have a schedule for implementing appropriate controls. Indiana has identified back-up enforceable authorities, but has not yet demonstrated the ability of the authority to ensure implementation of the watershed protection and existing development measures throughout the 6217 management area by submitting a legal opinion, demonstrating the authority and commitment to use the enforcement mechanisms where necessary, describing the laws and processes linking the implementing agencies with the enforcement agency, and describing the monitoring and tracking mechanisms the State will employ to ensure that the voluntary programs are being implemented sufficiently.

**CONDITION:** Within five years, Indiana will demonstrate that it has programs in place to identify priority local and/or regional watershed pollutant reduction opportunities and develop a schedule for implementing appropriate controls. Within five years, Indiana will submit a legal opinion and other supporting documents as described in *Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance* (October 1998) to demonstrate that it has adequate back-up authority to implement the watershed protection and existing development management measures throughout the 6217 management area.

**RATIONALE:** Indiana implements the watershed protection measure and the last two elements of the existing development measure (limit destruction of natural conveyances and preserve, enhance, or establish buffers along waterways) through its Planning with POWER program. POWER staff assist local governments with developing good land use and watershed protection practices through hands-on workshops, presentations, and one-on-one assistance. Through the technical assistance POWER provides and other guidance documents, POWER successfully promotes the preservation of natural drainage ways, riparian buffers and other areas that provide water quality benefits, the avoidance of erosion-prone areas and minimization of impervious surfaces. For example, POWER staff recently worked with Porter County to develop a conservation design ordinance to increase open space requirements, among other things.

## *Indiana Coastal Nonpoint Program Findings*

In addition to Planning with POWER, Indiana's Department of Environmental Management (IDEM) operates a Watershed Management Section to assist with voluntary watershed planning efforts throughout the State. To help watershed groups develop watershed plans, IDEM published the *Indiana Watershed Planning Guide* in 2003 that lays out the requirements for a watershed plan, such as how to conduct a watershed assessment, identify goals and opportunities to improve water quality impairments, prioritize problem areas, and establish an implementation plan and schedule for achieving the watershed plan goals.

The Northwestern Indiana Regional Planning Commission (NIRPC) recently developed a large-scale watershed plan for the Calumet-Galien watershed, which comprises the 6217 management area. This plan will serve as the framework for developing more detailed sub-watershed plans within the basin. The plan incorporates many 6217 (g) measures including those for watershed protection, existing development, and other agricultural, urban, hydromodification and wetland and riparian measures to ensure that each sub-watershed plan will be consistent with the (g) guidance. While the plan identifies broad sources of NPS and general actions that should be taken to address these problems, the plan does not identify specific local and/or regional opportunities to improve runoff from existing development as required by the (g) guidance: these will be addressed through the sub-watershed plans.

NOAA and EPA applaud Indiana's watershed planning efforts within the Calumet-Galien watershed to date. However, Indiana needs to show it is promoting these voluntary watershed planning efforts throughout the 6217 management area to ensure development of more detailed subwatershed plans consistent with the (g) guidance. EPA and NOAA recommend that Indiana adopt a strategy for using this voluntary process to develop subwatershed plans throughout the 6217 area over the next 15 years and provide an example of at least one plan that is consistent with the (g) guidance.

Indiana notes that its 319, Lake and River Enhancement Program (LARE), and Clean Water Indiana Programs have supported a few watershed planning and assessment efforts. However, the State has not explained how these existing watershed plans are consistent with the (g) guidance. NOAA and EPA encourage the State to prioritize watershed planning efforts within the 6217 management area for funding through these grant assistance programs.

Pursuant to NOAA and EPA's 2002 NPDES Phase II Memo, Indiana is exempt from implementing the existing development measure in designated MS4 areas subject to the NPDES Phase II regulations, which include 23 municipalities within the State's 6217 management area.

Indiana has proposed that its Water Quality Standards (327 IAC-2) can be used to require implementation of the watershed protection and existing development management measures. However, the State has not yet demonstrated its ability to ensure implementation of these management measures throughout the 6217 management area through the use of voluntary



## *Indiana Coastal Nonpoint Program Findings*

programs and its back-up enforcement authority (327 IAC-2). The State needs to submit a legal opinion, demonstrating the authority and commitment to use the enforcement mechanisms where necessary, describing the laws and processes linking the implementing agencies with the enforcement agency, and describing the monitoring and tracking mechanisms the State will employ to ensure that the voluntary programs are being implemented sufficiently. (See *Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance*, October 1998.)

### **C. CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL, and CONSTRUCTION SITE CHEMICAL CONTROL**

**FINDING:** Indiana's program is exempt from the construction site erosion and sediment control and construction site chemical control management measures because these areas are being addressed through the NPDES Phase II Storm Water Program.

**RATIONALE:** Effective December 20, 2002, NOAA and EPA have determined that these activities are no longer subject to requirements of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) Section 6217 Coastal Nonpoint Pollution Control Program due to their coverage in the National Pollutant Discharge Elimination System (NPDES) storm water permit program (Phase I and II).

State coastal nonpoint control programs are no longer required to include the Construction Site Erosion and Sediment Control Management Measure because the NPDES storm water regulations for industrial activities on construction sites apply nationwide and therefore throughout the coastal management areas of States and Territories.

### **D. NEW AND OPERATING ONSITE DISPOSAL SYSTEMS (OSDS)**

**FINDING:** Indiana's program includes management measures and enforceable policies and mechanisms in conformity with the 6217(g) guidance, except that it does not include measures or enforceable policies and mechanisms for: 1) inspection and maintenance of existing OSDS; 2) establish protective vertical separation distances to groundwater; and 3) use of denitrifying systems in nitrogen sensitive areas for new and existing OSDS.

**CONDITION:** Within five years, Indiana will include in its program management measures and enforceable mechanisms and policies for inspection of existing OSDS. Within five years, Indiana will include in its program management measures and enforceable mechanisms and policies for protective separation distances to groundwater in conformity with the 6217(g) guidance for new OSDS. Finally, within five years, Indiana will include in its program management measures and enforceable mechanisms and policies for denitrifying systems where nitrogen-limited surface waters may be adversely affected by nitrogen loading from OSDS, in conformity with the 6217(g) guidance for new and operating OSDS.

## *Indiana Coastal Nonpoint Program Findings*

**RATIONALE:** Indiana's regulations for Residential Sewage Disposal (410 IAC 6-8.1) and Commercial Sewage Disposal (410 IAC 6-10) establish a permitting program for the construction and installation of onsite disposal systems. The regulations and standards require site investigations prior to construction and minimum separation distances between OSDS and wells, water supplies, lakes, streams, drainage tiles, buildings, and property lines, but do not establish minimum vertical separation distances to the groundwater table for conventional residential systems.

The regulations do not include provisions to reduce nitrogen loadings where nitrogen-limited surface waters may be adversely affected by excess nitrogen loadings from OSDS or for inspecting existing OSDS at a frequency to ascertain failure. NOAA and EPA note that Indiana is currently revising its OSDS regulations. This would be a good opportunity to ensure the rules address all aspects of the new and existing OSDS 6217 (g) measures. NOAA and EPA also realize that nitrogen is often not a limiting nutrient in freshwater environments like Lake Michigan. Indiana may be able to be exempted from the requirements of these measures pertaining to nitrogen-limited waters provided that if the State can demonstrate that nitrogen is not a nutrient of concern within the 6217 management area.

### **E. POLLUTION PREVENTION**

**FINDING:** Indiana's program includes management measures in conformity with the 6217(g) guidance.

**RATIONALE:** Indiana has several education efforts underway to implement this management measure. These efforts include Planning with POWER, the Household Hazardous Waste Collection Program, and Perdue University Cooperative Extension Service programs addressing turf management and on-site disposal systems, among other topics. Indiana's Office of Pollution Prevention and Technical Assistance also offers grant programs and guidance in pollution prevention. For example, the Office has produced brochures on pollution prevention BMPs for several types of small businesses including landscapers, marinas and service stations. Many of the BMPs included in these brochures are designed to minimize nonpoint source pollution.

### **F. PLANNING, SITING, AND DEVELOPING ROADS AND HIGHWAYS; SITING, DESIGNING AND MAINTAINING BRIDGES; ROAD, HIGHWAY AND BRIDGE OPERATION AND MAINTENANCE; ROAD, HIGHWAY AND BRIDGE RUNOFF SYSTEMS**

**FINDING:** Indiana's program may have programs in place to implement the planning, siting and developing measure for roads and highways and the management measure for bridges for state and local roads, but additional clarification is needed. Additionally, the State has not identified enforceable mechanisms and policies for these measures. Although state roads are

## *Indiana Coastal Nonpoint Program Findings*

exempt from the operation and maintenance and runoff management measures because they are subject to NPDES Phase II MS4 permits, Indiana has not demonstrated it has programs or enforceable policies in place to address the operation and maintenance and runoff control measures for local roads throughout the 6217 management area.

**CONDITION:** Within five years, Indiana will demonstrate it has programs in place to implement the planning, siting and developing measures for roads, highways and bridges for state and local roads. Also within five years, Indiana will develop programs to address the operation and maintenance and runoff control measures for local roads. Finally, within five years, Indiana will submit a legal opinion and other supporting documents as described in the *Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance* (October 1998) to demonstrate that it has adequate back-up authority to implement all roads, highways and bridge management measures throughout the 6217 management area.

**RATIONALE:** Indiana may have management measures in place to implement the planning, siting and developing management measure for roads and highways and the management measure for bridges for both state and local roads, but additional clarification is needed. In addition, the State has not identified enforceable mechanisms and policies to implement these management measures. All state roads are exempt from the operation and maintenance and runoff management measures because they are subject to NPDES Phase II MS4 permits. Indiana has presented several other voluntary programs that may be able to address the operation and maintenance and runoff control measures for local roads, but additional information is needed.

With regard to the planning, siting, and developing management measure for roads, highways, and bridges, Planning with POWER (as described previously) promotes land use and site development decisions to protect water quality by hosting workshops and presentations, and providing written resources for decision makers, planners, developers and contractors and providing direct assistance in developing new ordinances. However, the State has not provided an example(s) of how POWER specifically promotes road and bridge planning and siting consistent with the (g) guidance.

In addition, Indiana guidance documents such as the *Indiana Handbook for Erosion Control for Developing Areas* may promote siting and design principles that are consistent with the planning, siting and developing and bridge management measures. The current Handbook does not address operation and maintenance practices for roadways to reduce nonpoint source pollution. NOAA and EPA understand the Handbook is currently being revised to include post-development storm water control practices. We encourage Indiana to complete this update and ensure that it is consistent with the road, highway and bridge management measures, including operation and maintenance.

Indiana's Local Technical Assistance Program (LTAP) provides technical assistance and training to the highway, road and street departments of all counties, cities and towns in Indiana.

## *Indiana Coastal Nonpoint Program Findings*

Technical assistance is provided through training programs conducted both at Purdue University and throughout the State. LTAP provides topical workshops and seminars on subjects pertaining to roads and streets, regular newsletters, and other periodic publications. While the mission of the Indiana LTAP is “to foster a safe, efficient, environmentally sound transportation system by improving the skills and knowledge of local transportation providers,” according to the workshop topics listed on the website, most pertain to general road construction techniques and do not necessarily have a particular emphasis on preventing nonpoint source pollution. NOAA and EPA encourage the State to incorporate the 6217 road, highway and bridge management measures (especially operation and maintenance) into these workshop forums.

Indiana’s watershed planning program, as described in the watershed protection section above, has the potential to be used to address the runoff system measures. However, as noted previously, it is unclear how many watershed plans have been developed and are being implemented within the 6217 management area and whether or not they identify projects to reduce polluted runoff from roads, highways and bridges. Indiana needs to develop a strategy for continuing to promote watershed planning efforts and guidance documents throughout the 6217 management area to ensure more detailed subwatershed plans consistent with the (g) guidance will be developed over the next 15 years, and demonstrate at least one watershed plan has been developed that implements the runoff control measure within the 6217 management area.

The Indiana Department of Transportation (IDOT) is a designated MS4 under the NPDES Phase II storm water management program as well as many municipalities within the 6217 management area. Effective December 20, 2002, NOAA and EPA have determined that in designated MS4 areas, the road, highway and bridge operation and maintenance and runoff system management measures are no longer subject to requirements of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) Section 6217 Coastal Nonpoint Pollution Control Program due to their coverage in the National Pollutant Discharge Elimination System (NPDES) storm water permit program (Phase I and II). Therefore, Indiana is exempt from implementing the road, highway and bridge operation and maintenance and runoff system management measures for state roads and for local roads within designated MS4s.

Indiana has proposed that its Water Quality Standards (327 IAC-2) can be used to require implementation of the road, highway and bridge management measures. However, the State has not yet demonstrated its ability to ensure implementation of these management measures throughout the 6217 management area through the use of voluntary programs and its back-up enforcement authority (327 IAC-2). The State needs to submit a legal opinion, demonstrating the authority and commitment to use the enforcement mechanisms where necessary, describing the laws and processes linking the implementing agencies with the enforcement agency, and describing the monitoring and tracking mechanisms the State will employ to ensure that the voluntary programs are being implemented sufficiently. (See *Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance*, October 1998.)

**G. ROAD, HIGHWAY AND BRIDGE CONSTRUCTION PROJECTS and ROAD, HIGHWAY AND BRIDGE CONSTRUCTION SITE CHEMICAL CONTROL**

**FINDING:** Indiana's program is exempt from the road, highway and bridge construction projects and construction site chemical control management measures because these areas are being addressed through the NPDES Phase II Storm Water Program.

**RATIONALE:** Effective December 20, 2002, NOAA and EPA have determined that these activities are no longer subject to requirements of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) Section 6217 Coastal Nonpoint Pollution Control Program due to their coverage in the National Pollutant Discharge Elimination System (NPDES) storm water permit program (Phase I and II).

State coastal nonpoint control programs are no longer required to include the Road, Highway and Bridge Construction Projects and Construction Site Chemical Control management measures because the NPDES storm water regulations for industrial activities on construction sites apply nationwide and therefore throughout the coastal management areas of States and Territories.

**V. MARINAS AND RECREATIONAL BOATING**

**A. MARINA SITING AND DESIGN**

**FINDING:** Indiana's program is in conformity with the 6217 (g) guidance for water quality, habitat assessment, marina flushing, and sewage facility management. Based on the information provided, Indiana's program is not in full conformity with the 6217 (g) guidance for shoreline stabilization, storm water runoff, and fueling station design.

**CONDITION:** Within five years, Indiana will demonstrate that it has programs in place to implement the shoreline stabilization, storm water runoff, and fueling station design.

**RATIONALE:** Indiana addresses the marina siting and design, habitat assessment and marina flushing measures through its Navigable Waters Regulations (312 IAC 6-4). Under this regulation, the State requires that all new and expanding marinas obtain a license from the Natural Resource Commission. The Navigable Waterways Permit Program reviews marina plans to ensure the marina does not cause significant harm to the environment. The Division of Fish and Wildlife and Division of Natural Preserves review the proposed plans for adverse impacts to habitat and aquatic resources. The Division of Water evaluates the project for physical and hydrologic impacts, including adequate marina flushing. All Divisions can place Special Provisions on the permit to address any environmental concerns they may have.

Indiana may also be able to use this licensing process to meet the shoreline stabilization measure

## *Indiana Coastal Nonpoint Program Findings*

but the State has not explained how the review process requires eroding shorelines to be stabilized and promotes the use of vegetative methods over more structural stabilization techniques.

Indiana addresses the water quality assessment measure through its Section 401 water quality certification review process. Under 312 IAC 2, Indiana's Department of Environmental Management (IDEM) reviews marina plans for consistency with State water quality standards. IDEM has the ability to condition the projects, including requiring additional monitoring or water quality studies, to ensure that water quality impairments do not occur.

Indiana's program does not adequately address the management measure for storm water runoff. The program submittal indicates that storm water runoff at marinas is addressed through the State's general NPDES storm water permit for construction sites (Rule 5). However, Rule 5 does not have specific requirements for reducing the average annual TSS loadings in runoff from hull maintenance areas by 80%. In addition, Rule 5 only applies during construction whereas the marina storm water runoff management measure applies to all new and existing hull maintenance areas throughout the life of the marina.

The State Fire Marshal's Office regulates marine fueling facilities under 675 IAC 22-23 including facility construction, fuel storage, handling and dispensing. However, Indiana did not describe how these regulations are consistent with the (g) guidance so NOAA and EPA are not able to determine if Indiana has programs in place to address the fueling station design measure at this time.

Finally, Indiana satisfies the sewage facility management measure through its Navigable Waters Regulations (312 IAC-6-4-3). Under the regulations, all new or expanding marinas must provide an operating sewage pumpout facility for their patrons. Marinas can be exempted from this requirement only if they enter into a binding agreement with a nearby marina to provide pumpout services to their patrons and the nearby marina's pumpout has the capacity to accept additional users.

### **B. MARINA AND BOAT OPERATION AND MAINTENANCE**

**FINDING:** Indiana's program includes programs and enforceable policies and mechanisms in conformity with the above management measures except for petroleum control and boat cleaning.

**CONDITION:** Within five years, Indiana will demonstrate that it has programs in place to implement the petroleum control and boat cleaning management measures.

**RATIONALE:** Indiana implements many of the marina operation and maintenance measures through a mixture of regulatory and voluntary programs. First of all, it is illegal to discharge

## *Indiana Coastal Nonpoint Program Findings*

waste, oil, trash or other toxic substances into Indiana state waters (IC 14-15-2-8). Disposal of fish waste consistent with the (g) guidance is specifically regulated under IC 14-22-9-6, which states that any wastes occurring from the catching, curing, cleaning or shipping of fish shall be disposed of in such a manner as to not pollute the water.

All new or expanding marinas must provide a sewage pumpout unless they have a binding agreement with a nearby marina to provide pumpout services to their patrons (312 IAC-6-4-3).

As noted above in the previous section, the state Fire Marshal's Office regulates marine fueling stations including fueling storage, handling and dispensing under 675 IAC-22-23. However, Indiana's Coastal Nonpoint Program submittal did not describe the requirements under these regulations, nor did it explain how they implement the 6217 (g) measures for petroleum control. NOAA and EPA encourage Indiana to provide additional information on how fuel storage and handling is regulated to ensure consistency with the (g) guidance.

The public education measure and several other operation and maintenance measures are met through the DNR Division of Law Enforcement's boater education program. The program, which is offered in both a classroom and online format, instructs boaters on proper boat operation and maintenance. The program contains an entire chapter dedicated to boaters' and personal watercraft operators' "responsibility to the environment" which, among other things, advises boaters to use environmentally safe soaps when cleaning their vessels, properly dispose of solid and liquid wastes, trash, and petroleum products (recycling when possible), and promptly clean up any oil or other hazard material spills. While these topics are consistent with many of the requirements under the (g) guidance for the marina operation and maintenance measures, the course does not address aspects of the petroleum control or boat cleaning measures such as using oil absorbent pads or cloths when fueling vessels and encouraging that all hull maintenance activities do not occur in the water. Indiana needs to develop education programs to instruct boaters about these environmentally safe boating practices as well.

IDEM's Office of Pollution Prevention and Technical Assistance published a BMP brochure for marina owners. The brochure discusses boat cleaning and fueling practices, as well as many other BMPs that are consistent with the (g) guidance. This brochure may be able to satisfy the gaps in the boater education program for the boat cleaning and petroleum control measures. However, IDEM does not appear to actively promote the brochure among marina operators. IDEM should consider using the material to actively reach out to marina operators. Similarly, the State may wish to develop the BMP guidance into a Clean Marina Program.

Indiana's Natural Resource Commission addresses the boat operation measure by restricting boat speed to idle within 200 feet of the Lake Michigan Shore (IC 14-15-3-17). The only boat operations permitted in the near-shore zone are trolling and entering or leaving a dock, pier or wharf. In addition, the DNR Division of Law Enforcement, boater education courses specifically advise personal watercraft operators not to operate in waters less than 24 inches deep

## *Indiana Coastal Nonpoint Program Findings*

or in submerged grassbeds, reeds or other sensitive habitats, and to avoid creating a wake at all times to prevent shoreline erosion.

### **VI. HYDROMODIFICATION**

**FINDING:** Indiana's program includes management measures and enforceable policies and mechanisms in conformity with the 6217(g) guidance except for: 1) a process to improve surface water quality and instream and riparian habitat restoration through the operation and maintenance of existing modified channels; 2) the protection of surface water quality and instream and riparian habitat during the operation of dams; and 3) the management measures for eroding streambanks and shorelines. Indiana's program is exempt from the erosion and sediment control and chemical and pollutant control management measures because these areas are being addressed through the NPDES Phase II Storm Water Program. The State has identified a back-up enforceable policy, but has not yet demonstrated the ability of the authority to ensure widespread implementation throughout the 6217 management area by submitting a legal opinion, demonstrating the authority and commitment to use the enforcement mechanisms where necessary, describing the laws and processes linking the implementing agencies with the enforcement agency, and describing the monitoring and tracking mechanisms the State will employ to ensure that the voluntary programs are being implemented sufficiently.

**CONDITION:** Within five years, Indiana will develop a process to improve surface water quality and instream and riparian habitat through the operation and maintenance of existing modified channels. Also within five years, the State will develop programs for the protection of surface water quality and instream and riparian habitat during the operation of dams and implement the management measure for eroding streambanks and shorelines. Finally, within five years, Indiana will submit a legal opinion and other supporting documents as described in the *Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance* (October 1998) to demonstrate that it has adequate back-up authority to implement the hydromodification management measures throughout the 6217 management area.

**RATIONALE:** Indiana lists several regulatory programs including its Navigable Waters Act (IC-14-29-1), Construction of Channels Act (IC-14-29-4), and 401 Water Quality Certification that can be used to implement the channelization and channel modification measures.

The Indiana DNR reviews channelization, dam and other hydromodification projects under the Navigable Waters Act and/or Construction of Channels Act for potential environmental impacts. The Division of Fish and Wildlife and the Division of Natural Preserves review the proposed plans for adverse impacts to habitat and aquatic resources. The Division of Water evaluates the project for physical and hydrologic impacts. All Divisions can place Special Provisions on the permit to address any environmental concerns they may have and to ensure that potential impacts to water quality and instream and riparian habitat are minimized. IDEM, through its 401 Water Quality Certification process, also assesses potential instream water quality impacts.



## *Indiana Coastal Nonpoint Program Findings*

The IDNR Division of Waters has also produced the *Indiana Drainage Handbook*, which recommends BMPs for channel modification projects. The Handbook is intended to guide contractors in designing and constructing hydromodification projects. IDNR agency staff also consult the Handbook when reviewing projects. The practices listed include stabilizing shoreline erosion through vegetative means, controlling sedimentation in the stream bed, and preserving instream and riparian habitat.

IDNR's regulatory programs and IDEM's water quality certification process are designed for newly proposed projects. However, many of the (g) measure requirements are intended to address potential nonpoint source pollution concerns from existing hydromodification projects. These requirements are not addressed through regulatory programs designed for new activities. For example, (g) measure requirements include developing an operation and maintenance program for existing modified channels to identify opportunities to improve water quality and habitat impairments, as well as stabilizing eroding streambanks. Also, the dam management measure for the protection of surface water quality and instream and riparian habitat measure applies specifically to dam operation and not construction. Indiana needs to develop programs to address these existing sources of nonpoint source pollution from hydromodification projects.

Indiana's voluntary watershed planning process (see also discussion under Watershed Protection) has the potential to address these remaining requirements for the hydromodification management measures. The broad-scale watershed plan for the Calmut-Galien watershed, which will serve as the foundation for developing more specific subwatershed plans, incorporates the hydromodification measures. NOAA and EPA encourage Indiana to continue to promote watershed planning efforts within the 6217 management area. The State needs to describe how it is using the Calmut-Galien watershed plan and other state general watershed planning guidance to promote development of subwatershed plans and provide an example(s) of completed subwatershed plans that address the (g) guidance for hydromodification. Indiana needs to also develop a strategy for developing watershed plans over the entire 6217 management area over the next 15 years.

Effective December 20, 2002, NOAA and EPA have determined that the dam management measures for erosion and sediment control and chemical and pollutant control are no longer subject to requirements of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) Section 6217 Coastal Nonpoint Pollution Control Program due to their coverage in the National Pollutant Discharge Elimination System (NPDES) storm water permit program (Phase I and II). State coastal nonpoint control programs are no longer required to include these management measures because the NPDES storm water regulations for industrial activities on construction sites apply nationwide and therefore throughout the coastal management areas of States and Territories.

## *Indiana Coastal Nonpoint Program Findings*

Indiana has proposed that its Water Quality Standards (327 IAC-2) can be used to require implementation of the hydromodification management measures. However, the State has not yet demonstrated its ability to ensure implementation of these management measures throughout the 6217 management area through the use of voluntary programs and its back-up enforcement authority (327 IAC-2). The State needs to submit a legal opinion, demonstrating the authority and commitment to use the enforcement mechanisms where necessary, describing the laws and processes linking the implementing agencies with the enforcement agency, and describing the monitoring and tracking mechanisms the State will employ to ensure that the voluntary programs are being implemented sufficiently. (See the *Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance*, October 1998.)

### **VII. WETLANDS, RIPARIAN AREAS AND VEGETATED TREATMENT SYSTEMS**

**FINDING:** Indiana has identified several federal and state programs that have the potential to adequately implement the management measures for protection and restoration of wetland and riparian areas but has not yet demonstrated the ability of these programs to ensure implementation of the measures within the 6217 management area. The State's program includes management measures for vegetated treatment systems. The State has identified a back-up enforceable policy and mechanism, but has not yet demonstrated the ability of the authority to ensure widespread implementation throughout the 6217 management area by submitting a legal opinion, demonstrating the authority and commitment to use the enforcement mechanisms where necessary, describing the laws and processes linking the implementing agencies with the enforcement agency, and describing the monitoring and tracking mechanisms the State will employ to ensure that the voluntary programs are being implemented sufficiently.

**CONDITION:** Within five years, Indiana will demonstrate that it has programs in place for the protection and restoration of wetland and riparian areas. Also, within five years, Indiana will submit a legal opinion and other supporting documents as described in *Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance* (October 1998) to demonstrate that it has adequate back-up authority to implement the wetland, riparian and vegetated treatment system management measures throughout the 6217 management area.

**RATIONALE:** Indiana DNR has the authority to review projects that have the potential to impact wetland and riparian areas under the Indiana Flood Control Act (IC 14-28-1), the Lakes Preservation Act (IC 14-26-2), the Lowering of Ten Acre Lakes Act (IC 14-26-5), and the Indiana Navigable Waterways Act (IC 14-29-1). None of these implementing regulations, however, specifically mentions the preservation or restoration of wetland or riparian areas. The regulatory language is much more generalized, such as "prohibiting structures . . . that would cause unreasonable detrimental effects on . . . botanical resources" (IC 14-28-1-20), or ensuring projects do not "cause harm to the environment" (IC 14-29-1). The State's submittal is unclear how these authorities can be used to ensure implementation of the wetland and riparian management measures throughout the 6217 management area.

## *Indiana Coastal Nonpoint Program Findings*

Indiana DEM can review projects for wetland and riparian impacts as it performs water quality certifications under Section 401 of the Clean Water Act (327 IAC 2-1). The State provided several examples of projects that were denied certification due to wetland impacts (destroying important isolated wetlands or discharging into a wetland site). When water quality certification is granted, IDEM requires mitigation if wetlands are lost, typically at a 3:1 ratio.

According to the *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 and EPA, October 1998), 401 Clean Water Act certifications can be a suitable way to meet the management measure requirements if: (1) the certifications are sufficient to address the full range of applicable activities and sources of nonpoint pollution (e.g., wetlands and riparian areas); (2) there is a back-up authority that can be used to enforce conditions or revoke certification; (3) the State has a monitoring system or other tracking methods by which to assess whether permit conditions have been met. Indiana has satisfied the first criterion. The State has not submitted a legal opinion to demonstrate how its back-up authority can be used to enforce conditions and revoke certification. The State has also not described how the permits and water quality certifications are tracked, but does readily admit that it doesn't have a monitoring program to ensure compliance with the mitigation components of the permit.

In addition to the above regulatory programs, Indiana also has several voluntary and incentive programs that may address the management measures, but like with the regulatory programs, the State's submittal often did not contain enough information explaining how the voluntary program specifically encourages the protection and restoration of riparian areas and wetlands. For example, Indiana's voluntary watershed planning process (see also discussion under Watershed Protection) has the potential to support the wetland and riparian protection and restoration measures. The broad-scale watershed plan for the Calmutf-Galien watershed, which will serve as the foundation for developing more specific subwatershed plans, incorporates the wetland and riparian measures. Descriptions of existing subwatershed plans, such as the one for Coffee Creek, indicate the plan has identified and led to the implementation of several riparian and wetland restoration projects. NOAA and EPA encourage Indiana to continue to promote watershed planning efforts within the 6217 management area. The State needs to describe how it is using the Calmutf-Galien watershed plan and other State general watershed planning guidance to promote development of subwatershed plans and provide an example(s) of completed subwatershed plans that address the (g) guidance for wetland and riparian areas. Indiana needs to also develop a strategy for developing watershed plans over the entire 6217 management area over the next 15 years.

To implement the vegetated treatment systems management measure, the State 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

## *Indiana Coastal Nonpoint Program Findings*

polluted runoff. For example, Indiana's Planning with POWER program has developed several publications that demonstrate how vegetated treatment systems like rain gardens and constructed wetlands can reduce nonpoint source pollution. NRCS's FOTG for agricultural land also incorporates BMPs consistent with the vegetated treatment system (g) measure. In addition, the DNR is currently updating its *Indiana Handbook for Erosion Control for Developing Areas*. NOAA and EPA encourage the State to incorporate vegetated treatment system practices into the revised manual.

If the state wishes to rely on voluntary programs to implement the wetland measures, the state must submit a legal opinion and supporting documents demonstrating the authority and commitment to use the enforcement mechanisms where necessary, describing the laws and processes linking the implementing agencies with the enforcement agency, and describing the monitoring and tracking mechanisms the State will employ to ensure that the voluntary programs are being implemented sufficiently (See *Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance*, October 1998).

### **VIII. ADMINISTRATIVE COORDINATION**

**FINDING:** Indiana's program includes mechanisms for coordination among State agencies and between State and local officials.

**RATIONALE:** Indiana established a 6217 Workgroup to develop and implement its Coastal Nonpoint Program. The Workgroup is comprised of representatives of numerous state agencies, and regional and local planning and soil conservation groups that play a role in nonpoint source pollution management, within the 6217 management area. The Workgroup and sub-workgroups focusing on the agriculture, urban, marina, and wetlands/hydromodification measures meet on a regular basis to identify goals, objectives, lead agencies and timelines for developing and implementing Indiana's Coastal Nonpoint Program.

### **IX. PUBLIC PARTICIPATION**

**FINDING:** Indiana's program provides opportunities for public participation in the development and implementation of the coastal nonpoint program.

**RATIONALE:** Indiana has a variety of methods and programs to meet the (g) management measures for public education and participation. Indiana solicited public involvement in the program by recruiting representatives of key state, regional and local agencies and organizations that govern the NPS land categories to serve on the 6217 Workgroup Committee. The Committee was further broken down into sub-workgroups for agriculture, urban, marinas, and wetlands/hydromodification. Indiana also provided several 30-day public comment periods throughout the development of its Coastal Nonpoint Program.

**X. CRITICAL COASTAL AREAS, ADDITIONAL MANAGEMENT MEASURES, and TECHNICAL ASSISTANCE**

**FINDING:** Indiana’s program does not include processes for the identification of critical coastal areas or for the development and continuing revision of management measures applicable to critical coastal areas and cases where the 6217(g) measures are fully implemented but water quality threats or impairments persist. The program does not describe efforts to provide technical assistance to agencies and the public for implementing additional management measures.

**CONDITION:** Within five years, Indiana will develop a process for the identification of critical coastal areas and a process for developing and revising management measures to be applied in critical coastal areas and in areas where necessary to attain and maintain water quality standards. Within five years, Indiana will also develop a program to provide technical assistance in the implementation of additional management measures.

**RATIONALE:** Indiana has not yet described how its program will address each of these elements. Indiana’s submittal does note that several waterways within the 6217 management area are on the State’s 303b list of impaired waterbodies. Indiana may wish to use its 303b listing process as the foundation for identifying areas where additional management measures may be needed.

The program does not include efforts to provide technical assistance to agencies and the public for implementing additional management measures. Technical assistance may be provided through the ongoing efforts such as IDEM’s NPDES Phase II implementation program, Illinois-Indiana Sea Grant’s Planning with POWER and other 319 and cooperative extension-related programs.

**XI. MONITORING**

**FINDING:** Indiana’s program does not yet include a plan to assess over time the success of the management measures in reducing pollution loads and improving water quality.

**CONDITION:** Within five years, Indiana will develop a plan that enables the State to assess over time the extent to which implementation of management measures is reducing pollution loads and improving water quality.

**RATIONALE:** Indiana states that information on its monitoring and tracking programs was not available at the time of submittal. The submittal did note that the Indiana Geologic Survey at the Indiana University was working with IDEM to compile information on how the State will monitor and assesses over time the success of its Coastal Nonpoint Program. NOAA and EPA encourage the State to proceed with developing a monitoring and tracking program strategy for its 6217 program.

## **XII. ENFORCEABLE POLICIES AND MECHANISMS**

Indiana must identify enforceable policies and mechanisms that provide for the “implementation, at a minimum, of management measures in conformity with the . . . [§6217(g) measures] to protect coastal waters generally . . .” (CZARA §6217(b)). Enforceable policies and mechanisms may provide specific authority to implement selected measures, or serve as back-up authorities, providing general authority to abate and prevent water pollution.

In October 1998, NOAA and EPA published the Final Administrative Changes, which outlines the criteria by which back-up authorities may be used as enforceable policies and mechanisms to provide for the implementation of voluntary or incentive-based programs. These criteria include:

1. A legal opinion from the attorney general or an attorney representing the agency with jurisdiction for enforcement that such authorities can be used to prevent nonpoint source pollution and require management measure implementation, as necessary;
2. A description of the voluntary or incentive-based programs, including the methods for tracking and evaluating those programs, the State will use to encourage implementation of the management measures; and
3. A description of the mechanism or process that links the implementing agency with the enforcement agency and a commitment to use the existing enforcement authorities where necessary.

Indiana may wish to consider submitting a legal opinion in conjunction with the detailed information the State has provided on voluntary and incentive-based programs in order to address the enforceable policies and mechanisms component conditions. Please refer to NOAA and EPA’s memorandum on Enforceable Policies and Mechanisms for State Coastal Nonpoint Programs (January 23, 2001) for additional information on these requirements and examples of how other states have met them.

Indiana’s program also relies upon the use of CWA section 401 certifications to meet program requirements, particularly for marinas, hydromodification and wetlands and riparian areas. As discussed in the Final Administrative Changes, NOAA and EPA will approve the use of section 401 certifications to meet program requirements where States can demonstrate the following:

1. The certifications, either alone or in concert with other programs, are sufficient to address the full range of applicable activities and sources of nonpoint pollution and geographic areas for which they are proposed;
2. There is a back-up authority (e.g., water quality authority) that can be used, as described above, by the State to enforce conditions or revoke certification (as demonstrated in a legal opinion); and

*Indiana Coastal Nonpoint Program Findings*

3. The State has a monitoring system or other tracking methods by which to assess whether permit conditions have been met.