

Great Lakes Clean Marina  
**BEST MANAGEMENT PRACTICES**  
Guide



## GREEN MARINA EDUCATION AND OUTREACH PROJECT

The Green Marina Education and Outreach Project team produced the Great Lakes Clean Marina Best Management Practices Guide, in collaboration with marina operators, representatives from regulatory agencies and others.

The Green Marina project is focused on reducing or eliminating pollution from entering the Great Lakes through boating and marina activities. Members of the project team led efforts to develop uniform best management practices for marinas in the Great Lakes.

The Green Marina Education and Outreach project is a strategic collaboration between Michigan, Ohio and Wisconsin Sea Grant programs to support education and outreach efforts across the Great Lakes states. Supported by the Great Lakes Restoration Initiative, through the U.S. Environmental Protection Agency.

Project partners and collaborators include universities, state agencies and marina industries, such as the Michigan Department of Natural Resources and Michigan Boating Industry Association; the Indiana and Wisconsin Coastal Management programs; the Wisconsin Marina Association and Wisconsin Department of Natural Resources; the Lake Erie Marine Trades Association; the Midwest Marina Association; and the National Association of Marina Industries. Additional collaborators include the National Oceanic and Atmospheric Administration, Lake Michigan Lakewide Management Plan Forum, Coastal Zone Management Programs, U.S. Army Corps of Engineers, U.S. Coast Guard, Power Squadrons, and non-government organizations.

Michigan, Ohio and Wisconsin Sea Grant programs help foster economic growth and protect the Great Lakes coastal resources through research, education and outreach. The programs are part of the NOAA-National Sea Grant network of 32 university-based programs around the country.



### Green Marina Project Team

#### Michigan

- Jim Diana (PI), [jimd@umich.edu](mailto:jimd@umich.edu)
- Elizabeth LaPorte (Co-PI), [elzblap@umich.edu](mailto:elzblap@umich.edu)
- Chuck Pistis (Quality Assurance Manager), [pistis@msu.edu](mailto:pistis@msu.edu)
- Amy Samples (Project Coordinator), [asamples@umich.edu](mailto:asamples@umich.edu)
- Josh Gunn (Michigan Clean Marina Coordinator), [gunnjosh@msu.edu](mailto:gunnjosh@msu.edu)

#### Ohio

- Jill Jentes Banicki (Co-PI), [jentes.1@osu.edu](mailto:jentes.1@osu.edu)
- Sarah Orlando (Ohio Clean Marina Coordinator), [orlando.42@osu.edu](mailto:orlando.42@osu.edu)
- Frank Lichtkoppler (Marina Consultant), [lichtkoppler.1@osu.edu](mailto:lichtkoppler.1@osu.edu)

#### Wisconsin

- Victoria Harris (Co-PI), [harrisv@uwgb.edu](mailto:harrisv@uwgb.edu)
- Gene Clark (Collaborator, Coastal Engineer), [gclark1@uwsuper.edu](mailto:gclark1@uwsuper.edu)
- Theresa Qualls (Collaborator), [quallst@uwgb.edu](mailto:quallst@uwgb.edu)

Project Website: [www.miseagrant.umich.edu/greenmarina](http://www.miseagrant.umich.edu/greenmarina)

Join the Great Lakes Clean Marina Network, email: [CleanMarina-GLRITeam@umich.edu](mailto:CleanMarina-GLRITeam@umich.edu)

# GREAT LAKES MARINA BEST MANAGEMENT PRACTICES GUIDE

## Contents

Scope and Purpose..... 2

BMP Status..... 2

Great Lakes Clean Marina Best Management Practices ..... 2

Siting, Design, Facility and Habitat (Theme #1) ..... 3

Stormwater Management (Theme #2) ..... 5

Boat Maintenance (Theme #3) ..... 5

Petroleum Control (Theme #4) ..... 7

Sewage Handling (Theme #5) ..... 9

Waste Management and Recycling (Theme #6) ..... 10

Marina Management and Boater Education (Theme #7) ..... 11

Aquatic Invasive Species (Theme #8)..... 12

## Scope and Purpose

The Great Lakes Clean Marina Best Management Practice Guide (BMP Guide) provides an inventory of common marina and boatyard best management practices (BMPs) used in the certification-based Clean Marina programs in the Great Lakes States (Ohio, Wisconsin, Michigan, and Indiana). To standardize certification requirements across the basin, this list may be used to provide baseline practices across the states' programs. The BMP Guide will also provide the basis for development of a common online training tool.

The existing Clean Marina Classroom, developed by Michigan Sea Grant, will be revised and enhanced to reflect the content in the BMP Guide. The BMP Guide and Clean Marina Classroom will serve as tools for existing and developing Clean Marina programs and as resources for states without Clean Marina Programs. The BMP Guide is an overview; users will be directed to state guidebooks, specific regulatory information, and the Clean Marina Classroom for details and additional resources.

## BMP Status

The BMP Guide was developed to provide suggested standards for Clean Marina program certification requirements. Note that some BMPs may be required by Clean Marina programs in one state and may be legally required by a state regulatory agency in another. ***Please consult your Clean Marina program's certification checklist or contact your Clean Marina program representative for assistance in determining requirements.***

### BMP Status Definitions:

- ***Mandatory*** – BMP is required by federal regulation. Completion of this practice is mandatory by law.
- ***Program Required*** – The Green Marina Project Team suggests that these BMPs be required by state Clean Marina programs for certification. They are practices that all certified Clean Marinas or boatyards should adopt, or practices that may be mandated by state regulations. However, some BMPs are either mandatory or recommended through a state Clean Marina program. Please pay special attention to these BMP status definitions (mandatory, program required, recommended) and contact your state Clean Marina program representative if clarification is needed.
- ***Recommended*** – BMP is recommended for adoption. Certification-based programs typically require implementation of a percentage of these BMPs to award certification (e.g., 50% of recommended BMPs must be adopted to achieve certification).

## Great Lakes Clean Marina Best Management Practices

Each of the following pages list the best practices by theme, including:

- Siting, Design, Facility and Habitat
- Stormwater Management
- Boat Maintenance
- Petroleum Control
- Sewage Handling
- Waste Management and Recycling
- Marina Management and Boater Education
- Aquatic Invasive Species

| Siting, Design, Facility and Habitat (Theme #1) |   |
|---|---|
| Topic   | Regional BMP  |
| <b>Permits</b>                                  | Have you received the proper federal and state permits for all past activity and pledge that all permits will be obtained for future marina construction and dredging? <i>(Mandatory)</i>   |
|   | Have you consulted your state regarding definition of and regulations related to public trust bottomlands and tributaries? <i>(Mandatory)</i>   |
|   | Have you obtained the proper erosion control permits for all past construction and pledge that permits will be obtained for all future marina construction? <i>(Mandatory)</i>  |
| <b>Planning</b>                                 | Have you planned new facilities to be located on previously disturbed sites, if applicable? <i>(Recommended)</i>  |
|   | Have you consulted with a site engineer? <i>(Recommended)</i><br><i>Resource: <a href="#">EPA Coastal Marina Assessment Handbook</a></i>  |
| <b>Water Movement</b>                           | Have you engineered the marina to enhance or maintain proper water movement, including consideration of impact on adjacent properties? <i>(Recommended)</i>   |
|   | Does your marina design enhance water circulation and minimize the need for dredging? <i>(Recommended)</i>  |
| <b>Fuel Dock Design</b>                         | Are your fueling stations protected from waves and also easily accessible by boat without entering or passing through the main berthing area? <i>(Recommended)</i>  |
| <b>Construction Scheduling</b>                  | Have you scheduled construction to avoid critical migration, nesting and spawning periods of important species of fish and wildlife? <i>(Mandatory)</i>   |
| <b>Dredging</b>                                 | Have you minimized the impacts of dredging by not dredging during critical migration or spawning periods, by avoiding colonial water bird nesting areas and historic waterfowl staging and concentration areas, and selecting an appropriate disposal site and containment design? <i>(Mandatory)</i>   |
| <b>Endangered Species</b>                       | Have you complied with all state and federal laws for rare and endangered species? <i>(Mandatory)</i>   |
| <b>Wetlands</b>                                 | Have you checked federal and state rules regarding wetlands and taken steps to avoid, minimize or mitigate their disturbance? <i>(Mandatory)</i>  |
| <b>Construction Materials</b>                   | Have you used environmentally neutral materials? <i>(Recommended)</i><br><br><i>BMP example:</i> Chromated copper arsenate (CCA) treated lumber or creosote treated lumber or other petroleum-based substances and asphalt are prohibited below the ordinary high-water mark.<br><br><i>State-specific requirement:</i> <ul style="list-style-type: none"> <li>• <b>Ohio:</b> You do not use asphalt near water surfaces. <i>(Program Required)</i></li> </ul> <i>Resource: <a href="#">LEED guidelines</a></i> |
| <b>Erosion</b>                                  | Have you used soft shorelines where feasible? Have you focused erosion control measures on non-structural applications? Where structural practices are required, have you chosen the least intrusive option? <i>(Recommended)</i>   |
|   | Have you consulted with local and state permitting authorities for sediment control requirements and utilized soil erosion control practices during construction? <i>(Mandatory)</i>  |
|   | If you have erosion-prone areas, have you designated a “no wake” or “no boating” zone to reduce sediment re-suspension from prop wash or destruction of shallow water habitat? <i>(Recommended)</i><br><i>State-specific requirement:</i> <ul style="list-style-type: none"> <li>• <b>Ohio:</b> Do you post a sign informing boaters of Ohio's no wake law near marinas? <i>(Program Required)</i></li> </ul>   |

|   |   |
|---|---|
| <b>Upland Storage</b>                         | If your marina owns any upland property, have you used this property to locate service operations, parking, waste storage facilities and boat storage away from the water where feasible? <i>(Recommended)</i>  |
| <b>Storage</b>                                | Do you provide dry-stack or covered storage? <i>(Recommended)</i>   |
| <b>Water Conservation</b>                     | Do you practice water conservation at facility (e.g., use low-flow toilets and shower heads, maintain and fix faucet or hose leaks on the docks, install rain barrels, etc.)? <i>(Recommended)</i>  |
|   | Do your landscaping practices promote water conservation? <i>(Recommended)</i><br><i>BMP examples:</i> water only “thirsty” plants, water deeply and infrequently, place mulch around plants, group plants with similar water needs together, practice measured watering.   |
| <b>Structure Maintenance</b>                  | Do you maintain structures using Clean Marina practices (i.e., scrape, sand and paint structures according to the same management principles as for vessels; move floating structures to prescribed areas for scraping, painting and major repairs)? <i>(Program Required)</i>  |
| <b>Wash Down Site</b>                         | To reduce the spread of aquatic invasive species, does your facility have a boat wash down site? <i>(Recommended)</i><br><br>See: Boat Maintenance and Aquatic Invasive Species sections.   |
| <b>Habitat Protection</b>                     | Do you conserve and protect existing sensitive areas and habitats? <i>(Recommended)</i><br><br><i>BMP examples:</i> Preserve natural vegetation and shorelines; place land in conservation trust; establish No Wake Zones; minimize hardened surfaces, particularly vertical walls; and use vegetative shoreline protection measures where possible.<br><br>See: Stormwater Management section.   |
|   | Do you enhance aquatic and/or terrestrial habitats adjacent to the marina basin? <i>(Recommended)</i><br><br><i>BMP example:</i> Create natural areas to use as educational features; conduct ecological restoration. See Regional Clean Marina Classroom for additional structural and non-structural habitat enhancement BMPs.  |
|   | Do your landscaping and grounds maintenance practices protect sensitive habitat? <i>(Recommended)</i><br><br><i>Landscaping BMP examples:</i> Use native plants that require little care; use plants that are disease- and insect-resistant; choose plants that attract birds, small mammals and other wildlife; plant in naturalized patterns; plant and maintain vegetated buffers and infiltration areas.<br><br><i>Grounds Maintenance BMP examples:</i> Mow lawns and pull weeds to reduce reliance on herbicides, or as a last resort, use least toxic chemicals applied at times to minimize leaching into the water; foster natural predators (integrated pest management); minimize fertilizer use; conduct annual soil test to identify soil chemistry — phosphorous fertilizer may not be necessary. |
| <b>Pesticide Applicator Training/ License</b> | Do you adhere to your state's training requirements (if applicable) for the application of pesticides? <i>(Mandatory)</i>   |

| Stormwater Management (Theme #2)        |   |
|---|---|
| Topic                                   | Regional BMP  |
| <b>Stormwater (SW) Site Management</b>  | Has your facility been designed to collect, infiltrate and/or treat stormwater runoff? <i>(Program Required)</i><br><br><i>Resource:</i> <a href="#">Stormwater Runoff Best Management Practices for Marinas: A Guide for Operators</a> – Stormwater Treatment section  |
| <b>SW Permit</b>                        | Have you obtained the required stormwater permits? <i>(Mandatory)</i><br><br><i>State-specific requirements:</i> <ul style="list-style-type: none"> <li>• <b>Wisconsin:</b> Have you consulted with state agency to determine if WPDES stormwater discharge permit is required?</li> <li>• <b>Ohio:</b> Have you obtained a stormwater permit from Ohio EPA?</li> <li>• <b>Michigan:</b> Have you obtained a Stormwater Certificate of Coverage or, if necessary, a stormwater discharge permit?</li> </ul> |
| <b>SWPPP</b>                            | If required, do you have a stormwater pollution prevention plan (SWPPP)? <i>(Mandatory)</i><br><br>If a SWPPP is not required, have you developed a stormwater information map? <i>(Program Required)</i>   |
| <b>Vegetation</b>                       | Do you maintain vegetated drainage areas and retain vegetated buffers along the waterfront? <i>(Recommended)</i><br><br><i>BMP example:</i> Position downspouts to drain to vegetated areas and use grass swales to facilitate stormwater infiltration.<br><br><i>See:</i> Siting, Design, Facility and Habitat section.  |
| <b>Stormwater Management Structures</b> | Do you have and maintain stormwater management structures that are appropriate for your property (e.g., retention basins, extended detention basin, constructed stormwater wetlands, sand filters, grassed swales, vegetated filter strip)? <i>(Program Required)</i>   |
| <b>Paving/ Impervious Surface</b>       | Do you minimize the amount of impervious surface by only paving necessary areas or using pervious pavers? <i>(Recommended)</i>  |
|   | Where impervious surfaces are necessary, do you direct runoff away from work areas and onto vegetated areas? <i>(Recommended)</i>   |
| <b>Drain Label</b>                      | Do you stencil or label storm drains with "No Dumping, Drains to Lake (River)" message? <i>(Recommended)</i>  |

| Boat Maintenance (Theme #3) |  |
|-----------------------------|--|
| Topic                       | Regional BMP   |
| <b>Maintenance Area</b>     | Is maintenance work performed in a designated work area that is designed to contain waste materials? <i>(Program Required)</i><br><br><i>BMP examples (marina facility):</i> Work area is as far from shore as is practical; areas are marked with signage or identified in marina rules for patron usage; areas are located indoors or on impervious surfaces such as concrete or asphalt.<br><br><i>BMP examples (boaters working outside of designated area):</i> Provide tarps to patrons for hull maintenance. Restrict painting outside of designated shops to the use of rollers and brushes, with proper use of tarps and tenting to protect the surrounding area. |

|  |   |
|--|---|
|  | <i>Resource: <a href="#">Stormwater Runoff Best Management Practices for Marinas: A Guide for Operators</a> – Source Control section</i>  |
|  | Do you regularly collect maintenance debris and dispose of it properly? <i>(Program Required)</i>   |
| <b>Sanding</b>                           | Do you prohibit sanding or blasting work of any sort carried out by individual boat owners or their contractors unless it is done inside one of the designated shops or a vacuum sander is used and the residue properly disposed of? <i>(Recommended)</i>  |
|  | Do you rent or loan vacuum sanders to tenants and contractors? <i>(Recommended)</i>   |
| <b>Spraying restrictions</b>             | Have you restricted spray painting, spraying of fiberglass or other chemicals unless it is done inside of designated shop, in a spray booth or under a tarp? <i>(Program Required)</i><br><br><i>BMP examples:</i> If using a spray booth, you have approval of the local fire department and local building code authority. You have a painting policy to minimize environmental impacts of painting operations.   |
| <b>Boat Hull Maintenance</b>             | Do you allow boat hull maintenance at your marina? This includes services conducted by marina staff, outside contractors and patrons.<br><br><i>If yes,</i><br>a) Do you comply with your state’s rules for boat wash water discharge? <i>(Mandatory)</i><br>If you are unsure of your state’s requirements, contact your state authority; see <a href="#">Green Marina State Resources for Boat Wash Water</a> webpage.<br><br><i>Resources:</i> <a href="#">EPA National Pollutant Discharge Elimination System (NPDES)</a> website, New Jersey <a href="#">Vessel Generated Wash Water</a> website, Massachusetts <a href="#">Guide to Selecting Pressure Washing Management Practices and Technologies</a> (Supplement to the Massachusetts Clean Marina Guide)<br><br>b) Are boat washing activities limited to a designated area? <i>(Program Required)</i><br>See Siting, Design, Facility and Habitat, and AIS sections.<br><br>c) Have you installed infrastructure improvements to power washing area, which include filtration of particles and/or recycling the wash water? <i>(Recommended)</i><br><br><i>State-specific requirement:</i><br><ul style="list-style-type: none"> <li>• <b>Ohio:</b> Do you prohibit the discharge or disposal of chemicals or other wastes into an underground injection well (this includes floor drains that lead to an on-site septic system)? <i>(Mandatory)</i></li> </ul> |
| <b>Air Permit</b>                        | <i>State-specific requirement:</i><br><ul style="list-style-type: none"> <li>• <b>Ohio:</b> If engaged in large scale fueling or painting, do you have the appropriate air permits? <i>(Mandatory)</i></li> </ul>   |
| <b>Chemical Storage Area</b>             | Do you have and maintain appropriate storage areas for materials such as antifreeze, solvents, oil and paints? <i>(Program Required)</i><br><br>See: Waste Containment section.   |
| <b>Records</b>                           | Do you handle solvents appropriately and keep records of the amount and type of solvent and paint usage? <i>(Program Required)</i><br><br>See: Waste Containment section.   |
| <b>Environmentally Friendly Products</b> | Do you use or sell “environmentally friendly” cleaning and maintenance products if possible, (i.e., biodegradable and phosphorous-free products; alternatives to standard teak cleaners, varnishes and solvents)? <i>(Recommended)</i>  |

|   |   |
|---|---|
|   | <i>Resources:</i> <a href="#">Michigan Clean Marina Boat Cleaning and Maintenance Tip Sheet</a>   |
| <b>Engine Repair</b>                            | <p>Have you minimized the environmental impacts of engine repair and maintenance? <i>(Program Required)</i></p> <p><i>BMP examples:</i> Use dry pre-cleaning methods, such as wire brushing; avoid unnecessary parts cleaning; adopt alternatives to solvent-based parts washers such as bioremediation systems; use water-based, non-VOC cleaners that are less hazardous than solvent-based degreasers; use drip pans when handling any type of liquid.</p>   |
|   | Do you winterize only with less toxic anti-freeze, such as propylene glycol? <i>(Program Required)</i>  |
| <b>Bilge Maintenance</b>                        | <p>Do you inspect bilges prior to boat storage at your facility and encourage boat owners to keep bilges clean and dry during storage? <i>(Recommended)</i></p> <p><i>BMP examples:</i> Offer bilge cleaning service, encourage patrons to use bilge socks. Provide educational materials to patrons that promote engine and bilge maintenance.</p>   |
| <b>Antifouling Paints: Training and License</b> | <p>Do you adhere to your state's training and license requirements (if applicable) for the application anti-fouling paints? <i>(Mandatory)</i></p> <p><i>Resources:</i> Annual pesticide applicator license and pesticide application business license typically required. <i>Contacts:</i> <a href="#">Wisconsin Department of Agriculture, Trade and Consumer Protection</a>, <a href="#">Ohio Department of Agriculture</a>, and the <a href="#">Michigan Department of Agriculture &amp; Rural Development</a>.</p> |
|   | <p>Do you recommend antifouling paints with minimal environmental impacts? <i>(Recommended)</i></p> <p><i>BMP examples:</i> Recommend to your customers antifouling paints that contain the minimal amount of toxic ingredient necessary for the expected conditions. Avoid soft ablative paints. Use water-based paints whenever practical. Stay informed about antifouling products like Teflon, silicone, polyurethane and wax that have limited negative impacts. Inform your customers about such paints.</p>      |
| <b>Antifreeze</b>                               | <p>Do you collect and recycle or dispose of antifreeze by approved methods? <i>(Mandatory)</i></p> <p><i>State-specific requirement:</i></p> <ul style="list-style-type: none"> <li>• <b>Wisconsin:</b> Do you use best management practices to minimize the use and release of antifreeze into the environment? <i>(Program Required)</i></li> </ul>   |
| <b>Freon</b>                                    | Do you use U.S. EPA certified technicians to recover and properly dispose of Freon? <i>(Mandatory)</i>  |
| <b>Lead Acid Batteries</b>                      | Do you have appropriate procedures for the collection, storage and recycling of spent lead acid batteries? <i>(Mandatory)</i>   |

| <b>Petroleum Control (Theme #4)</b>     |   |
|---|---|
| <b>Storage Tank Permits/Regulations</b> | <p>Do you have the necessary permits and meet all the requirements (e.g., labeling, barriers, etc.) of the fire code for spill prevention and for fuel containment to operate a commercial Aboveground Storage Tank (AST) containing flammable or combustible liquids? <i>(Mandatory)</i></p> <p><i>BMP examples:</i> Install a secondary containment system that would prevent accidental fuel releases if your fuel system does not have a double-walled configuration. Install appropriate barriers (guard posts) to protect tanks and dispensing systems from damage. Properly label tanks.</p> |
|   | Do you meet the requirements of BUSTR (Bureau of Underground Storage Tank Regulations) and PUSTRCB (Petroleum Underground Storage Tank Release Compensation Board) for monitoring and registration of your commercial Underground Storage Tank (UST) containing flammable or combustible liquids? <i>(Mandatory)</i>  |

|                                |  |
|--------------------------------|--|
|                                | <p>The U.S. Environmental Protection Agency (EPA) is proposing new UST requirements including operator training and secondary containment. Have you completed the necessary training? <i>(Mandatory)</i></p> <p><i>Resources:</i> <a href="#">State And Territory UST/LUST Program Status And Contacts</a>; <a href="#">Underground Storage Tank Provisions of the Energy Policy Act of 2005</a></p>   |
| <b>Records</b>                 | <p>Do you keep a file of Material Safety Data Sheets (MSDS) for all products (including diesel and gas) used at your facility, as required by the Occupational Safety and Health Act of 1970 (29 USC Sec. 657) stored in an office away from the material storage areas? <i>(Mandatory)</i></p>  |
|                                | <p>Have you filed paperwork (Tier II forms) with the appropriate emergency management authorities for hazardous waste, including petroleum? <i>(Mandatory)</i></p> <p><i>Resources:</i> <a href="#">EPA State Tier II Reporting Requirements</a>, <a href="#">Michigan SARA Title III Program</a></p>  |
| <b>Fire Code</b>               | <p>Do you have records from your local or state fire inspections? <i>(Mandatory)</i></p>   |
| <b>Staff Training</b>          | <p>Do you train staff in fueling and spill prevention, containment and cleanup procedures annually and keep records of the training? <i>(Program Required)</i></p> <p><i>Resources:</i> Florida "Panic Preventer File", <a href="#">University of Alaska Southeast Oil Spill Prevention, Preparedness and Response Course</a></p>  |
| <b>Fuel Dock Operation</b>     | <p>Do you always have a trained employee at the fuel dock to oversee or assist with fueling? <i>(Program Required)</i></p>   |
|                                | <p>Do you have special fueling docks for personal watercraft to help drivers refuel without spilling? <i>(Recommended)</i></p>   |
| <b>Fuel Nozzles</b>            | <p>Have you removed fuel nozzle holding clips? <i>(Mandatory)</i></p>  |
|                                | <p>Have you installed automatic back pressure shutoff nozzles on fuel pump discharge hoses? <i>(Program Required)</i></p>  |
| <b>Fuel Transfer Equipment</b> | <p>Do you regularly inspect, maintain and replace fuel nozzles, hoses, pipes and tanks for fueling stations as necessary? <i>(Program Required)</i></p>  |
| <b>Used Oil</b>                | <p><b>If you offer oil changes</b>, do you have appropriate procedures for the collection, storage and recycling or disposal of used oil and filters (spill-proof oil changes)? <i>(Program Required)</i></p> <p><i>BMP example:</i> Provide spill-proof oil changes. Include information on appropriate handling of maintenance waste (e.g., used oil and filters) in contract language. Provide oil filter crusher to reduce the size of disposal waste.</p> |
|                                | <p><i>State-specific requirement:</i></p> <ul style="list-style-type: none"> <li>• <b>Ohio:</b> Do you have a permit from Ohio EPA to install and operate a used oil burning space heater or do you qualify for the <i>de minimus</i> exemption? <i>(Mandatory)</i></li> </ul>   |
| <b>Signage</b>                 | <p>Do you post signage for boaters about clean boater fueling practices at your marina? <i>(Recommended)</i></p> <p><i>Resource:</i> <a href="#">Boat US Foundation's "Help Stop the Drops"</a></p>  |
| <b>Spill Materials</b>         | <p>Do you make available and promote the use of oil absorbent materials during oil changes, fueling and in the bilge areas of all boats with inboard engines? <i>(Program Required)</i></p>  |
|                                | <p>Do you recycle oil absorbent materials if possible or dispose of them in accordance with petroleum disposal regulations? <i>(Program Required)</i></p>  |
|                                | <p>Do you maintain enough oil spill response equipment to contain the greatest potential spill at your facility and store it in readily accessible locations, such as at the fuel dock, launch and dry stack areas? <i>(Program Required)</i></p>  |
|                                | <p>Do you prohibit the use of detergents to dissipate fuel spills on the water? <i>(Mandatory)</i></p>   |
| <b>Machinery</b>               | <p>Do you perform regular maintenance on your yard equipment (forklifts, tugs, trailers, hoists, etc.) and machinery, taking precautions to minimize oil spills and leaks? <i>(Program Required)</i></p>   |

|                              |  |
|------------------------------|--|
| <b>Spill Prevention Plan</b> | Do you have a spill prevention, control and countermeasure (SPCC) plan that meets all SPCC rules (if the facility has an aggregate aboveground storage capacity of greater than 1,320 gallons or an underground storage capacity greater than 42,000 gallons)? <i>(Mandatory)</i><br><br><i>Resource: <a href="#">EPA SPCC Plan Guide for Marinas and Boat Owners</a></i>                                    |
|                              | If you are not legally required to have an SPCC plan under these guidelines, do you still have an SPCC plan or similar plan in place? <i>(Recommended)</i>   |
| <b>Reporting</b>             | Have you posted the U.S. Coast Guard National Response Center phone number (800-424-8802) and phone number for the local authority at various and appropriate areas of your marina to allow for the proper notification of a spill? Do you notify these entities any time a spill produces a sheen on the water? <i>(Mandatory)</i><br><br><i>Resource: <a href="#">EPA Spill Reporting Requirements</a></i> |

| <b>Sewage Handling (Theme #5)</b> |  |
|-----------------------------------|--|
| <b>Topic</b>                      | <b>Regional BMP</b>  |
| <b>Prohibit Discharge</b>         | Do you prohibit the discharge of sewage (treated and untreated) in your marina and prevent waste from your pump-out, septic system or dump station from draining into receiving waters? <i>(Mandatory)</i><br><br><i>Note: Regardless of No Discharge Zone status, if marina is to be certified, they can't discharge.</i>   |
| <b>Pump-out Facility</b>          | Does your marina have a well-maintained pump-out facility or do you inform boaters of other pump-out locations for holding tanks and port-a-potties? <i>(Program Required)</i><br><br><i>BMP example: Sign an agreement with another marina or facility to provide pump-out services.</i><br><br><i>If you have a pump-out facility, do you:</i><br>a) Dispose of the waste in a manner that meets state standards? <i>(Mandatory)</i><br><br><i>BMP example: Connect pump-out to municipal sewer. If not connected to public sewer, regularly maintain your septic or private sewage treatment system. Consider advanced septic treatment systems.</i><br><br>b) Have a regular maintenance schedule to keep pump-out stations clean and in service? <i>(Recommended)</i><br>c) Keep log sheets of pump-out maintenance? <i>(Recommended)</i><br>d) Have a dump station, wand attachment or an alternative procedure to empty portable toilets? <i>(Recommended)</i><br>e) Have trained marina staff assist boaters with pump-out operation? <i>(Recommended)</i> |
| <b>Contracts</b>                  | Do you include information about marine sanitation device (MSD) requirements and sewage laws in contracts for slips, rentals, transients and live-aboards? <i>(Program Required)</i><br><br><i>BMP example: Include contract language allowing operator to board and inspect vessel if sewage discharge is suspected.</i><br><br><i>Resources: Michigan Clean Marina <a href="#">Vessel Sewage and Marine Sanitation Devices Tip Sheet</a>; <a href="#">House Rules and Dockage contract from Walstrom Marine</a> (Michigan)</i>   |
| <b>MSD Inspection</b>             | Do you check boats to ensure they have proper and functioning marine sanitation devices (e.g., checking Y-valve, dye test)? <i>(Recommended)</i>   |

|                  |   |
|------------------|---|
| <b>Restrooms</b> | Does your marina provide clean, functional restrooms which are open 24 hours a day to encourage people not to use their boat's head while in port? <i>(Recommended)</i>   |
| <b>Signage</b>   | Do you post signs prohibiting the discharge of head waste and directing people to use shoreside restrooms? <i>(Recommended)</i>   |
|                  | Are the pump-out station locations well marked by signage and are instructions for correct operation posted? <i>(Recommended)</i>   |
|                  | If your marina uses a septic or private treatment system, do you post signs about what patrons can and cannot put into the system? <i>(Program Required)</i>  |
| <b>Graywater</b> | Do you discourage the discharge of pollutants/graywater in the marina basin? <i>(Recommended)</i><br><br><i>BMP examples:</i> Encouraging eco-friendly, non-phosphorous detergents; provide laundry and dish washing facilities; include language in slip agreements to discourage discharge. |

| <b>Waste Management and Recycling (Theme #6)</b> |   |
|--|---|
| <b>Topic</b>                                     | <b>Regional BMP</b>   |
| <b>Waste Disposal and Recycling</b>              | Do you follow state law and local ordinances for waste disposal and recycling? <i>(Mandatory)</i>   |
| <b>Hazardous Waste</b>                           | Have you evaluated your waste stream, determined your hazardous waste generator status and are in compliance with the regulations that apply to your state? <i>(Mandatory)</i><br><br><i>Resources:</i> <a href="#">EPA Resource Conservation and Recovery Act webpage</a> and State RCRA Delegates: <a href="#">Michigan Department of Environmental Quality</a> , <a href="#">Wisconsin Department of Natural Resources</a> , <a href="#">Ohio Environmental Protection Agency</a>          |
|  | Do you meet all mandatory requirements for storage, transport, containment and disposal of hazardous wastes? <i>(Mandatory)</i><br><br><i>BMP examples:</i> Store hazardous wastes and materials in appropriate, labeled and separate containers; minimize spills, leaks or releases. Store regulated liquid wastes in proper, well-labeled containers, and provide secondary containment for 100% of the largest container or 10% of the combined total volume, whichever volume is greater. |
|  | Do you minimize your use of hazardous products? <i>(Recommended)</i>  |
|  | Do you keep all hazardous materials on an impervious surface away from floor drains and covered to prevent contact with precipitation? <i>(Recommended)</i>   |
| <b>No Dumping (Federal)</b>                      | Do you prohibit all dumping of waste in the water? <i>(Mandatory)</i><br><br><i>BMP examples:</i> Include language about prohibition of dumping in your slip agreements and service provider contracts. Encourage boaters to contact marina staff to handle hazardous waste.  |
| <b>Records</b>                                   | Are you tracking pollution incidents? <i>(Recommended)</i><br><br><i>BMP example:</i> Use a "Pollution Report and Action Log" – see example in <a href="#">Wisconsin Guidebook: Waste Containment Chapter</a> (page 12).  |
| <b>Waste Reduction</b>                           | Do you take steps to reduce waste? <i>(Recommended)</i><br><br><i>BMP examples:</i> Avoid having leftover materials by sizing up a job, minimize office waste, request alternative packing material, discourage the use of plastic and styrofoam cups, etc.   |
| <b>Staff Litter Patrol</b>                       | Do you require your employees to be involved in policing the marina grounds, waters and shoreline for trash and litter? <i>(Recommended)</i>  |
| <b>Recycling</b>                                 | Have you have contacted a waste hauler or your local solid waste coordinator to enroll in available recycling programs? <i>(Recommended)</i>  |

|                     |  |
|---------------------|--|
|                     | <i>BMP example:</i> If you do not provide recycling facilities, direct your patrons to the nearest recycling facility.   |
|                     | Do you provide or promote recycling of liquid waste (e.g., used oil, antifreeze and solvents)?<br><i>(Program Required)</i>  |
|                     | Do you recycle used shrink-wrap covers? <i>(Recommended)</i><br><br><i>Resources:</i> <a href="#">Michigan Shrink-wrap Recycling Program</a> , <a href="#">Ohio Shrink-wrap Recycling Program</a>  |
|                     | Do you promote used fishing line collection or recycling? <i>(Recommended)</i><br><br><i>Resources:</i> <a href="#">Michigan Monofilament Recycling Program</a>  |
| <b>Receptacles</b>  | Do you provide both trash and recycling receptacles that are covered, well labeled, conveniently located and maintained on a daily basis? <i>(Program Required)</i>  |
| <b>Signage</b>      | Do you post signs advising disposal in designated receptacles (e.g., recycling, trash, hazardous materials such as engine oil, antifreeze, paints, solvents, varnishes, lead batteries and transmission fluids)? <i>(Recommended)</i><br><br><i>Resources:</i> For suggested sign templates, see the Wisconsin Guidebook, <a href="#">Marina Management Chapter</a> . Also include instruction to contact the marina if unsure of how to handle disposal of an item. |
| <b>Fish Waste</b>   | Does your marina provide a fish cleaning station or post signs and contractually bind your customers to the proper disposal of fish waste? <i>(Program Required)</i><br><br><i>BMP example:</i> Check with your local waste coordinator to determine availability of fish waste composting programs.   |
| <b>Pet Waste</b>    | Does your marina provide dog walks or contractually bind your customers to the proper disposal of pet waste? <i>(Recommended)</i>  |
| <b>Bird Feeding</b> | Do you discourage the feeding of waterbirds and waterfowl in your marina? <i>(Recommended)</i>   |

### Marina Management and Boater Education (Theme #7)

| <b>Topic</b>                   | <b>Regional BMP</b>   |
|--------------------------------|---|
| <b>Emergency Response Plan</b> | Do you have a current, written emergency response plan which is readily accessible to trained staff and do you provide annual training? <i>(Program Required)</i>   |
| <b>Training</b>                | <p>A well-trained staff will routinely minimize pollution, answer patrons' questions and perform their duties more efficiently. The proper training will also contribute to a faster response time in emergencies. Note — The Clean Marina Classroom provides information about these topics, see: <a href="http://www.cmpclassroom.com">www.cmpclassroom.com</a></p> <p>Do you train staff on the following: <i>(Program Required)</i></p> <ul style="list-style-type: none"> <li>○ Used oil management</li> <li>○ Spent solvent management</li> <li>○ Proper disposal of spent abrasives</li> <li>○ Disposal of vessel wastewater (e.g., pump-outs, boat hull washing)</li> <li>○ Pump-out operation</li> <li>○ Spill prevention and control (SPCC Plan)</li> <li>○ Fueling procedures</li> <li>○ General good housekeeping and litter patrol</li> <li>○ Painting and blasting procedures</li> <li>○ Used battery management</li> </ul> |

|                               |  |
|-------------------------------|--|
|                               | <ul style="list-style-type: none"> <li>○ Stormwater pollution prevention plan (SWPPP)</li> <li>○ Relaying “yard rules” to patrons and contractors</li> </ul>   |
|                               | <p>Do you maintain training records and require staff to sign off on all training? <i>(Program Required)</i></p> <p><i>BMP examples:</i> Record training dates, topics and names of employees and instructors; keep copies of instructional material.</p>  |
| <b>Contract Language</b>      | <p>Do you include language requiring the use of best management practices in all of your contracts: slip holders, live-aboards, transients, charters, workers, contractors and tenants? <i>(Program Required)</i></p> <p><i>Resource:</i> <a href="#">House Rules and Dockage contract from Walstrom Marine</a> (Michigan)</p> |
| <b>Addressing Infractions</b> | <p>Do you have a procedure and provide training to your employees to approach boaters or contractors who are not following the best management procedures? <i>(Recommended)</i></p>  |
| <b>Boater Audits</b>          | <p>Do you work with the Coast Guard Auxiliary or Power Squadron to offer vessel safety checks? <i>(Recommended)</i></p>  |
| <b>Signs</b>                  | <p>Do you post clear, visible signs regarding your best management practices throughout the marina? <i>(Recommended)</i></p> <p><i>Note:</i> <i>Specific signage recommendations are listed in Petroleum Control, Sewage Handling, and Waste Management and Recycling sections of this Guide.</i></p>                          |
| <b>Communication tools</b>    | <p>Do you provide information (brochures, fact sheets, workshops, tours, direct mail, billing inserts) to boaters promoting environmentally friendly marina and boating practices? <i>(Recommended)</i></p>  |
| <b>Customer Recognition</b>   | <p>Do you use public relations and customer recognition to demonstrate and promote best management practices? <i>(Recommended)</i></p>   |

| <b>Aquatic Invasive Species (Theme #8)</b> |   |
|--|---|
| <b>Topic</b>                               | <b>Regional BMP</b>   |
| <b>AIS Education</b>                       | <p>Do you inform boaters and encourage practices that help control the spread of aquatic invasive species and diseases? <i>(Program Required)</i></p> <p><i>BMP examples:</i> Use signage and/or other notices to advise boaters about their responsibility in controlling the spread of AIS; distribute pamphlets, newsletters or billing inserts to promote BMPs that can reduce the spread of AIS; host a “Clean Boats, Clean Waters” volunteer to assist boaters.</p> <p><i>Resources:</i> <a href="#">Stop Aquatic Hitchhikers website</a>, <a href="#">Clean Boats, Clean Waters Handbook</a>, <a href="#">Aquatic Nuisance Species Task Force website</a>, <a href="#">Great Lakes Information Network - Invasive Species in the Great Lakes Region website</a>, <a href="#">USDA National Invasive Species Information Center</a> (information by state).</p> |
| <b>Boat Cleaning Resources</b>             | <p>Do you encourage your boaters to use best management practices when cleaning, washing and draining their boats? <i>(Program Required)</i></p> <p><i>BMP examples:</i> Provide trash receptacles for disposal of leftover bait and debris, plants and mud from boaters’ equipment; provide high-pressure washer or hot water; provide oil-absorbent materials at the wash station.</p> <p><i>Resources:</i> <a href="#">NOAA Preventing Invasive Species: Cleaning Watercraft and Equipment fact sheet</a>, <a href="#">EPA Clean Boating Act webpage</a>, <a href="#">GLANSIS Guidelines to Prevent the Spread of Aquatic Invasive Species</a> (based on Aquatic Nuisance Species Task Force guidelines), <a href="#">Watercraft Inspection and Decontamination video</a>.</p>   |

|                             |  |
|-----------------------------|--|
|                             | <p>Do you provide boaters with an area — contained and managed for wash water — where they can carefully inspect, clean, drain and dry their boats and equipment when they leave the water? <i>(Recommended)</i></p> <p>See: Boat Maintenance and Siting, Design, Facility and Habitat sections.</p>   |
| <p><b>AIS Reporting</b></p> | <p>If a boater suspects a new occurrence of an aquatic invasive species, do you provide contacts and resources about aquatic invasive species? <i>(Program Required)</i></p> <p><i>Resources:</i> <u>USGS Nonindigenous Aquatic Species Sighting Report Form</u> and hotline (1-877-STOP-ANS), <u>Aquatic Nuisance Species Task Force Invasive Species Experts Database</u>, <u>Midwest Invasive Species Information Network</u></p> <p><i>Contact Information by State:</i></p> <ul style="list-style-type: none"> <li>• <b>Michigan:</b> Please report invasive species found at new locations to: USGS NAS at <a href="http://nas.er.usgs.gov/SightingReport.aspx">http://nas.er.usgs.gov/SightingReport.aspx</a> or (877) STOP-ANS or directly to the GLANSIS manager, Rochelle Sturtevant at <a href="mailto:rochelle.sturtevant@noaa.gov">rochelle.sturtevant@noaa.gov</a> or (734) 741-2287. You should also notify the Michigan Department of Environmental Quality.</li> <li>• <b>Ohio:</b> See Aquatic Nuisance Species Task Force expert list for who to notify: <a href="http://www.anstaskforce.gov/experts/expertlist.php?PHPSESSID=25941cfb19d941958512eb15183ab923&amp;expertprimarystate=OH">http://www.anstaskforce.gov/experts/expertlist.php?PHPSESSID=25941cfb19d941958512eb15183ab923&amp;expertprimarystate=OH</a>. The person to contact (ODNR/OSG/GLANSIS) varies based on the type of AIS collected.</li> <li>• <b>Wisconsin:</b> Notify the <u>Wisconsin Department of Natural Resources</u>. Select “Report” for next steps (forms, contact information, etc.).</li> </ul>   |
| <p><b>Transport</b></p>     | <p>Are you aware of and do you adhere to your state’s restrictions on the transport of species? <i>(Program Required)</i></p> <p><i>State-specific requirements:</i></p> <ul style="list-style-type: none"> <li>• <b>Michigan:</b> The Michigan AIS Management Plan (<a href="http://www.michigan.gov/documents/deg/wrd-ais-smp-public-review_380166_7.pdf">http://www.michigan.gov/documents/deg/wrd-ais-smp-public-review_380166_7.pdf</a>) states: “The transportation of inspection and cleaning of equipment is of paramount importance to prevent the transport of AIS between bodies of water. Placing a boat, boating equipment, or boat trailer in Michigan’s water when an aquatic plant is attached is considered a civil infraction under Chapter 324, Section 41325 of the NREPA. This law does not regulate boat washing or the removal of any aquatic animals, parasites, or microorganisms from boating equipment, nor does it include non-boating, water-related recreational equipment, such as fishing waders.”</li> <li>• <b>Ohio:</b> Ohio Administrative Code: Chapter 1501:31-19 (D) Wild Animal Regulations (<a href="http://codes.ohio.gov/oac/1501%3A31-19">http://codes.ohio.gov/oac/1501%3A31-19</a>) states: “It shall be unlawful for any person to possess, import or sell exotic species of fish or hybrids thereof for introduction or to release into any body of water that is connected to or otherwise drains into a flowing stream or other body of water that would allow egress of the fish into public waters, or waters of the state, without first having obtained permission of the chief.”</li> <li>• <b>Wisconsin:</b> Wisconsin Administrative Code NR 40 (<a href="http://docs.legis.wisconsin.gov/code/admin_code/nr/40.pdf">http://docs.legis.wisconsin.gov/code/admin_code/nr/40.pdf</a>) makes it illegal to possess, transport, or introduce certain invasive species without a permit. For a compiled NR 40 species list, please refer to, <a href="http://dnr.wi.gov/topic/Invasives/documents/NR40ListsSep292010.pdf">http://dnr.wi.gov/topic/Invasives/documents/NR40ListsSep292010.pdf</a>.</li> </ul> |