

## ENVIRONMENTAL ASSESSMENT

Wisconsin Statewide General Permit for placement of net pen structures in a Great Lakes water body or a tributary of a Great Lakes water body for the purpose of holding or rearing fish for noncommercial purposes.

Prepared by Wisconsin Department of Natural Resources, Bureau of Watershed Management  
February 7, 2014

NOTE TO REVIEWERS: This document is a Department of Natural Resources Environmental Analysis that evaluates probable environmental effects and decides on the need for an Environmental Impact Statement. The attached analysis includes a description of the action and the affected environment. The DNR has reviewed the attachments and accepts responsibility for their scope and content to fulfill requirements in s. NR 150.22, Wisconsin Administrative Code.

Your comments should address completeness, accuracy or the EIS decision.

For your comments to be considered, they must be received by the contact person before 4: 30 p.m., March 13th 2014.

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## DESCRIPTION

### Statewide General Permit Process

#### *General Permit Issuance*

If a regulated project or activity is not exempt in statute from the requirement to obtain a permit, it must be authorized by either a general permit or an individual permit. General permits are written to cover any number of projects or activities that can meet a standardized set of criteria, whereas an individual permit is written specifically for that project.

2011 Wisconsin Act 167 established new procedures under the DNR's authority to issue a general permits for activities that affect navigable waters (any activity regulated under Ch. 30, Wis. Stats). These new procedures exempts general permits from the definition of "rule" (eliminating the procedural requirements for promulgating these permits by adopting administrative rules to create a General Permit), and replaces that procedure with a public comment period and a legislative committee review process. The legislative review process provides for temporary suspension of general permits by certain legislative committees

To ensure that the cumulative adverse environmental impact of the activities authorized by a general permit cause only minimal adverse environmental impacts and that the issuance of the general permit will not injure public rights or interests, cause environmental pollution, as defined in s. 299.01 (4), or result in material injury to the rights of any riparian owner, the department may impose any of the following conditions on the permit:

- Construction and design requirements that are consistent with the purpose of the activity authorized under the permit.
- Location requirements that ensure that the activity will not materially interfere with navigation or have an adverse impact on the riparian property rights of adjacent riparian owners.
- Restrictions to protect areas of special natural resource interest.

#### *General Permit Coverage:*

Individuals may apply for coverage under a statewide general permit to perform work in accordance with the terms and conditions of the general permit. Coverage under a general permit will be valid for a period of 5 years from the date of issuance. Regardless of the expiration date of a general permit, an activity authorized under a general permit remains authorized for five years from the date of coverage or until it is complete, whichever occurs first. The Department continues to have authority to establish requirements, conditions and exceptions for statewide general permits to ensure that the authorized activity will cause only minimal adverse environmental effects. The DNR is authorized to renew, modify and revoke general permits following the same procedures used to issue the general permit initially. The Department will make a determination to either issue coverage under the general permit to the applicant or require an individual permit. The Department determination will depend on whether or not the project complies with the eligibility requirements and standard conditions outlined in the general permit.

### **Statewide General Permit for Placement of Net Pens in a Great Lakes Water Body or a Tributary of a Great Lakes Water Body for the Purpose of Holding or Rearing Fish.**

#### *Authorized Activities:*

WDNR-GP9-2014 would provide authorization for placement of a net pen(s) in a Great Lakes water body or a tributary of a Great Lakes water body for the purpose of holding or rearing fish for noncommercial purposes and for a period not to exceed 8 weeks. Projects would be required to meet all eligibility standards, terms and conditions of the general permit to be eligible for coverage.

#### *Excluded Activities:*

Projects that are not exempt from permitting requirements, and do not meet all the terms and conditions of WDNR-GP9-2014 would not be eligible and would be excluded from coverage. Projects that are not eligible for this general

permit may be reviewed under the individual permit review process. The department has authority under s. 30.206(3r), Stats. to require an individual permit in lieu of a general permit, if the department has conducted an investigation and visited the site and has determined that conditions specific to the site require restrictions on the activity in order to prevent significant adverse impacts to the public rights and interest, environmental pollution, as defined in s. 299.01 (4), or material injury to the riparian rights of any riparian owner.

***Permit Changes:***

The department could modify or revoke coverage of the general permit if the placement of net pen project was not carried out in compliance with the terms and conditions of the permit, or if the Department determines the project would be detrimental to the public interest. Furthermore, the Department would have the authority to reevaluate the effectiveness of WDNR-GP9-2014 and could suspend, modify or revoke it if determined necessary.

**PURPOSE AND NEED**

The purpose of issuing a statewide general permit is to establish a stable, relatively simple permit program that is specifically designed to effectively and efficiently regulate the public and private needs for minor environmental impacts. The legislative intent of 2011 Wisconsin Act 167 was to establish clear criteria, conditions and timelines to ensure more predictable permit review process and decisions.

**ALTERNATIVES**

The Department retains authority under 30.206(3r), Stats, to require an individual permit in lieu of a general permit.

Coverage under WDNR-GP9-2014 could be granted for projects meeting all applicable purpose, design, construction and location requirements, terms and conditions. The Department would have 30 days to review the application, notify the applicant of any further required information or missing application items, and make a determination regarding the applicants' eligibility for coverage. When Department review of the proposed project indicates that terms and conditions of the general permit were not sufficient to ensure only minimal adverse environmental effects (for example an unusually large project area for placement of structures, or placement of structures in an environmentally sensitive area) the Department could require an individual permit to allow a more detailed review and possible acceptance of the project.

Projects requiring individual permits would be those that do not fit the pre-approved designs, terms and conditions necessary to be eligible for coverage under the statewide general permit. Individual permit procedures require a more detailed permit application and Department review. Through the individual permit process Department staff may advise applicants on project modifications needed to reduce impacts and ensure that the project would not result in any significant adverse environmental consequences. Additionally, individual permits require a public notice, public comment period and an opportunity for an informational hearing. Individual permit decisions are subject to appeal for review by an administrative law judge within 30-days of the decision.

Although the Department has the authority to require an individual permit in lieu of a general permit, the alternative of only permitting placement of net pens as individual permits is deemed unnecessary.

The Department has the authority to establish requirements, conditions and exceptions for statewide general permits and WDNR-GP9-2014 has been designed to produce and achieve the same regulatory results as an individual permit review for projects with minor impacts. Furthermore, individual permit reviews for all projects is beyond the ability of the Department's limited resources. Individual permit review would be required of proposed projects not meeting the terms and conditions of WDNR-GP9-2014 or on a case-by-case determination of specific site conditions that necessitate additional restrictions in order to provide reasonable assurance that no significant adverse impacts to the environment would occur.

## **AUTHORITIES AND APPROVALS**

General permit authorizations are provisional and require that the applicant obtain any other federal, state, local or tribal permits or approvals that may be required for the project or activity involving alterations to public waters and before any work is authorized. For example, under section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) may require permits for placement of structures below the ordinary high water mark in federal navigable waters and for the discharge of dredged or fill material into waters and wetlands. This federal permit is in addition to a state permit. If federal permits are needed, the type of permit and the length of the USACE review of a proposal would depend on the extent of the alteration proposed. More information about federal requirements can be found at: <http://www.mvp.usace.army.mil/regulatory>.

Furthermore, while the state permit program governs the determination of whether the placement of structures, dredging and similar activities in or adjacent to navigable waters is in compliance with state Water Quality Standards, it does not affect the authority of the Department to otherwise regulate the discharge of dredged or fill material into a wetland. For example, several types of activities related to collecting, storing, transporting, treating, and disposing of solid waste, require permits or licenses from the Department. Additionally, local governments use floodplain and shore-land zoning to control development along lake shores and streams. Local zoning officials administer permit programs for buildings, land disturbance and other activities in shore-land and floodplain areas.

## **ENVIRONMENTAL IMPACTS**

This analysis briefly describes potential effects that would be attributable to activities authorized by WDNR-GP9-2014 for the placement of net pens. This analysis further addresses any expected difference in environmental effects and impacts between the issuance of a statewide general permit versus the alternative of issuing an individual permit.

### **Affected Environment**

WDNR-GP9-2014 would authorize placement of a net pen(s) in a Great Lakes water body or a tributary of a Great Lakes water body for the purpose of holding or rearing fish for noncommercial purposes and for a period not to exceed 8 weeks.

The intent of placing net pens would be to allow private individuals and groups to assist the Department by holding Department stocked fish for a specified time period prior to releasing into the wild as opposed to conventional stocking which immediately releases fish into the wild. The purpose of placing net pens would be to allow stocked fish to better acclimate, imprint, and/or avoid predation before being released into the wild. Net pens would be placed in the Great Lakes and tributaries of the Great Lakes potentially impacting nearshore areas on a temporary basis. Currently, the only fish stocked into the Great Lakes is fish reared by the Department. As a result, only Department raised fish would be held or reared in net pens. Additionally, through a cooperative agreement with the applicant, the Department would control the stocking process, numbers stocked, and species stocked. The stocked fish would remain in Department ownership during rearing in net pens and all stocking would follow current and future Department management plans for Lake Michigan and Lake Superior.

Net pens have been used to allow stocked fish to better acclimate, imprint, and/or avoid predation before being released into the wild in Michigan and Wisconsin as well as other Great Lakes states. Current use of net pens has been restricted to developed areas such as marinas, docks, and bulkheads to aid in securing and monitoring the net pen. Though it is possible under WDNR-GP9-2014 that net pens could be used in less developed areas as well, a large expansion into less developed areas is not anticipated.

### **General Impacts Due to Placement of Net Pen Structures**

The statewide general permit for the placement of net pen structures has safeguards in place to minimize the impacts to public's interest in the water body. However there are general considerations when placing net pen structures in public waterways to hold or rear fish as part a fish stocking program.

### **Impacts to the Fish Populations and the Fishery**

Net pens are a widely used tool to increase survival and returns of stocked salmon, trout, and other species. Two primary reasons for net pen use are to reduce predation by birds and predator fish and to help fish acclimate to their

environment before being release into the wild. In the case of salmon and some trout, net pens are also used to help the fish imprint on the particular water body to increase the return rate to that stream or harbor during spawning runs.

Anadromous trout and salmon (e.g., Chinook salmon, coho salmon, steelhead) juveniles sense unique water chemical composition and other factors in their natal streams and return to those streams when they are spawning adults. The ability of stocked trout and salmon to accomplish this depends upon timing of stocking, length of time in the stream, and other factors. Net pens are used to increase the time the juveniles spend in the stream or harbor and also to time the release when the juvenile fish are in their smolt life stage (the life stage when the fish are physiologically changing to prepare for out-migrating from the rearing tributary). The smolt life stage is when most imprinting it thought to occur (Hasler and Scholz 1983; Pascual et al. 1995).

The State of Michigan has been using net pens to stock Chinook salmon since the 1990's. During an evaluation through the early 1990's Chinook salmon stocked in net pens in Michigan waters of Lake Michigan returned to the creel (anglers catch) at a higher rate than those fish stocked in a conventional manner at a ratio of 1.7:1.0 (D. Clapp, Michigan DNR, Pers. Comm.). The results were not statistically significant and there may have been confounding factors in the study; however, the net pen fish consistently returned at a greater rate among the years and sites.

Other studies examining situations where the fish were held in ponds or off-channel rearing locations also showed positive results. These rearing situations were different than net pens but adhered to the same principle of holding the fish for a time period prior to release into the body of water. In the Au Sable River in Lake Huron, Chinook salmon stocked using off-channel raceways had higher return to creel (2.5:1) and return to spawning streams (6.4:1) than conventionally stocked fish (Johnson et al. 2007). In other locations in this Lake Huron study off-channel raceway reared fish generally had higher returns than conventionally stocked fish but the results were more varied with some age classes showing no differences and one age class that had lower returns than conventionally stocked fish. Wisconsin DNR research has shown that fish stocked into a rearing pond had slightly higher returns than those stocked directly into the river or lake at a ratio of 1:1.17 (Peeters and Toney 1995).

Savitz et al. (1993) showed that there were no differences in returns for Chinook and coho salmon stocked using net pens than those conventionally stocked in various Illinois harbors of Lake Michigan.

### **Impacts Related to Habitat Due to Shading**

Placement of net pen structures could potentially hinder plant growth by shading out plants. The total amount of shaded area would be limited because of the limited stocking opportunities and thus limited use for net pens. In addition, the temporary nature of net pens will decrease the shading impact, if any, on plant growth.

### **Impacts Due to Permit Processes**

The Department will control stocking of fish into public waters separate from this GP process. Stocking of fish would be controlled by the Department through a cooperative agreement process in which only Department raised fish would be allowed to be reared in net pens. The number of fish stocked into net pens will be within limits established by Department Lake Michigan and Lake Superior management plans.

The Department's policy on the placement of net pens in public waters has currently been to allow the placement of net pens without a permit only if placement of net pens is temporary and placed for less than 48 hours in a public waterway. Two projects involving placement of net pens occurred in 2013. Both of these projects occurred in Lake Michigan and tributaries of Lake Michigan; both of these projects involved net pens that were placed for less than 48 hours. The Department did not require permits for these projects.

2012 Act 75 modified Wis. Stats., s. 95.60 by exempting net pen operations from, the Department of Agriculture, Trade and Consumer Protection (DATCP) authority to regulate fish farms. After the date on which the fish are placed in a net pen authorized by this General Permit, Wis. Stats., s. 95.60 will not apply to the fish that are held in the net pen. WDNR-GP9-2014 may result in an expansion of the use of net pens for the holding and rearing of fish in the Great Lakes as an authorized net pen will ease other fish rearing restrictions.

Net pens permitted under WDNR-GP9-2014 will be allowed to be placed for up to 8 weeks, and could allow the rearing of fish (which includes fish feeding). Fish rearing will be monitored through a cooperative agreement with the Department that will be required for individuals or groups to receive fish for stocking into the Great Lakes or tributaries of Great Lakes. The Department will retain ownership of the fish throughout this process and will control the fish stocking process.

The overall number of net pens authorized for placement in the Great Lakes under the General Permit will be limited by the number of fish that the Department stocks into the Great Lakes. These limits are set for ecological and budgetary reasons and governed by long-term management plans. We anticipate that net pens will be used mostly to stock Chinook salmon rather than other species (e.g., warmwater species, rainbow trout, brown trout, coho salmon) because net pens have been shown to benefit Chinook salmon. Current management plans allow for stocking of 815,000 Chinook salmon into Lake Michigan and allows for no Chinook salmon to be stocked into Lake Superior (D. Boyarski, Wisconsin DNR, Pers. Comm.). These Chinook salmon will be stocked throughout ten Lake Michigan coastal counties.

Both General Permits, such as WDNR-GP9-2014, and Individual Permits, provide terms and conditions that address cumulative impacts to surface waters. Permit requirements to decrease impacts include construction measures to minimize sediment movement into surface waters, avoidance of the spread of invasive species, and prevention of potential pollutants from entering a water body. Both permitting processes prevent adverse impacts to historical and cultural resources, state and federal designated threatened or endangered species and fishery spawning habitat. Neither the general permit nor individual permit authorizations would be contrary to wetland water quality standards or result in adverse impacts to adjacent landowners. Both general and individual permitted projects would be required to be maintained in good condition to ensure that there would be no additional impacts.

Evaluating the overall extent of secondary and cumulative impacts of placing net pen structures, can be difficult since individual projects that may seem minor when considered in isolation may become major if considered collectively over time and space. Individual permit review requires a more intensive analysis that will minimize the impacts to recreation and navigation, and will provide that the project will not result in any other significant adverse environmental consequences that are detrimental to the public trust. The Department considers direct impacts, cumulative impacts and potential secondary impacts of proposed projects in determining that each permitted project represents the least environmentally damaging alternative.

Differences in the ecology of lakes and streams, variations in land use throughout the state, economic trends, and potential impacts of future climate changes provide uncertainties in predicting the environmental effects of future activities that would be authorized under either WDNR-GP9-2014 or individual permits. Both general and individual permits could be revoked if the Department determines that the applicant failed to comply with the terms and conditions of the permit or if the information provided by the applicant proves to be false, incomplete or inaccurate. Either permit could also be revoked if new information indicates that the project would cause significant environmental impacts.

The establishment of this general permit as a streamlined permit process for activities of minimal impact would have the advantage of allowing more Department resources to be allocated to the review of individual permits of greater complexity and greater potential for significant adverse impacts.

### **Impacts to Air Quality**

Placement of net pen structures may be done with heavy machinery (e.g., crane, truck) and may result in emissions of vehicle exhaust. Projects of the scale that would be covered under WDNR-GP9-2014 would result in only minor and temporary air emissions. Impacts to air quality would be the same for these kinds of projects regardless of coverage under WDNR-GP9-2014 or an individual permit.

### **Risk**

#### ***Reliance on Applicants Data:***

Department staff would review all general permit applications to determine that projects meet all permit terms and conditions, and are eligible for coverage. In making these determinations, the Department would rely on the

information provided by applicants, and any other required information. The Department would have authority for site access to investigate the project construction, operation, maintenance or permit compliance. The Department could deny coverage or reevaluate its decision on any authorization under this GP at any time circumstances warrant. Circumstances would include, but would not be limited to, failure to comply with the terms and conditions of the general permit; information provided by the applicant proves to have been false, incomplete, or inaccurate; or significant new information surfaces which was not considered in reaching the original determination. Any act of noncompliance would constitute a permit violation and would be grounds for enforcement action.

***Presumptive Approval:***

Under WDNR-GP9-2014, if the Department failed to make a determination regarding coverage under the general permit within 30 days, the project would be presumed to be authorized under s. 30.206(3), Wis. Stats., and the applicant could proceed. According to recent permitting data, the average general permit decision issued by the Department has been within this 30 day timeframe. The Department cannot guarantee that statutory presumptive approval would never occur, however. Any presumptively approved project would still have to adhere to the terms and conditions of the general permit with any act of noncompliance constituting a permit violation that would be grounds for enforcement action.

**Degree of Controversy**

The authority and requirement of the Department to issue statewide general permits was legislatively established. The process involves public notice of the Department's intent to issue, modify or revoke a statewide general permit, and allows for public input to address potential concerns. The issuance is not expected to be controversial. Once a statewide general permit is issued, the authorization of coverage for permit activities would provide no public comment opportunity, nor would it require notification to adjacent landowners of any proposed activity. However, this is no change from prior general permit procedures promulgated under rule and is not expected to be controversial.

**Degree of Precedence**

While this is one of the early statewide general permit to be issued under the new process established by 2011 Act 167, historically the Department has promulgated many general permits (albeit by rule). This new process for creating statewide general permits administratively instead of through rule promulgation continues the Department's practice of consistently providing conditions and standards for low-risk projects in navigable waters.

Project Name: Statewide General Permit WDNR-GP9-2014: **placement of net pen structures in a Great Lakes water body or a tributary of a Great Lakes water body for the purpose of holding or rearing fish for noncommercial purposes.**

Counties include but may not be limited to: Ashland, Bayfield, Brown, Door, Douglas, Iron, Kenosha, Kewaunee, Manitowoc, Marinette, Milwaukee, Oconto, Ozaukee, Racine, and Sheboygan.

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#### PRELIMINARY DECISION

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In accordance with s. 1.11, Wis. Stats., and Ch. NR 150, Wis. Adm. Code, the Department is authorized and required to determine whether it has complied with s. 1.11, Wis. Stats., and Ch. NR 150, Wis. Adm. Code.

The Department has made a preliminary determination that the Environmental Impact Statement process will not be required for this action/project. This recommendation does not represent approval from other DNR sections which may also require a review of the action/project.

Signature of Evaluator 	Date Signed 02/07/14
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#### FINAL DECISION

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The public review process has been completed. The Department received and fully considered responses to the news release or other notice.

Pursuant to s. NR 150.22(2)a., Wis. Adm. Code, the attached analysis of the expected impacts of this proposal is of sufficient scope and detail to conclude that this is not a major action, and therefore the environmental impact statement process is not required prior to final action by the Department.

The Department has determined that it has complied with s. 1.11, Wis. Stats., and Ch. NR 150, Wis. Adm. Code. This decision does not represent approval from other DNR sections which may also require a review of the action/project.

Signature of Environmental Analysis Program Staff	Date Signed
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#### NOTICE OF APPEAL RIGHTS

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If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to sections 227.52 and 227.53, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to section 227.42, Wis. Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with section NR 2.05(5), Wis. Adm. Code, and served on the Secretary in accordance with section NR 2.03, Wis. Adm. Code. The filing of a request for a contested case hearing does not extend the 30 day period for filing a petition for judicial review.

## **ADDENDUM**

### **GENERAL PERMIT PROCESS SEQUENCE**

- Anyone wishing to proceed with an activity that may be authorized under a statewide general permit is required to submit an application for coverage at least 30 days before beginning the activity.
- The applicant needs to provide sufficient information describing the proposed activity in order for the Department to make a determination whether the activity can be authorized by the general permit.
- The applicant will allow the Department consent to enter and inspect the site if needed.
- General permits are valid for five years and may be renewed, modified, or revoked. It also specifies that projects authorized under a general permit remain authorized for five years from the date the DNR determines the project may proceed under the general permit, even if the underlying general permit expires during this time period.
- The application will be reviewed by the Department to ensure that the proposed project complies with all general permit requirements.
- Applications providing all required project information and found to comply with all general permit requirements will be issued a “Letter of Coverage” authorizing the activity.
- If sufficient information is not received with the proposed project application, the Department can make one request for additional information deemed necessary for the Department to verify compliance with the terms and conditions of the general permit.
- If the Department fails to make a determination regarding coverage under the general permit within 30 days, the project is considered to be authorized and the applicant may proceed as long as the project is carried out in compliance with all conditions of the general permit.
- The Department may determine that the proposed project is not eligible for coverage under the general permit and require that the project be reviewed through the individual permit process as outlined in Ch. 30.12(3m) Wisconsin Statutes.
- Authorization of coverage under a general permit is valid for 5 years after the date of issuance or until the project is completed, whichever occurs first.

### **DOCUMENTS USED IN ANALYSIS:**

#### *References*

- Hasler, A. D., and A. T. Scholz. 1983. Olfactory imprinting and homing in salmon. Springer-Verlag, Berlin.
- Johnson, J. E., S. P. DeWitt, and J. A. Clevenger, Jr. 2007. Causes of variable survival of stocked Chinook salmon in Lake Huron. Michigan Department of Natural Resources, Fisheries Research Report 2086, Ann Arbor.
- Pascual, M. A., T. P. Quinn, and H. Fuss. 1995. Factors affecting the homing of fall Chinook salmon from Columbia River hatcheries. Transactions of the American Fisheries Society, 124(3): 308-320.
- Peeters, P. and M. Toney. 1995. Pond, river, lake Chinook stocking technique Final Report. Wisconsin Department of Natural Resources. Madison.
- Savitz, J., L. G. Bardygula, and G. Funk. 1993. Returns of cage-released and non-cage-released chinook and coho salmon to Illinois harbors of Lake Michigan. North American Journal of Fisheries Management, 13(3):550-557.