

**EPA's Review of the State of Wisconsin's Multi-Discharger Variance for Phosphorus
Under Section 303(c) of the Clean Water Act
WQSTS #WI2016-668**

Date: FEB 06 2017

I. Summary

A. Date Received by EPA

In a March 29, 2016, letter, the Wisconsin Department of Natural Resources (WDNR) requested that the U.S. Environmental Protection Agency approve Wisconsin's Multi-Discharger Variance (MDV) for Total Phosphorus in accordance with Section 303(c) of the Clean Water Act (CWA). On March 31, 2016, WDNR posted the letter requesting EPA approval of the MDV and the information that WDNR submitted in support of its request at <http://dnr.wi.gov/topic/surfaceWater/phosphorus/statewideVariance.html>. EPA received a hard copy of the letter on April 1, 2016.

B. Description of the State's Action

1. Background

Nutrient pollution caused by excess phosphorus and nitrogen is a costly, challenging nationwide water quality problem. *See* <https://www.epa.gov/nutrientpollution/problem>. (All internet sources cited in this document were accessible on the internet at the cited internet location as of February 1, 2017.) Nutrient pollution has impacted many streams, rivers, lakes and bays throughout the country, resulting in serious environmental and human health issues and impacting the economy. *Id.*

Under the CWA, states and authorized tribes adopt water quality criteria for pollutants to protect the assigned designated uses of surface waters. Other CWA programs that are intended to protect, manage and restore the quality of the nation's surface waters, such as the National Pollutant Discharge Elimination System (NPDES) permitting program, state and tribal monitoring and assessment programs and the total maximum daily load (TMDL) program rely directly on water quality criteria, in addition to other water quality standards (WQS), adopted by states and tribes and approved by EPA as a primary basis for regulating discharges, monitoring and assessment, restoring impaired uses and evaluating the effectiveness of restoration efforts. EPA encourages states to adopt numeric nutrient criteria and utilize them for protecting and restoring a waterbody's designated uses from impacts due to nutrient pollution. *See* <https://www.epa.gov/nutrient-policy-data/numeric-nutrient-water-quality-criteria>. Such numeric criteria provide quantitative benchmarks for interpreting monitoring data and for establishing loading targets for the development of TMDLs and other efforts for restoring waters not attaining their designated uses. *Id.*

In 2010, the State of Wisconsin became one of the first states to adopt numeric criteria for phosphorus that are broadly applicable to most waters throughout the state. *See* Wisconsin

Department of Administration and Wisconsin Department of Natural Resources, *Substantial and Widespread Adverse Social and Economic Impacts of Wisconsin's Phosphorus Regulations: A Final Determination*, Appendix A, December 29, 2015 ("Final Determination," available at <http://dnr.wi.gov/topic/surfaceWater/phosphorus/statewideVariance.html>); see also <https://www.epa.gov/nutrient-policy-data/state-progress-toward-developing-numeric-nutrient-water-quality-criteria> (Comprehensive summary of the 50 states' phosphorus and nitrogen criteria). Wisconsin's criteria, which are codified at Wis. Admin. Code NR 102.06, are among the most stringent phosphorus criteria in the country. See *id.* Wisconsin's total phosphorus criteria were approved by EPA in 2010.

In 2012, WDNR prepared a report entitled *Phosphorus Reduction in Wisconsin Water Bodies: An Economic Impact Analysis* (Aug. 13, 2012) ("2012 Economic Impact Analysis," available at <http://dnr.wi.gov/topic/SurfaceWater/documents/PhosphorusReductionEIA.pdf>), that documented the significant statewide economic and social impacts from nutrient pollution in Wisconsin. WDNR explained in the report that nutrient pollution adversely impacts property values, recreational opportunities, tourism, scenic beauty and quality of life, human and pet health and the health of commercial fisheries. *Id.* at ii. WDNR estimated the economic benefit over a 20-year period of attaining Wisconsin's phosphorus criteria in terms of increased property values, increased recreational opportunities and avoided lake cleanup/management costs alone would be approximately \$1.7 billion dollars. *Id.* at p. 4. WDNR was not able to quantify or monetize other economic benefits associated with reducing nutrient pollution, explaining:

There were many other types of benefits we considered but ultimately excluded from the analysis, as not enough information was available to make a reliable estimate of their monetary value. Despite their exclusion from this economic analysis, these benefits are no less valuable than the benefits we were able to monetize and ought to be considered when weighing the merits of the rules. These categories include benefits to human and pet health, tourism, commercial fishing, biodiversity, scenic beauty, avoided costs of treating drinking water, and reduction in other pollutants that would result from increased treatment.

Id. at p. 9.

Nonpoint sources are a major source of phosphorus pollution into the nation's waters. <https://www.epa.gov/nutrient-policy-data/nutrient-innovations-task-group-documents>, "Urgent Call to Action" <https://www.epa.gov/sites/production/files/documents/nitgreport.pdf>. As reported in EPA's "Urgent Call to Action" at page 13, crops and livestock are the source of approximately 80% of the phosphorus and 70% of the nitrogen reaching the Gulf of Mexico according to the USGS (USGS. 2008. *Differences in Phosphorus and Nitrogen Delivery to the Gulf of Mexico from the Mississippi River Basin: Sources of Nutrients Delivered to the Gulf of Mexico*. U.S. Geological Survey, Washington, DC., available at http://water.usgs.gov/nawqa/sparrow/gulf_findings/primary_sources.html). Regarding livestock sources of nutrient pollution, this document states at page 16:

In contrast to the 18 million tons of human fecal material treated annually (based on Freitas Jr. 1999; MERCK 2007) at POTWs, animal agriculture production results in the generation of more than 1 billion tons of manure each year (based on Brodie 1974; Chastain et al. 2003; USDA 2009a; USDA 2009b; USDA 2009c; USDA 2009f). This manure results in over 8 million pounds per day of nitrogen and 3 million pounds per day of phosphorus. Much of the manure is applied to farmland as organic fertilizer for crops. Some of the nutrients in this applied manure end up in harvested plant tissue, but significant portions end up in our nation's waters.

Although evidence shows that livestock production is a leading source of nutrient pollution, significant parts of this activity nonetheless remain generally unregulated.

With respect to row crop agriculture, the report states at p. 17:

Nutrient pollution from row crop agricultural operations, a by-product of excess manure and chemical fertilizer application, is the source of many local and downstream adverse nutrient-related impacts. Currently, stormwater runoff and irrigation return flow from row crop agriculture are exempt from regulation under the CWA generally and the NPDES program specifically. There are many ways in which agricultural operations can reduce the amount of nutrients released from farm fields, namely, by applying nutrients at the proper rate and timing, with the appropriate application method, and in the proper form or by using cover crops.

Robertson and Saad found that agricultural inputs contribute approximately 50% of the phosphorus and 60% of the nitrogen reaching the Gulf of Mexico, based on Spatially Referenced Regression On Watershed attributes (SPARROW) models that assess the relative source contributions of nutrient pollution (Robertson, D. M., and D. A. Saad. 2013. SPARROW Models Used to Understand Nutrient Sources in the Mississippi/Atchafalaya River Basin. *J. Environ. Qual.* 42:1422-1440. doi:10.2134/jeq2013.02.0066, <https://dl.sciencesocieties.org/publications/jeq/articles/42/5/1422>).

The situation in Wisconsin is no different: approximately 80% of the total phosphorus load to Wisconsin surface waters comes from nonpoint sources. *Final Determination* at p. 56. Data from Wisconsin's PRESTO system show that point source to nonpoint source ratios for permitted discharge locations are commonly less than 10% and often less than 5%. *Id.* at p. 56; *see also id.* at p. 81 ("the majority of the phosphorus loading to Wisconsin's streams and rivers comes from nonpoint sources," referencing <http://dnr.wi.gov/topic/SurfaceWater/PRESTO.html>). In fact, WDNR's analysis reveals that approximately 85% of point sources that are potentially eligible for coverage under the MDV "discharge to surface waters that are dominated by nonpoint sources of phosphorus pollution." *Final Determination* at p. 67. Data from Wisconsin's PRESTO system show that nearly 72% of the permitted point source discharges are to watersheds where the point source load is less than 25% of the upstream nonpoint source load, and nearly half (47%) are to watersheds where the point source load is less than 10% of the upstream nonpoint source load. Of these, approximately 60% will receive discharge limits set equal to criteria at point of discharge because the receiving stream exceeds the criteria even without the additional load from the point source. For these nonpoint-source-dominated surface waters, it will not be

possible to attain the phosphorus criteria until nonpoint source loadings are reduced; even if all point source loadings into those waters are eliminated. *See also Multi-discharger Variance Justification* (“*Justification*,” available at <http://dnr.wi.gov/topic/surfaceWater/phosphorus/statewideVariance.html>) at p. 8 (“if only the preliminary eligibility category were considered, 75% of permittees discharge to surface waters where at least 70% of the phosphorus loading comes from nonpoint source pollution such as agricultural runoff. Only 15% of the potentially eligible category discharge to a receiving water that is dominated by phosphorus loadings coming from point sources.”). At least 14,061 of Wisconsin’s 46,954 miles of assessed rivers do not meet Wisconsin’s phosphorus criteria and at least 413,766 acres of Wisconsin’s 1,078,748 acres of assessed lakes/impoundments do not meet Wisconsin’s phosphorus criteria. *See EPA Spreadsheets Extracting Information from Wisconsin Water Quality Report to Congress* and the 2016 Impaired Waters List, Full Impaired Waters List (Categories 4 and 5) that is attached to that report at pdf pages 155-178. The *Wisconsin Water Quality Report to Congress* is available at <http://dnr.wi.gov/topic/surfacewater/assessments.html>.

Reducing nonpoint source loadings of nutrients requires resources to fund and maintain nonpoint source controls and time to monitor the effects of the controls on water quality under a variety of conditions, and the potential for successfully achieving nonpoint source loading reductions necessary to achieve water quality criteria is greatly enhanced with regulatory authority. The CWA provides direct regulatory authority over point sources, but does not provide direct regulatory authority to control nonpoint sources.

Although nonpoint sources are the primary source of phosphorus pollution in Wisconsin, the owners of approximately 425 municipal treatment plants and 167 industrial treatment facilities throughout Wisconsin could be required to spend significant amounts of money constructing and operating additional wastewater treatment facilities to comply with water quality based effluent limitations for phosphorus reflecting Wisconsin’s phosphorus criteria. *See Economic Impact Analysis (April 24, 2015) (“2015 Economic Impact Analysis”)* at pp. 1-2. As described above, approximately 75% of these permittees discharge to surface waters where at least 70% of the phosphorus loading comes from nonpoint source pollution; 10% of permittees discharge to a nonpoint source dominated watershed, but the nonpoint contribution is less than 70% of the total phosphorus load; and only 15% of permittees discharge to surface waters that are dominated by point source loadings. *Justification* at p. 8.

Wisconsin’s approach to achieving phosphorus criteria has always recognized the importance of addressing both point source and nonpoint source contributions of phosphorus to Wisconsin’s surface waters. In the NPDES implementation rules adopted with the phosphorus criteria in 2010, Wisconsin created an option, called “adaptive management,” to allow point sources to pursue reductions in nonpoint source loads as an alternative to achieving compliance through construction of end-of-pipe treatment. *See* NR 217.18. The adaptive management approach provides time (up to two permit terms) for point sources to identify nonpoint source partners that can reduce phosphorus loads, resulting in overall water quality improvements on a wider scale, while also reducing overall compliance costs. NR 217.18 requires that each permit that includes adaptive management provisions also include a final effluent limit based on the conditions prevalent at the time the initial permit is issued (not reflecting the anticipated effect of upstream

nonpoint source reductions on the ambient total phosphorus concentration) that can only be changed through a permit modification and a requirement that the point source commit to funding all nonpoint source controls. Wisconsin's rules also include an option, called "trading," that provides point sources flexibility to acquire pollutant reductions from other sources in the watershed to offset their point source load so that they will comply with their own permit requirements.

However,

[a]lthough these compliance options may be effective for some point sources, barriers prohibit implementation of one or more of these compliance options to be effective for all point sources especially when they rely on involvement and interaction with nonpoint sources. Some point sources have limited areas in which to trade with other point or nonpoint sources or they are not eligible for adaptive management given their location in the watershed. Other point sources are limited by the uncertainty associated with the technical and economic analyses of compliance measures that may be required and/or lack of willing partners to help implement compliance projects.

Final Determination at p. 7. Given these impediments, as of February 1, 2017, only seventeen point source dischargers in the entire state of Wisconsin had formally selected adaptive management or water quality trading as their preferred phosphorus compliance option since WDNR adopted its adaptive management and phosphorus water quality trading regulations on December 1, 2010. See <http://dnr.wi.gov/topic/SurfaceWater/AmWqtMap.html>.

Wisconsin has also developed a robust nonpoint source control regulatory program under Wis. Stat. § 281.16, to compel landowners, and owners and operators engaged in a wide number of agricultural and nonagricultural activities, to implement measures to reduce pollutant loadings into waterbodies. Specifically, Wis. Stat. § 281.16(2) and (3) required WDNR to adopt regulations that "prescribe performance standards for nonpoint sources that are not agricultural facilities or agricultural practices" and "prescribe[] performance standards and prohibitions for agricultural facilities and agricultural practices that are nonpoint sources." The performance standards and prohibitions under Wis. Stat. § 281.16(2) and (3) were required to "be designed to achieve water quality standards by limiting nonpoint source water pollution." WDNR adopted the required performance standards and prohibitions at NR 151 in 2002 and 2010.

A key component of NR 151 is the "Phosphorus index performance standard" at NR 151.04. The phosphorus index is a numeric "agricultural land management planning tool for assessing the potential of a cropped or grazed field to contribute phosphorus to the surface water." NR 151.015(15s). The phosphorus index "estimates how well phosphorus is kept in the field," using "general cropping, soil test and long-term weather information to estimate a field's annual phosphorus runoff to nearby surface waters." <http://wiconsumercomplaints.wi.gov/uploads/Farms/pdf/NMTrainingWWhatIsPIndex.pdf>. The higher the phosphorus index "the greater the potential for that field to contribute phosphorus to nearby lakes and streams." *Id.* NR 151.04 provides that

Croplands, pastures, and winter grazing areas shall average a phosphorus index of 6 or less over the accounting period and may not exceed a phosphorus index of 12 in any individual year within the accounting period.

NR 151.09(3)(d) requires that landowners and operators of new cropland immediately comply with cropland performance standards, including the phosphorus index performance standard. Landowners and operators of existing cropland that are already complying with the cropland performance standards are required to maintain compliance with those performance standards. Landowners and operators of existing croplands that are not complying with the cropland performance standards, including the phosphorus index performance standard, are only required to bring their existing croplands into compliance if either the state or a municipal government notifies the landowner that the governmental entity will provide "cost share" to fund a significant portion of the costs of measures necessary to enable the landowner to come into compliance with the performance standards. Wis. Stat. § 281.16(3)(e). If the state or a municipality notifies an existing landowner that cost share will be provided, then the existing landowner is required to implement best management practices and corrective measures necessary to meet the performance standard within three years, unless reasons beyond the control of a landowner or operator warrant a four-year compliance period. NR 151.09(5)(b). The landowner is required to implement those practices and measures, even if the cost-share amount provided by the state or municipality only funds 70% of the costs that are necessary to achieve compliance with the performance standard. Finally, NR 151.09(3)(b) provides

If any cropland is meeting a cropland performance standard on or after the effective date of the standard [whether or not compliance has been achieved due to cost share], the cropland performance standard shall continue to be met by the existing landowner or operator, heirs or subsequent owners or operators of the cropland.

2. Wisconsin's Multi-Discharger Variance for Phosphorus Statute

In light of the facts that: (1) the costs to point sources of treating point source discharges down to levels necessary to comply with stringent phosphorus water quality based effluent limitations could be significant and in most instances would not result in attainment of criteria absent a significant reduction in nonpoint source loadings, (2) there is limited regulatory authority to compel nonpoint loading reductions in any enforceable, legally binding way, and the authority that exists under state law is dependent on adequate funding of the state's nonpoint source cost share program, and (3) the adaptive management and trading approaches allowed under Wisconsin law did not appear to be succeeding in securing the types of commitments necessary to meaningfully reduce nonpoint source loadings, Wisconsin enacted Wis. Stat. § 283.16 (2013-2014) in 2013 pertaining to state adoption of a MDV for phosphorus.

Wis. Stat. § 283.16(2) sets forth state requirements that the Wisconsin Department of Administration (WDOA) and WDNR were required to follow in adopting the MDV under state law. One of the state statutory conditions that needed to be met under Wis. Stat. § 283.16(2)(em) before the MDV could be adopted under state law was that WDOA was required to make a "determination" that "attaining the WQS for phosphorus through compliance with water quality

based effluent limitations by point sources that cannot achieve compliance without major facility upgrades is not feasible.” The statute provides that, if the conditions specified in Wis. Stat. § 283.16(2) were met, WDNR “shall seek approval under 40 CFR Part 131 from the federal environmental protection agency for the variance under this section.” Wis. Stat. § 283.16(2)(em). The MDV is not available to permittees under state law until it is approved by EPA. Wis. Stat. § 283.16(4)(a) (permittees are not eligible for the coverage under the MDV until the state-required determination and “approval of the variance under this section by the federal environmental protection agency are in effect”).

Wis. Stat. § 283.16(2m) and (3) set forth state requirements that WDOA and WDNR are required to follow in considering whether the MDV should be modified and/or renewed, assuming the MDV was originally adopted and approved by EPA. Specifically, Wis. Stat. § 283.16(2m) requires WDNR to consider, as part of Wisconsin’s triennial review process under Section 303(c)(1) of the CWA, whether WDOA’s original determination in support of the original MDV under Wis. Stat. § 283.16(2)(em) should be reviewed by WDOA. If WDNR determines that WDOA’s determination should be reviewed, and within 10 years of EPA approval of the MDV whether or not WDNR determines that WDOA’s determination should be reviewed, Wis. Stat. § 283.16(3) requires WDOA to follow certain procedures and prepare a report as to whether its original determination remains accurate. If WDOA decides after following the required state procedures that the original determination remains accurate, Wis. Stat. § 283.16(3)(g) provides that WDNR “shall seek approval from the federal environmental protection agency under 40 CFR 131.21 for renewal of the variance under this section.”

On March 1, 2016, Wisconsin enacted 2015 Wis. Act 205, which amended Wisconsin’s Administrative Procedure and Review law at Wis. Stat. § 227.01(13)(yt) to clarify that the rulemaking requirements under Wisconsin’s Administrative Procedure and Review law do not apply with respect to any WDOA or WDNR action or inaction which

Relates to implementing, interpreting, or administering s. 283.16, including determining social and economic impacts of compliance with phosphorus effluent limitations, establishing application and eligibility requirements for obtaining a variance, and providing guidance to the public.

2015 Wis. Act. 205 also amended Wis. Stat. § 283.16(9) to provide that “[n]otwithstanding any of the provisions of [the MDV statute], the [WDNR] shall comply with the provision of 40 CFR 131.14 when approving and implementing a variance under [the MDV statute].”

The statute, as amended, includes a number of terms and conditions that would be included in the MDV, assuming the statutory preconditions necessary under state law to allow WDNR to proceed with finalizing and submitting the MDV to EPA were met. Those terms and conditions are summarized in Section I.B.6 of this document.

3. WDOA’s Determination

On December 29, 2015, WDOA made the determination specified in Wis. Stat. § 283.16(2)(em): that “attaining the water quality standard for phosphorus through compliance with water quality

based effluent limitations by point sources that cannot achieve compliance without major facility upgrades is not feasible.” WDOA specified in the determination that the MDV is only applicable for point source dischargers that fall within eight statewide categories of discharges: municipal lagoons, municipal wastewater treatment facilities (WWTFs), paper, aquaculture, cheese, food processors, non-contact cooling water (NCCW), and other industrial dischargers of process wastewater. WDOA further specified that the determination does not apply with respect to any dischargers within the statewide categories unless certain specific numeric “primary screeners” and “secondary screeners are met, based on site and discharger-specific data that are available at the time when specific dischargers seek coverage under the MDV. These WDOA-established “eligibility criteria” are summarized in Section I.B.6 of this document.

4. WDNR’s Multi-Discharger Variance Justification, Implementation Guidance and Checklist

WDNR developed three documents -- entitled *Multi-discharger Variance Justification (Justification)*, *Multi-Discharger Variance Implementation Guidance (Implementation Guidance)* and *Checklist to Evaluate MDV Applications (Checklist)* (all three of these documents are available at <http://dnr.wi.gov/topic/surfaceWater/phosphorus/statewideVariance.html>) – in the course of developing the MDV. Among other things, the documents clarify how WDNR interprets and will implement the MDV statute and the *Final Determination* in the following respects:

- The term of the MDV is 10 years following EPA’s approval of the MDV. *See Justification* at p. 14 (“Presuming EPA approves the 10 year MDV term, the Department recognizes that the MDV will terminate at the end of the approved 10 year period, unless the Department submits and receives approval for an extension.”); and
- Permittees that choose to implement watershed plans either directly or in collaboration with third parties under Wis. Stat. § 283.16(6)(b)(2) or (3) will be required as a condition of their permits to achieve specified offset load reductions on an annual basis starting from the first year of the first permit that is issued to the permittee incorporating the MDV. *See Implementation Guidance* at pp. 31-32, 49, and 56-57.

5. WDNR’s Finalization of the MDV

On March 29, 2016, WDNR finalized the MDV and submitted it to EPA for review and approval under Section 303(c) of the CWA, 33 U.S.C. § 1313(c). WDNR specified in its submission that the term of the MDV is 10 years following EPA’s approval of the MDV. *See Justification* at p. 14.

6. The MDV’s Terms and Conditions

- a. Citations to specific statutory, regulatory and other provisions that comprise the MDV’s terms and conditions**

As explained on page 1 of the March 22, 2016, certification statement from WDNR's Chief Legal Counsel, "[t]he substantive requirements of the phosphorus MDV are established by [the MDV statute, *Determination, Justification, Implementation Guidance and Checklist*]." Specifically, for the reasons set forth in Section II of this document, EPA is approving the following:

The following sections in Wis. Stat. § 283.16, as amended by 2015 Wis. Act 205: Wis. Stat. §§ 283.16(1) (definitions); 283.16(3m) and 4(d) (highest attainable condition review); 283.16(4)(a)(1)-(3) (statutory eligibility criteria); 283.16(6) (statutory variance provisions); 283.16(7) (more stringent effluent limitations); 283.16(8) and 8(m) (payments to counties and projects and plans); and 283.16(9) (federal requirements).

Technology based effluent limitations for phosphorus established under Wis. Stat. § 283.11(3)(am) in NR 217.04 (which are referenced in the MDV statute at Wis. Stat. § 283.16(6)(am)).

Cost share requirements applicable to municipalities under Wis. Stat. § 281.16(3)(e) and (4) (which are referenced in the MDV statute at Wis. Stat. § 283.16(8)(b)); and, for entities that construct a project or implement a plan to reduce nonpoint sources of phosphorus in accordance with Wis. Stat. § 283.16(6)(b)(2) or (3), the nonpoint source performance standards and prohibitions in NR 151 prescribed under Wis. Stat. § 281.16(2) and (3) (which are referenced in the MDV statute at Wis. Stat. § 283.16(8m)).

Section 5 of the *Final Determination* and Appendix I to the *Final Determination*, which set forth the categories of facilities potentially eligible for the variance and the determination economic impact eligibility criteria for the variance.

WDNR's representation on page 14 of the *Justification* that the term of the MDV is 10 years following the date of EPA approval ("Presuming EPA approves the 10 year MDV term, the Department recognizes that the MDV will terminate at the end of the approved 10 year period, unless the Department submits and receives approval for an extension.").

The aspects of pages 31-32, 49, and 56-57 of the *Implementation Guidance* clarifying that permittees that choose to implement watershed plans either directly or in collaboration with third parties under Wis. Stat. § 283.16(6)(b)(2) or (3) will be required as a condition of their NPDES permits to achieve specified offset load reductions on an annual basis.

b. Summary of the substance of the MDV's terms and conditions

The aspects of the MDV statute and other statutes, *Final Determination, Justification and Implementation Guidance* specified above establish the following specific terms and conditions of the MDV:

- In accordance with Wis. Stat. § 283.16(4)(a), only existing sources are eligible for coverage under the MDV, and an existing source is only eligible for coverage under the MDV if it meets the following requirements, which are referred to collectively in the remainder of this document as “statutory eligibility criteria”:
 - WDOA’s determination applies to the existing source (including the WDOA-established requirements that are referred to collectively in the remainder of this document as “determination economic impact eligibility criteria” that are summarized below);
 - The permittee certifies that the existing source cannot achieve compliance with the water quality based effluent limitations for phosphorus without a “major facility upgrade” (defined in Wis. Stat. § 283.16(1)(e) as “the addition of new treatment equipment and a new treatment process”); and
 - The permittee agrees to:
 - Comply with the most stringent interim effluent limitation that can be achieved without a major facility upgrade (i.e., without the addition of new treatment equipment and a new treatment process). Generally, these limits would be a monthly average of 0.8 milligrams per liter for the first permit issued to a permittee under the MDV and 0.6 mg/L for the second permit issued, although the limits can be less stringent if the permittee certifies that it cannot comply with these limits without a major facility upgrade (in which case the limit must reflect the most stringent achievable interim limit) or, in accordance with Wis. Stat. § 283.16(7), WDNR can include more stringent limits to reflect the “highest attainable condition” (HAC) as determined by WDNR. In any event, the interim limits can be no less stringent than limits established under Wis. Stat. § 283.11. Wis. Stat. § 283.16(6)(am). The limits established under Wis. Stat. § 283.11 are 1.0 mg/L of total phosphorus as a monthly average for dischargers except for publicly owned treatment works (POTWs) that discharge 60 pounds or less of phosphorus per month and privately owned domestic sewage works that discharge 150 pounds or less of phosphorus per month. *See* NR 217.04(1)(a); and
 - Implement or fund measures on an annual basis (starting in the first year that a permit is issued to a permittee reflecting the MDV) to reduce phosphorus loadings from other sources within the permittee’s basin using one of the following three options specified at Wis. Stat. § 283.16(6)(b):
 1. Enter into an agreement with WDNR to implement a plan or project to actually reduce phosphorus loadings from other sources in the HUC 8 basin in an amount equal to the difference between what the permittee actually discharges each year and the amount of phosphorus that the permittee would have discharged in each year in question if it would have discharged at a phosphorus target concentration value of 0.2 mg/L unless a TMDL was approved by EPA on or before

April 25, 2014, in which case the target phosphorus value would be based on the wasteload allocation for the permittee in the TMDL;

2. Enter into an agreement that is approved by WDNR with a third party to implement a plan or project to actually reduce phosphorus loadings from other sources in the hydrologic unit code (HUC) 8 basin in an amount equal to the difference between what the permittee actually discharges each year and what the permittee would have discharged in each year in question if it would have discharged at a phosphorus target concentration value of either 0.2 mg/L or a target value based on a wasteload allocation in a TMDL that was approved by EPA on or before April 25, 2014; or
3. Make annual payments to counties in the same HUC 8 basin of \$50 per pound of phosphorus that the permittee actually discharges each year in excess of the amount the permittee would have discharged in each year in question if it had discharged at a phosphorus target concentration of either 0.2 mg/L or a target value based on a wasteload allocation in a TMDL that was approved by EPA on or before April 25, 2014. Payments are capped for any one point source at \$640,000 per year.

- Counties receiving payments under the variance must use them to provide cost share (and staffing) for projects to reduce phosphorus entering waters of the state from nonpoint sources. Counties must use at least 65% of the payments for cost-share practices in accordance with the requirements of Wis. Stat. § 281.16(3)(e) or (4) with a maximum of 35% of payments for staffing. Wis. Stat. § 283.16(8)(b).
 - Counties must develop a plan by March 1 describing how they are going to use the payments they received in the previous year and submit a report by May 1 of the following year describing the projects they implemented and the amount of phosphorus reduced. Wis. Stat. § 283.16(8)(b)(2m).
- With regard to permittees that choose to implement watershed plans either directly or in collaboration with third parties under Wis. Stat. § 283.16(6)(b)(2) or (3), such permittees will be required as a condition of their permits to achieve the specified offset load reductions on an annual basis starting from the first year of the first permit that is issued to the permittee under the MDV. *See Implementation Guidance* at pp. 31-32, 49, 56-57.

Persons who construct projects or implement plans as a result of a permittee choosing to implement plans or projects either directly or in collaboration with third parties under Wis. Stat. § 283.16(6)(b)(2) or (3) are required to comply with the nonpoint source performance standards and prohibitions prescribed under

Wis. Stat. § 281.16(2) and (3): i.e., the nonpoint source performance standards and prohibitions in NR 151. Wis. Stat. § 283.16(8m)(b).

- With regard to the “determination economic impact eligibility criteria,” Section 5 of WDOA’s *Final Determination* specifies the process whereby an individual permittee seeking coverage under the MDV must document that the *Final Determination* applies to an existing permittee. The basic process consists of presenting facility-specific data for a suite of primary and secondary indicators of significant economic impact and scoring the results to assess the severity of the economic impacts expected to result if the permittee were to be required to comply with its water quality based effluent limitation for total phosphorus through the construction and operation of additional treatment to remove phosphorus to the concentration specified in the water quality based effluent limitations. The specific indicators vary depending on whether the permittee seeking coverage is a publicly-owned wastewater treatment plant or a privately owned facility. Except as noted below, the indicators will be based on the most current information available at the time that a permittee seeks coverage under the MDV. The table below summarizes the determination economic impact eligibility criteria and how they are used to assess eligibility of individual permittees for the MDV.

Applicable Category	Primary Screener	Secondary Scoring
Municipal	Municipal Preliminary Screener Value calculated in accordance with EPA’s <i>Interim Economic Guidance for Water Quality Standards (Interim Economic Guidance)</i> of 1-2%	A secondary score of at least 3 to qualify
	Municipal Screener Value of at least 2%	A secondary score of at least 2 to qualify
All Industrial Categories	Compliance costs must exceed the specific cost threshold specified in Table 13 of Appendix I of the <i>Determination</i> for the permittee’s industrial category (the cost threshold was set at approximately the 25%-tile for costs for all dischargers in that category at the time of the <i>Determination</i>);	If both are met, a secondary score of at least 2 is needed to qualify; If only one met, a secondary score of at least 3 is needed to qualify. If neither primary screener is met, the facility is not eligible for the MDV.
	and/or Permittee must be located in a county specified in Table 14 of the <i>Determination</i> as being within the top 75% of counties incurring costs for that category at the time of the <i>Determination</i> .	

The following table summarizes the secondary scoring.

Municipal & Industrial	County Personal Current Transfer Receipts Share of Total Income > National average based on the most-current published figures from the U.S. Commerce Department's Bureau of Economic Analysis that are available at the time a permittee requests that WDNR approve an application seeking coverage under the MDV	Score=1
	County Jobs per Square Mile < Wisconsin average based on the most-current published figures from the Wisconsin Department of Workforce Development's Quarterly Census of Employment and Wages (numerator) and the U.S. Census Bureau's Quick Facts (denominator) that are available at the time a permittee requests that WDNR approve an application seeking coverage under the MDV	Score=1
	10-year County Population Change rate < ½ National average rate based on the most-current published figures from Wisconsin's WDOA Demographic Services Center and the U.S. Census Bureau's July 1 population estimates that are available at the time a permittee requests that WDNR approve an application seeking coverage under the MDV	Score=1
	10-year County Change in Net Earnings < National rate based on the most-current published figures for the U.S. Bureau of Economic Analysis that are available at the time a permittee requests that WDNR approve an application seeking coverage under the MDV	Score=2
	10-year County Employment Change Rate < ½ National rate based on the most-current figures published from the U.S. Bureau of Economic Analysis that are available at the time a permittee requests that WDNR approve an application seeking coverage under the MDV	Score=1
All Industrial Categories	County MHI < National MHI based on the most-current published figures from the Census Bureau's American Community Survey that are available at the time a permittee requests that WDNR approve an application seeking coverage under the MDV	Score=1
Cheese Manufacturing, Food Processing, Aquaculture, and Paper	Capital Cost as a % of County Payroll > 1% based on the most-current published figures from the Census Bureau's County Business Patterns regarding total wages that are available at the time a permittee	Score=2

	requests that WDNR approve an application seeking coverage under the MDV	
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- In accordance with Wis. Stat. § 283.16(3m), as amended by 2015 Wis. Act 205, WDNR is required, as part of the review required by 40 CFR 131.14(b)(1)(v), to review every five years the 0.8 and 0.6 milligram per liter phosphorus effluent limitations set forth in the statute and described above, as well as any other effluent limitations in effect for phosphorus, to determine whether they are consistent with the HAC for the point sources and categories of point sources that are eligible for the MDV. WDNR is required to submit the results of its review to EPA. If WDNR fails to conduct the required review or fails to submit the results to EPA, then the MDV that was approved would cease to be available until WDNR completes the review and submits it to EPA.
- As set forth on page 14 of the *Justification*, the term of the MDV is 10 years after the date of EPA approval of the MDV.

7. Wisconsin’s provisions for state adoption, review, renewal and submission to EPA for review and approval of the MDV

The following are provisions from Wis. Stat. § 227.01 and Wis. Stat. § 283.16, as amended by 2015 Wis. Act 205, that pertain to the state’s process for adoption, review and renewal of the MDV: Wis. Stat. § 227.01(13)(yt) (providing that the rulemaking requirements under Wisconsin’s Administrative Procedure and Review law do not apply with respect to any WDOA or WDNR action or inaction relating to implementing, interpreting, or administering Wisconsin’s MDV statute); Wis. Stat. § 283.16(2) (state requirements for the state’s initial adoption of the MDV); Wis. Stat. § 283.16(2m) (state requirements pertaining to WDNR review during Wisconsin’s triennial WQS review of WDOA’s original determination in support of the original MDV); Wis. Stat. § 283.16(3) (state requirements pertaining to renewal of the MDV and submission to EPA for approval in accordance with 40 CFR 131.21); Wis. Stat. § 283.16(4)(a) (MDV not available to permittees unless EPA approval of the MDV is “in effect”); and Wis. Stat. § 283.16(9) (requiring WDNR to “comply with the provisions of 40 CFR 131.14 when approving and implementing a variance under [the MDV statute]”). For the reasons set forth in Section III of this document, EPA is approving these provisions.

8. Wisconsin’s provisions pertaining to NPDES permitting and other matters that are not new or revised water quality standards

Wis. Stat. § 283.16(4)(am), (b) & (e) set forth state procedural provisions governing preliminary steps and actions that must be taken by permittees and WDNR in advance of the state’s NPDES permitting process as they are implementing the MDV. Wis. Stat. § 283.16(4)(c) & (f) govern when NPDES water quality based effluent limitations and compliance schedules are effective and permittees’ compliance obligations following WDNR’s completion of administrative actions pertaining to phosphorus effluent limitations. For the reasons set forth in Section IV of this document, EPA is not taking action under Section 303(c) of the CWA to approve or disapprove these provisions because they are not new or revised WQS.

C. Documents included in the submittal

WDNR listed in its March 29, 2016, letter, all of the documents that it was submitting in support of its request for EPA approval of the MDV. On March 31, 2016, WDNR posted its March 29, 2016, letter and Wisconsin's supporting documents at <http://dnr.wi.gov/topic/surfaceWater/phosphorus/statewideVariance.html>.

II. EPA's Review of the MDV

Section 303 of the CWA requires states to adopt WQS for waters of the United States within their respective jurisdictions. Section 303(c) of the CWA requires, among other things, that state WQS include the designated use or uses to be made of the waters and water quality criteria based upon such uses. EPA has also long recognized that, where a state satisfies all of the requirements in 40 CFR Part 131 for removing designated uses (or subcategories of uses), including demonstrating that it is not feasible to attain the designated use for one of the reasons specified at 40 CFR 131.10(g), EPA could also approve a state decision to limit the applicability of the use removal to specific dischargers, while continuing to apply the previous use designation and criteria to other dischargers and for other CWA purposes.

On August 21, 2015, EPA revised its water quality standards regulations at 40 CFR Part 131 to explicitly provide a federal regulatory framework for adoption of water quality standards variances. Specifically, the revisions define a "water quality standards variance" "as "a time-limited designated use and criterion for a specific pollutant(s) or water quality parameter(s) that reflect the highest attainable condition during the term of the WQS variance" (40 CFR 131.3(o)); and set forth requirements governing variances at 40 CFR 131.14. EPA's regulations at 131.14(b)(1)(ii)(A) provides that for discharger specific variances, the state can define the WQS variance in terms of the highest attainable interim criterion or interim effluent condition. EPA explained its basis in the preamble to the final rule:

For a discharger(s)-specific WQS variance, the rule allows states and authorized tribes to express the highest attainable condition as an interim criterion without specifying the designated use it supports. EPA received comments suggesting that identifying both an interim use and interim criterion for a WQS variance is unnecessary. EPA agrees that the level of protection afforded by meeting the highest attainable criterion in the immediate area of the discharge(s) results in the highest attainable interim use at that location. Therefore, the highest attainable interim criterion is a reasonable surrogate for both the highest attainable interim use and interim criterion when the WQS variance applies to a specific discharger(s).

80 Fed. Reg. 51020, 51037 (August 21, 2015). Similarly, EPA explained that "[a]dopting a numeric effluent condition that reflects the highest attainable condition is reasonable because the resulting instream concentration reflects the highest attainable interim use and interim criterion and, therefore, the interim numeric effluent condition is acting as a surrogate for the interim use and interim criterion. 78 Fed. Reg. 54518, 54534 (September 4, 2013); *see also* 80 Fed. Reg. 51020, 51037.

40 CFR 131.21 requires EPA to review and approve or disapprove state-adopted WQS. In making this decision, EPA must consider relevant requirements specified at 40 CFR 131.5(a), 131.6 and part 132, where appropriate. EPA must consider the requirements of 40 CFR 131.14 pertaining to variances in accordance with 40 CFR 131.5(a)(4) when deciding whether to approve or disapprove state-adopted variances.

A. 40 CFR 131.5(a)(1)-(3), (5)-(7), 40 CFR 131.6(a), (c), (d) and (f) and 40 CFR part 132 are not relevant to EPA's review of Wisconsin's MDV

40 CFR 131.5(a)(1)-(3), (5)-(7), and 40 CFR 131.6(a), (c), (d) and (f) are not relevant in considering whether to approve the MDV because the MDV only grants a variance applicable to point sources; it does not remove the underlying designated water uses, criteria, antidegradation policies, antidegradation implementation procedures or compliance schedule provisions within Wisconsin's WQS. 40 CFR part 132 is not relevant in considering whether to approve the MDV. This is because phosphorus is a pollutant set forth in Table 5 of part 132, and Great Lakes states are not required to comply with the variance procedures in Procedure 2, Appendix F to 40 CFR part 132 with respect to the discharge of any pollutant set forth in Table 5. *See* 40 CFR 132.4(e)(2).

B. Wisconsin's MDV is consistent with all relevant aspects of 40 CFR 131.5(a) and 131.6

1. The MDV is consistent with 40 CFR 131.14 (40 CFR 131.5(a)(4))

40 CFR 131.14 specifies requirements that states must meet to obtain EPA approval of variances to WQS. Specifically, 40 CFR 131.14(b)(1) sets forth six substantive elements that variances must include and 40 CFR 131.14(b)(2) sets forth two types of documentation that states must provide in support of any discharger-specific variance. As described below, the MDV meets all of the substantive elements of 40 CFR 131.14(b)(1) and both documentation requirements of 40 CFR 131.14(b)(2).

a. The MDV identifies the pollutant and the water bodies to which the MDV applies and the permittees subject to the MDV (40 CFR 131.14(b)(1)(i))

The MDV statute identifies phosphorus as the pollutant to which the variance applies. The MDV only applies with respect to existing permittees that fall within one of eight discharge categories identified in the *Final Determination*: municipal lagoons, municipal WWTFs, paper, aquaculture, cheese, food processors, NCCW, and other industrial dischargers of process wastewater. Table 6 (pp. 23- 24) of the *Justification* (attachment 3 in Wisconsin's submittal) identifies, on a county-by-county basis and category-by-category basis, the specific counties that currently have permittees in any of the eight categories. Consequently, the MDV identifies the pollutant (phosphorus) and the water bodies (those water bodies within the counties identified in Table 6 of the *Justification*) to which it potentially applies, and the permittees (all permittees within the counties identified in Table 6 of the *Justification* that fall within one of the eight classes of discharges potentially eligible for the MDV) potentially subject to the MDV, and so meets the requirements of 40 CFR 131.14(b)(1)(i). However, although the MDV potentially

applies with respect to all of these existing permittees and water bodies, specific permittees must still demonstrate that they satisfy the statutory eligibility criteria and determination economic impact eligibility criteria before any MDV-based effluent limitations can be included in their NPDES permits in lieu of a water quality based effluent limitation based on Wisconsin's unvaried numeric criteria for total phosphorus.

b. The MDV includes requirements that apply throughout the term of the MDV that represent the HAC of the water body or waterbody segment applicable throughout the term of the MDV (40 CFR 131.14(b)(1)(ii))

i. Requirements that apply throughout the term of the MDV

(1) Requirements applicable to point source dischargers

As described in Section I.B.6 of this document, starting from the first year of the first permit that is issued to a permittee that meets the statutory and determination economic impact eligibility criteria, permittees will be required to comply with two key requirements of the MDV during the 10-year term of the MDV:

- Permittees will be required to comply with the most stringent interim effluent limitation that can be achieved without a major facility upgrade (i.e., without the addition of new treatment equipment and a new treatment process). Generally, these limits would be a monthly average of 0.8 milligrams per liter for the first permit issued to a permittee under the MDV and 0.6 mg/L for the second permit, although the limits can be less stringent if the permittee certifies that it cannot comply with these limits without a major facility upgrade (in which case the limit must reflect the most stringent achievable interim limit) or, in accordance with Wis. Stat. § 283.16(7), WDNR can include more stringent limits to reflect the "highest attainable condition" (HAC) as determined by WDNR; and
- Permittees will be required to implement or fund measures to reduce phosphorus loadings from other sources within the permittee's basin using one of the following three options specified at Wis. Stat. § 283.16(6)(b), each of which will be included as specific, enforceable permit conditions:
 1. Make annual payments to counties in the same HUC 8 basin of \$50 per pound times the number of pounds of phosphorus their discharge exceeds the target value of 0.2 mg/L or a wasteload allocation in a TMDL that was approved by EPA on or before April 25, 2014. Payments are capped for any point source at \$640,000 per year;
 2. Enter into an agreement with WDNR to implement a plan or project designed to result in annual reductions of phosphorus from other sources in the HUC 8 basin in an amount equal to the difference between what they discharge and a target value of 0.2 mg/L or a wasteload allocation in a TMDL that was approved by EPA on or before April 25, 2014. Permittees that choose to implement plans or projects under this option will be required as a condition of their permits to achieve the specified offset load reductions on an annual basis; or

3. Enter into an agreement with a third party and approved by WDNR to implement a plan or project designed to result in annual reductions of phosphorus from other sources in the HUC 8 basin in an amount equal to the difference between what they discharge and the target value of 0.2 mg/L or a wasteload allocation in a TMDL that was approved by EPA on or before April 25, 2014. Permittees that choose to implement plans or projects in collaboration with third parties under this option will be required as a condition of their permits to achieve the specified offset load reductions on an annual basis.

These conditions will be reflected as conditions of permits requiring that, each year of the permit, permittees must make the required payments to counties for phosphorus discharges that occurred in the prior calendar year or ensure that the annual phosphorus loading reductions are achieved.

(2) Additional requirements

In addition to the requirements applicable to point source dischargers, the MDV includes the following requirements applicable to counties that receive payments from point sources under the MDV and to nonpoint sources that either receive cost share from counties or that implement measures to reduce phosphorus loadings in accordance with the MDV's "offset" requirements:

- Counties receiving payments under the MDV must use them to provide cost-sharing (and staffing) for projects to reduce phosphorus entering waters of the state from nonpoint sources. Counties must use at least 65% of the payments for cost-sharing practices with a maximum of 35% of payments for staffing. Wis. Stat. § 283.16(8)(b)(2).
- Counties must develop a plan for using the payments by March 1 of each year and submit a report to WDNR by May 1 of the following year describing the projects they implemented and the amount of phosphorus reduced. Wis. Stat. § 283.16(8)(b)(2m).
- Entities that construct a project or implement a plan under Wis. Stat. § 283.16(6)(b)(2) or (3) to reduce nonpoint source loadings of phosphorus are required to comply with the nonpoint source performance standards and prohibitions prescribed under Wis. Stat. § 281.16(2) and (3); i.e., the nonpoint source performance standards and prohibitions in NR 151. Wis. Stat. § 283.16(8m)(a). They also must submit an annual report to WDNR that quantifies in pounds the phosphorus loading reductions achieved during the previous year. Wis. Stat. § 283.16(8m)(b).

ii. The requirements that apply throughout the term of the variance reflect the HAC

40 CFR 131.14(b)(1)(ii) provides:

The State must specify the HAC of the water body or waterbody segment as a quantifiable expression that is one of the following:

- (A) For discharger(s)-specific WQS variances:

- (1) The highest attainable interim criterion; or
- (2) The interim effluent condition that reflects the greatest pollutant reduction achievable; or
- (3) If no additional feasible pollutant control technology can be identified, the interim criterion or interim effluent condition that reflects the greatest pollutant reduction achievable with the pollutant control technologies installed at the time the State adopts the WQS variance, and the adoption and implementation of a Pollutant Minimization Program.

As described below, the MDV satisfies the requirements of 40 CFR 131.14(b)(1)(ii)(A)(2).

(1) The MDV includes an interim effluent condition that is a quantifiable expression

The MDV includes a two-pronged “interim effluent condition” that is “a quantifiable expression” that “reflects the greatest pollutant reduction achievable” and, hence, that reflects “the HAC of the water bod[ies] or waterbody segment[s]” that will be impacted by the MDV. The first prong of the effluent condition is that dischargers who choose to be covered by the MDV are subject to a numeric effluent limitation that allows the discharger to continue to discharge without making a “major facility upgrade.” The second prong is that, in exchange for receiving an effluent limitation that does not require a “major facility upgrade,” dischargers must agree to implement (and have as a condition of their permits) measures that will reduce phosphorus loadings from other sources, measures the point source dischargers would not otherwise be required to implement. The availability of the numeric effluent limitations, therefore, serve as incentives for dischargers to agree to be legally bound to implement the nonpoint source loading reduction measures. Each prong of this two-pronged “interim effluent condition” is “quantifiable.” The numeric interim effluent limitation reflecting the level of control that the point source can achieve without a “major facility upgrade” is quantifiable, as are the legally binding obligations to implement measures to reduce phosphorus, which are based on a quantifiable, numeric calculation of either the specific number of pounds of phosphorus that must be controlled by other sources or the specific, numeric dollar amount that must be paid to a county for implementation of measures to reduce loadings of phosphorus from nonpoint sources.

(2) The MDV’s two-pronged interim effluent condition reflects the greatest phosphorus reduction achievable and the HAC of the waterbodies and water body segments impacted by the MDV

As described in Section II.B.1.g of this document, variances may be justified under 40 CFR 131.14(b)(2)(i)(A)(1) and 40 CFR 131.10(g)(6) where it would not be feasible for a discharger to install treatment equipment necessary to meet permit limits based on attaining water quality criteria. In these circumstances, it still might be feasible for the discharger to install treatment equipment at the discharger’s facility to reduce the discharger’s point source loadings of the pollutant into the water body, albeit not down to the level necessary to meet permit limits based on attaining water quality criteria. Where this is the case, a discharger-specific variance with an interim effluent condition reflecting the pollutant loading reductions that would be achieved following installation of any such feasible treatment equipment would be an adequate and

appropriate reflection of “the HAC of the water body” in accordance with 40 CFR 131.14(b)(1)(ii)(A)(2). As described below, and in a separate document that EPA developed in support of this decision entitled “*EPA Evaluation of Phosphorus Loading Reductions Likely to be Achieved Under Wisconsin MDV*” (“*Phosphorus Loading Reductions Evaluation Document*”), in most instances, the MDV’s innovative two-pronged effluent condition is expected to result in greater pollutant loading reductions in the ambient waterbody, and therefore result in attainment of an even higher condition, than would result if the MDV simply included a requirement that dischargers comply with effluent limitations reflecting installation and operation of feasible phosphorus treatment equipment to control point source discharges.

A number of variables must be considered in comparing the amount of phosphorus loading reductions that would likely be achieved under the MDV compared to the amount that would have been discharged had dischargers installed point source discharge treatment equipment. These variables include (1) whether the target value -- used for calculating the amount of money that a discharger must pay to a county or for calculating the amount of nonpoint source phosphorus loading reduction that the discharger must achieve as an offset by implementation of specific loading reduction measures -- is the 0.2 mg/L value specified in the MDV statute or whether the target value is based on a wasteload allocation in a TMDL approved on or before April 25, 2014; (2) the phosphorus amounts that a discharger actually discharges from its point source; (3) the phosphorus amounts that would have been discharged if the discharger had installed treatment equipment to reduce phosphorus rather than implemented the measures required by the MDV; (4) the amount of time it would take for the discharger to achieve its phosphorus limits by installing treatment equipment to reduce phosphorus; (5) the costs and effectiveness of the nonpoint source load reduction measures that are implemented when a county uses funds generated under the MDV on cost share; (6) in county-payment situations, whether a discharger’s payment amounts might reach the MDV’s statutory cap of \$640,000 per year; and (7) the amount of funding farmers provide to implement BMPs to reduce phosphorus loading to surface waters. As explained in the *Phosphorus Loading Reductions Evaluation Document*, after considering each of these variables, EPA has determined the following:

1. In all instances where the target value is based on a wasteload allocation in a TMDL that was approved by EPA on or before April 25, 2014, the MDV is expected to result in more phosphorus load reductions than would result from a discharger complying with effluent limitations reflecting installation and operation of feasible phosphorus treatment equipment to control the discharger’s point source discharge, *see Phosphorus Loading Reductions Evaluation Document* at pp. 34-39. This will be true even in the rare instances where a discharger who meets the statutory and determination eligibility criteria chooses the county payment option and reaches the \$640,000 cap. *Id.* at pp. 41-75.
2. With one possible exception described below, in all instances where the target value is 0.2 mg/L, the MDV is expected to result in more phosphorus load reductions than would result from a discharger complying with effluent limitations reflecting installation and operation of feasible phosphorus treatment equipment to control the discharger’s point source discharge, *see id.* at pp. 3-35. This will be true even in the rare instances where a discharger who meets the statutory and determination

eligibility criteria chooses the county payment option and reaches the \$640,000 cap. *Id.* at pp. 41-75.

3. The only possible exception would be instances where a discharger meets the statutory and determination eligibility criteria and currently discharges low concentrations of phosphorus. In these instances, the difference between the amount of phosphorus that the discharger actually discharges and what it would have discharged had it discharged at the target value of 0.2 mg/L would be relatively small and so the amount of offset that would be required or money that the discharger would need to pay to the county would also be relatively small. *Id.* at pp. 31-33.
 - i. However, it appears that only a limited number of dischargers in Wisconsin are currently discharging at these low phosphorus concentrations, *id.* at pp. 76-85, and it is unclear whether any of these dischargers would meet the statutory and determination eligibility criteria. In particular, dischargers that are discharging phosphorus at levels substantially below the 1.0 mg/L level that WDOA assumed when it developed compliance cost estimates that informed the determination eligibility criteria will likely face substantially lower compliance costs than WDOA assumed in making the *Final Determination*, making it less likely that these dischargers will meet the statutory and determination eligibility criteria. *Id.* at pp. 82-85.
 - ii. Moreover in light of the likelihood that the nonpoint source loading reductions from other MDV participants that discharge at higher phosphorus concentrations will be greater than what would have been achieved solely from point source controls, it is likely that the MDV's two-pronged approach will provide greater phosphorus load reduction on a statewide basis than would occur if dischargers covered by the MDV only had to meet point source effluent limitations reflecting installation of feasible treatment equipment, even if there are some specific low-phosphorus concentration dischargers that might not alone achieve such a result. This is especially likely in light of the fact that the defining characteristic of these dischargers is that they discharge low concentrations of phosphorus, meaning that the environmental impact of these dischargers is much less than comparably-sized facilities discharging at higher concentrations of phosphorus. In addition, the majority of these dischargers (38 out of a total of 51) are "minor" dischargers, discharging less than 1 million gallons per day of effluent. *Id.* at pp. 79-82.

Based on the information presented above and in the *Phosphorus Loading Reductions Evaluation Document*, EPA concludes that Wisconsin's MDV satisfies 40 CFR 131.14(b)(1)(ii)(A)(2). The MDV includes legally binding, quantifiable obligations to implement measures to reduce nonpoint source loadings for phosphorus. These measures will likely result in greater pollutant loading reductions than if the MDV simply required point source discharges to comply with

interim effluent limitations reflecting installation of feasible treatment equipment. In light of the requirements in Wisconsin's MDV, it is appropriate to use as the benchmark for evaluating whether the MDV satisfies 40 CFR 131.14(b)(1)(ii)(A)(2) the condition of the water body or waterbody segment that would be achieved if the MDV included an interim effluent condition that reflects the effluent quality that would be achieved through installation of all feasible treatment equipment to reduce pollutants from a point source discharge. In other words, Wisconsin's MDV satisfies 40 CFR 131.14(b)(1)(ii)(A)(2) as long as the loading reductions that will be achieved from the interim effluent condition are equal to or greater than the reductions that would be achieved as a result of installation and operation of feasible point source control treatment equipment.

EPA has stated that multiple discharger variances should be developed so that "[a] permittee that could not qualify for an individual WQS variance should not qualify for a multiple discharger variance." *Discharger-specific Variances on a Broader Scale: Developing Credible Rationales for Variances that Apply to Multiple Dischargers*, EPA-820-F-13-012, March 2013, at p. 5; see also 80 Fed. Reg. 51020, 51040 (August 21, 2015). However, given the likelihood that, for the large majority of dischargers covered by the MDV, the MDV will likely result in greater phosphorus loading reductions than would have occurred if those dischargers had instead installed feasible treatment technology to reduce phosphorus in their point source discharges, and that there is a critical need in Wisconsin to achieve reductions in nonpoint source loadings of phosphorus in order for the large number of waters that are not achieving phosphorus criteria to be restored, EPA has determined that it is reasonable and appropriate to conclude that the MDV satisfies the HAC requirements of 40 CFR 131.14(b)(1)(ii)(A)(2). EPA's determination is also consistent with the objectives, national goals and national policies set forth in Sections 101(a), 101(a)(2) and 101(a)(7) of the CWA. As described below in Sections II.B.1.c, EPA expects WDNR's HAC re-evaluation to evaluate whether the MDV's requirements are in fact achieving significant nonpoint source phosphorus loading reductions greater than would be expected to be achieved by dischargers installing additional point source treatment equipment. In addition, as described below in Section II.B.1.g.iii, these issues will also need to be considered if Wisconsin seeks EPA approval of a renewal of the MDV after the current MDV expires in 10 years.

- c. The MDV includes a statement providing that the requirements of the MDV are either the HAC identified at the time of the adoption of the MDV or the HAC later identified during any reevaluation (40 CFR 131.14(b)(1)(iii))**

40 CFR 131.14(b)(1)(iii) provides that variances must include

A statement providing that the requirements of the WQS variance are either the highest attainable condition identified at the time of the adoption of the WQS variance, or the highest attainable condition later identified during any reevaluation consistent with paragraph (b)(1)(v) of this section, whichever is more stringent.

The MDV satisfies the first part of this requirement because, as described in Section II.B.1.b of this document, the MDV's requirements that the permittee achieve compliance with the most stringent limitations attainable without a major facility and annually implement measures

intended to reduce phosphorus loadings into water bodies from other sources represent the HAC at the time that the MDV was adopted.

With regard to the second part of this requirement, following WDNR's December 9, 2015, public hearing and October 23 – December 16, 2015, public comment period on the proposed MDV, the Wisconsin General Assembly enacted 2015 Wis. Act. 205, which amended the MDV statute in several ways, including amendments to address the HAC requirements of 40 CFR 131.14; requirements that were the subject of several public comments. Specifically, 2015 Wis. Act. 205 amended Wis. Stat. § 283.16(3m) to provide:

HIGHEST ATTAINABLE CONDITION REVIEW. (a) Every 5 years after the variance under this section is approved by the federal environmental protection agency, the department shall, as part of the review required by 40 CFR 131.14(b)(1)(v), review the interim effluent limitations under sub. (6)(a), or any other effluent limitations that are in effect as a result of a previous review under this subsection or sub. (3), and determine whether they are consistent with the highest attainable condition for the point sources and categories of point sources that are eligible for the variance under this section. In conducting this review, the department shall use all existing and readily available information. The department shall hold a public hearing in order to receive additional information and public comment. The department shall publish notice of the hearing on the department's Internet site at least 45 days before the hearing date.

(b) The department shall submit the results of a review under this subsection to the federal environmental protection agency within 30 days after determining that the review under par. (a) has been completed.

2015 Wis. Act 205 also amended Wis. Stat. § 283.16(7) to provide:

If the department determines [during the 5-year HAC review under § 283.16(3m)] that the interim effluent limitations under sub. (6)(a) or any other effluent limitations that are in effect as a result of a previous review under sub. (3) or (3m), are not consistent with the highest attainable condition for a point source or category of point sources eligible for the variance under this section, the department shall include the more stringent effluent limitations that were specified under sub. (3) (cm) or (3m) (a) or (e) as being consistent with the highest attainable condition in permits that are reissued, modified, or revoked and reissued after that determination for all the point sources source or for the category of point sources to which the more stringent effluent limitations apply.

Wis. Stat. § 283.16(7), therefore, effectively provides that the requirements of the MDV are either the HAC identified at the time of the adoption of the MDV or the HAC later identified during WDNR's five-year HAC reevaluation, thereby satisfying the second part of 40 CFR 131.14(b)(1)(iii).

It is important to note that, although the statute specifies that WDNR is required to "review the interim effluent limitations under sub. (6)(a), or any other effluent limitations that are in effect as a result of a previous review under this subsection or sub. (3), and determine whether they are

consistent with the highest attainable condition for the point sources and categories of point source that are eligible for the variance under this section,” the statute is clear that the required review of effluent limitations is only “*part of the review required by 40 CFR 131.14(b)(1)*” (emphasis added). As explained in Section II.B.1.b.ii(2) of this document, the basis for EPA’s conclusion that the MDV reflects the HAC of the waterbodies impacted by the MDV is that the MDV’s two-pronged effluent condition will likely result in equal or greater reductions in phosphorus loadings than would result from interim effluent limitations reflecting the effluent quality that would be achieved as a result of installation and operation of feasible point source control treatment equipment. Consequently, to be consistent with the HAC reevaluation requirements of 40 CFR 131.14(b)(1), in addition to reviewing the interim effluent limitations that are in effect at the time, WDNR’s HAC review must also include an evaluation of any information that is available at the time that is relevant to the question of whether the MDV’s two-pronged effluent condition is likely to result in the same or greater phosphorus loading reductions than would result from a more stringent interim effluent limitation reflecting installation and operation of feasible treatment equipment for point source dischargers. *See also* Wis. Stat. § 283.16(9) (“[n]otwithstanding any of the provisions of [the MDV statute], the [WDNR] shall comply with the provision of 40 CFR 131.14 when approving and implementing a variance under [the MDV statute].”) WDNR should include an evaluation of the extent, if any, that the MDV’s \$640,000 cap and 0.2 mg/L target value are resulting in specific instances in which the MDV’s nonpoint source control requirements are not resulting in loading reductions that would have exceeded reductions that would have been achieved through installation and operation of point source controls. If WDNR determines that the nonpoint source phosphorus loading reductions resulting from the MDV’s two-pronged effluent condition are not likely to equal or exceed those that would result from more stringent interim effluent limitations reflecting installation and operation of feasible treatment equipment, then WDNR’s conclusion regarding HAC following its once-every-five-year review should reflect that determination.

d. The MDV includes a specified term that is as long as necessary to achieve the HAC (40 CFR 131.14(b)(1)(iv))

i. Specified term

The specified term of the MDV is 10 years following EPA’s approval of the MDV. *See* WDNR’s March 7, 2016, *Justification* at p. 14 (“Presuming EPA approves the 10 year MDV term, the Department recognizes that the MDV will terminate at the end of the approved 10 year period, unless the Department submits and receives approval for an extension.”). The MDV, therefore, includes a “term . . . expressed as an interval of time from the date of EPA approval,” in accordance with 40 CFR 131.14(b)(1)(iv).

There were public comments to WDNR questioning whether the MDV term length is 10 years or 20 years and questioning WDNR’s authority with respect to specifying the term of the MDV. However, as described in Section I.B.2 of this document, the MDV statute and Wisconsin Administrative Procedure and Review law were amended on March 1, 2016, to (1) provide WDNR with broad authority with respect to “implementing, interpreting, or administering” the MDV without undergoing rulemaking, and (2) require WDNR to “comply with the provision of 40 CFR 131.14 when approving and implementing a variance under [the MDV] statute.”

“[n]otwithstanding any of the provisions of [the MDV statute]” (emphasis added). In light of the requirement of 40 CFR 131.14(b)(1)(iv) that variances must include “[t]he term of the WQS variance, expressed as an interval of time from the date of EPA approval or a specific date,” the fact that the MDV statute requires WDNR to “comply with the provision of 40 CFR 131.14 when approving and implementing a variance [under the MDV] statute,” and the fact that WDNR enjoys broad authority in “implementing, interpreting, or administering the MDV,” WDNR had authority under state law to specify that the term of the MDV is 10 years from EPA approval. The MDV, therefore, will no longer be effective 10 years following EPA approval. Wisconsin can seek EPA approval of a new or revised MDV in accordance with Section 303(c) of the CWA, to the extent that Wisconsin wishes to continue to have an MDV in place when the MDV that EPA is approving today is no longer effective.

ii. As long as necessary to achieve the HAC

As described above in Section II.B.1.b.ii, the MDV reflects the HAC of the impacted water bodies and waterbody segments because it includes legally binding, quantifiable obligations to implement measures that will likely result in greater pollutant loading reductions to the water bodies and waterbody segments than if the MDV simply required compliance with an interim effluent condition reflecting the greatest pollutant reduction that could be achieved from installation and operation of feasible treatment technology from the point source dischargers. After an initial start-up period, which WDNR has explained “is necessary time to establish key relationships, build partnerships, and find creative solutions that can be maintained,” *Justification* at p. 11, the amount of nonpoint source load reductions that will occur as a result of the MDV will likely grow larger each year because the amount of croplands dedicated toward achieving and maintaining compliance with Wisconsin’s cropland performance standards will likely increase each year the MDV is in effect. *See* Section II.B.1.b.ii, above. The HAC for each water body or waterbody segment, therefore, will be a higher condition each year, until such time as there are no longer opportunities to implement measures to further reduce nonpoint source loadings of phosphorus in a manner that is more cost-effective than doing so with point source controls. In light of the fact that the large majority of the total phosphorus load (approximately 80%) to Wisconsin’s water bodies comes from nonpoint sources (*see* Section I.B.1, above), there likely will continue to be opportunities and a continued need to implement additional nonpoint control measures for the entire 10-year duration of the MDV. Consequently, each additional year of the MDV is “necessary” to attain the higher condition that can be achieved through implementation of additional nonpoint control measures, and so the MDV’s 10-year term is consistent with the requirements of 40 CFR 131.14(b)(1)(iv).

- e. The MDV includes a specified frequency of no less than every five years after EPA approval for the State to reevaluate the HAC, a provision specifying how the State intends to obtain public input on the reevaluation, and a requirement that the results of such reevaluation must be submitted to EPA within 30 days of completion of the reevaluation (40 CFR 131.14(b)(1)(v))**

40 CFR 131.14(b)(1)(v) requires that variances:

with a term greater than five years, [must include] a specified frequency to reevaluate the highest attainable condition using all existing and readily available information and a provision specifying how the State intends to obtain public input on the reevaluation. Such reevaluations must occur no less frequently than every five years after EPA approval of the WQS variance and the results of such reevaluation must be submitted to EPA within 30 days of completion of the reevaluation.

Wis. Stat. § 283.16(3m), as amended by 2015 Wis. Act. 205, which is entitled "Highest Attainable Condition Review" and is described in Section II.B.1.c of this document, closely tracks the requirements of 40 CFR 131.14(b)(1)(v). Specifically, Wis. Stat. § 283.16(3m) specifies: (1) that a highest attainable condition review must be performed "every 5 years after" EPA approval of the MDV; (2) how the State intends to obtain public input on the reevaluation (through a public hearing following a 45 day or greater notice of the hearing posted on WDNR's website); (3) that "[i]n conducting this review, the department shall use all existing and readily available information;" and (4) that the results of the reevaluation be submitted to EPA within 30 days of completion of the reevaluation. Consequently, the MDV meets the requirements of 40 CFR 131.14(b)(1)(v).

- f. The MDV provides that it will no longer be the applicable WQS for purposes of the CWA if the State does not conduct a reevaluation consistent with the frequency specified in the MDV or the results are not submitted to EPA (40 CFR 131.14(b)(1)(vi))**

Wis. Stat. § 283.16(3m)(c) & (d), as amended by 2015 Wis. Act. 205, provides that the MDV "will cease to be available" if WDNR either does not complete the reevaluation within the timeframe described in Section II.B.1.e or submit the results to EPA within the required timeframe, and the MDV will remain unavailable until WDNR completes the reevaluation and submits the results to EPA. Wis. Stat. § 283.16(4)(d) provides that, notwithstanding a cessation of the availability of the MDV resulting from a failure to conduct or submit the results of the HAC review under § 283.16(3m)(c) & (d), a permittee that is operating under an NPDES permit that was issued when the MDV was available can continue to operate in accordance with the MDV related provisions of the permit "until the [permittee's] permit is reissued, modified, or revoked and reissued." This is consistent with EPA's interpretation of 40 CFR 131.14(b)(1)(vi). See 80 Fed. Reg. 51020, 51038 (August 21, 2015). Consequently, the MDV meets the requirements of 40 CFR 131.14(b)(1)(vi).

- g. The MDV is appropriate because attaining the designated uses and criteria is not feasible throughout the term of the MDV because imposition of "[c]ontrols more stringent than those required by sections 301(b) and 306 of the CWA would result in substantial and widespread economic and social impact" (40 CFR 131.14(b)(2)(i)(A))**

40 CFR 131.14(b)(2)(i)(A)(1) requires that, for a variance to a use specified in Section 101(a)(2) of the CWA, states "must demonstrate that attaining the designated use and criterion is not feasible throughout the term of the variance because . . . [o]ne of the factors listed in [40 CFR] 131.10(g) is met." One of those factors is that "[c]ontrols more stringent than those required by

sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.” 40 CFR 131.10(g)(6).

i. Factors relevant to determining in the phosphorus MDV context whether requiring “[c]ontrols more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact”

Although Wisconsin focused almost exclusively on the economic impacts that would result if Wisconsin point source dischargers were required to install treatment equipment necessary to comply with water quality based effluent limitations necessary to attain Wisconsin’s phosphorus criteria in its 40 CFR 131.10(g)(6) evaluation, as described in Section I.B of this document, Wisconsin also provided a great deal of information on the broader, statewide economic and social impacts that would occur if such controls were imposed that EPA is also considering in its evaluation of 40 CFR 131.10(g)(6). Specifically, EPA’s evaluation and conclusions are in the context of how the overall structure of the MDV is used to facilitate the needed nonpoint source reductions so that the ambient waters in Wisconsin can ultimately achieve the Wisconsin phosphorus standard. The following factors described in Section I.B.1 of this document are relevant in the context of the MDV in evaluating whether “[c]ontrols more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.” 40 CFR 131.10(g)(6):

- At least 14,061 of Wisconsin’s 46,954 miles of rivers do not meet Wisconsin’s phosphorus criteria and at least 413,766 acres of Wisconsin’s 1,078,748 acres of lakes/impoundments do not meet Wisconsin’s phosphorus criteria.
- Phosphorus pollution in Wisconsin has a significant, statewide economic and social impact, adversely impacting property values, recreational opportunities, tourism, scenic beauty and quality of life, human and pet health and the health of commercial fisheries. WDNR has estimated that the economic benefit that would result if Wisconsin’s phosphorus criteria was achieved throughout the state would be \$1.7 billion; an estimate based solely on benefits that WDNR was able to monetize. WDNR stressed that the numerous benefits that could not be monetized were no less valuable than those that could be monetized.
- Nonpoint sources are the primary source of phosphorus pollution in Wisconsin and, in the large majority of Wisconsin’s phosphorus-impacted waters, it will not be possible to attain Wisconsin’s phosphorus criteria unless phosphorus loadings from nonpoint sources are significantly reduced (even if all loadings from point sources are eliminated).
- The CWA does not provide direct regulatory authority over nonpoint sources of pollution.
- Hundreds of municipalities and industrial facilities throughout Wisconsin would incur significant economic impacts if they were required to construct treatment facilities necessary to comply with water quality based effluent limitations based on Wisconsin’s phosphorus criteria.
- The MDV includes legally-binding obligations – obligations that would not otherwise exist but for the MDV – for ensuring that measures are implemented that will likely significantly reduce pollution from nonpoint sources, potentially serving as a means for

ultimately attaining phosphorus criteria in waters that would not otherwise attain the phosphorus criteria by simply controlling phosphorus from point sources.

ii. Wisconsin's determination economic impact eligibility criteria

As described in Section I.B.6.b of this document, individual permittees that wish to be covered by the MDV must demonstrate, among other things, that they meet the determination economic impact eligibility criteria set forth Section 5 of the *Final Determination*. The determination economic impact eligibility criteria ensure that only dischargers that face significant economic costs are potentially eligible for coverage under the MDV. The determination economic impact eligibility criteria are constructed in a manner similar to the recommendations included in EPA's *Interim Economic Guidance*, with one set of determination economic impact eligibility criteria for publicly-owned entities and a second set for privately-owned entities.

(1) Primary Screener for determination economic impact eligibility criteria for publicly-owned entities

Wisconsin developed its determination economic impact eligibility criteria for publicly-owned entities using an approach similar to that recommended in the *Interim Economic Guidance*. Specifically, Wisconsin's eligibility criteria require that publicly-owned entities provide information necessary to calculate two separate scores: one to assess the burden of the costs of compliance to the community served by the publicly-owned entity and the second to assess the community's overall socioeconomic strength.

The first screener required by Wisconsin, referred to as the "Primary Screener," follows the same methodology recommended in the *Interim Economic Guidance* to calculate the Municipal Preliminary Screener. The Municipal Preliminary Screener, as it is referred to in the *Interim Economic Guidance*, and Wisconsin's Primary Screener are calculated by dividing the average total pollution control cost per household by the median household income of the community serviced by the entity.

(2) Primary Screeners for determination economic impact eligibility criteria for privately-owned entities

Wisconsin's approach for privately-owned entities is similar to its approach for publicly-owned entities. Both approaches use a combination of Primary and Secondary Screeners to determine whether or not significant economic impacts will result from requiring a specific permittee to comply with phosphorus limits through installation of additional wastewater treatment equipment. For privately-owned entities, Wisconsin relies on two Primary Screeners to assess the eligibility of individual privately-owned entities for the MDV. These are:

- Whether the compliance costs for an individual privately-owned entity is within the top 75% of costs for permittees incurring costs to comply with water quality based effluent limits derived from Wisconsin's phosphorus criteria within a given category of privately-owned entities; and

- Whether the privately-owned facility is located in a county that is within the top 75% of Wisconsin counties incurring phosphorus compliance costs for a given category of privately-owned entities.

Wisconsin developed its eligibility criteria for privately-owned entities using a Primary and Secondary Screener approach as recommended in the *Interim Economic Guidance* and Wisconsin uses for publicly-owned entities. However, the specific screeners selected for use in assessing eligibility of privately-owned entities differ from those recommended by EPA in the *Interim Economic Guidance*. EPA's *Interim Economic Guidance* focuses on the economic impacts of compliance for individual facilities while the recommended Wisconsin Primary Screener for privately-owned entities focuses on changes in profitability. Wisconsin's *Justification* document provides the basis for how Wisconsin selected the Primary Screeners for privately-owned entities beginning on page 3.

In selecting the first Primary Screener described above, Wisconsin wanted to evaluate the potential change in competitiveness of a facility in relation to competitors in the same type of industry. Wisconsin concluded that facilities whose compliance costs would be within the top 75th percentile would be incurring significant compliance costs relative to other entities in the industry and thus are likely to be at a competitive disadvantage; compliance costs not within the top 75th percentile are not considered significant and the affected entity is considered able to remain competitive. The industry-specific thresholds were established using a four-group clustering analysis of estimated compliance costs for each discharge category (*see* Section 5.A.2 of the *Final Determination* for further details.) The clustering analysis allowed Wisconsin to better select specific breakpoints between the fourth and third groups that reflect more separation in costs between the groups. Although this generally corresponded with approximately the 25th percentile line (separating the top 75% of costs from the rest), it reflects a less arbitrary distinction among facilities. This Screener only looks at relative compliance costs of facilities within Wisconsin, all of which are required to comply with water quality based effluent limitations derived from Wisconsin's phosphorus criteria.

The first Primary Screener evaluates the financial burden of compliance costs to permittees across a given industrial category, but does not address concerns Wisconsin has with community-level impacts. According to the *Final Determination*, communities in Wisconsin, especially rural communities, tend to be less economically diverse and have a greater potential to become economically distressed due to phosphorus compliance costs. *Justification* at p. 4. Also, because there are many small to medium-sized businesses, it is possible that significant community-level economic impacts will occur due to the number of impacted facilities within a community, even if the compliance costs for an individual facility are relatively small. To address this issue, Wisconsin uses a second Primary Screener for privately-owned entities that evaluates the overall compliance burden at the county level by discharger category. This second Primary Screener ranks projected total compliance costs by county for each category with communities incurring costs within the top 75th percentile assumed to be significantly affected by aggregate compliance costs. If the aggregated community costs are within the lower quartile, it is anticipated that the community's economic health will not be significantly affected by phosphorus compliance costs. *Justification* at p. 4.

In summary, an industrial permittee may be eligible for coverage under the MDV if the permittee meets either of two conditions: (1) the permittee's site-specific compliance costs are greater than the industry-specific cost threshold set forth in Table 13 of Appendix I of the *Final Determination*; or (2) the discharge is located in a county that is listed in Table 14 of Appendix I of the *Final Determination* as a county that is within the top 75% of counties incurring costs for a particular industry. Permittees that meet either test may suffer a significant adverse economic impact if they are required to install phosphorus treatment equipment, provided that they also meet Wisconsin's Secondary Screener requirements. Privately-owned permittees do not meet the significant impact test and are not eligible for coverage under the MDV if they don't meet either Primary Screener. If a privately-owned permittee satisfies only one of the two primary screeners, the entity must achieve a higher score on the Secondary Screener to be eligible for the MDV as compared to an entity that satisfies both of the Primary Screeners.

While Wisconsin's first Primary Screener requiring that a facility incur compliance costs within the top 75% of compliance costs for entities within a given industrial category does not exactly mirror the recommended change in profitability screener from the *Interim Economic Guidelines*, it retains some similarities. Wisconsin considered evaluating the change in profitability, but deemed it infeasible for four reasons, most prominently the lack of information on profitability of individual entities as well as the lack of resources at a level that would be needed to analyze the financial position of each individual permittee. In Wisconsin's methodology, the compliance costs that would be borne by an entity are compared to the compliance cost of other entities in the same industrial category. As profits are generally defined as revenue less costs, if revenues are assumed to be unaffected, comparing costs to peer facilities is similar to the comparison of profit levels of peer facilities recommended by the *Interim Economic Guidance*. Thus, basing the screener on cost data, in this circumstance, is a reasonable approach when obtaining data on profits is not practicable. Only facilities within the top 75% of compliance costs for an industrial category fulfill this Primary Screener. It is reasonable to assume that the facilities facing the lowest compliance costs (i.e. in the bottom 25% of compliance costs) are more likely to remain competitive, even if they are required to install phosphorus treatment equipment, and so the economic impacts on these facilities is not expected to be especially significant.

The second Primary Screener selected by Wisconsin as well as the Secondary Screeners (described below) address the fact that communities may face significant impact as a result of the costs of private entities complying with the water quality based effluent limitations derived from Wisconsin's phosphorus criteria and their resultant loss of competitiveness in the industry. Because the *Interim Economic Guidelines* are predominantly focused on the effects to a single entity, these types of impacts are not presented for consideration when determining whether the costs will be significant. However, in this circumstance, Wisconsin's phosphorus standard would result in an increase in wastewater treatment costs in an industrial category which could then result in significant impacts to communities because of the increase in costs to multiple discharges of a given industrial category operating in the same community.

(3) Secondary Screener for determination economic impact eligibility criteria

Wisconsin’s approach to calculate a score to assess the community’s socioeconomic strength – which Wisconsin refers to as the “Secondary Screener” -- relies upon a different methodology and a different set of socioeconomic indicators than the methodology and indicators set forth in the *Interim Economic Guidance*. As explained on pages 39-40 of the *Final Determination*:

Taken together, the secondary indicators should identify those counties that have particular susceptibility to the costs of phosphorus standards, either because local economic conditions limit the capacity to adapt productively to increased costs, or because affected industries’ costs are particularly large in relation to a local economy. When selecting indicators, WDOA consulted with economists and analysts at the Wisconsin Department of Workforce Development, the Wisconsin Department of Revenue, and the Wisconsin Department of Health, as well as consultants at the University of Massachusetts Donahue Institute. Those experts concurred that there is no standard array of data sets used for many types of analysis. They concurred that individual arrays of data sets are selected for specific questions. Seven indicators emerged from the experts’ consensus: median household income (MHI), personal current transfer receipts as a share of total income, jobs per square mile, population change, change in net earnings by place of residence, job growth, and capital costs as a share of total wages. MHI is not a secondary indicator for municipal WWTFs (this indicator was used as a primary screener for that category, *see* p. 28). Capital costs as a share of total wages is not a secondary indicator for municipal WWTFs because total wages are available at the county level, not at the municipal level. The NCCW category and the “Other” category of industrial dischargers are not industries for which wage data is available; therefore, this indicator (capital costs as a share of total wages) does not apply to these categories.

The following table summarizes Wisconsin’s seven secondary indicators. Two secondary indicators, median household income at the county level and capital costs as a percent of payroll by county, apply to privately-owned entities only. Wisconsin will evaluate each secondary indicator to the benchmark based on the most recent data available at the time of evaluation.

Secondary Indicator	Rationale for Indicator and Benchmark
County Median Household Income	Median Household Income is a measure of the wealth of a community. This indicator is met if a county has a median household income (MHI) value below the U.S. MHI. In 2013, the U.S. MHI was \$53,046; Wisconsin had a MHI of \$52,413. By tying this benchmark value to U.S. MHI, this benchmark value is not very sensitive to economic changes within the state of Wisconsin. As a result, if Wisconsin experiences economic growth and MHI rises in counties throughout the state, the U.S. MHI benchmark value will not rise as significantly and fewer counties will meet this indicator. Of course, this is also true in the reverse – if Wisconsin experiences an economic downturn, more counties would likely meet this indicator. It is appropriate for this benchmark to not be

	sensitive to changes within the state and evaluate the health of a county relative to the nation.
County Personal Current Transfer Receipts Share to Total Personal Income	This indicator reflects the percentage of income that is from transfers; primarily from governments to individuals through social programs. A higher percentage of personal income coming from transfer payments indicates a greater reliance on government programs, and a lower percentage of income being earned through work. This indicator is met if a county receives more than the national average of income from transfer receipts. To evaluate this indicator, data from the Bureau of Economic Analysis reporting 2013 personal current transfer receipts as a share of total income was examined. In 2013, transfer receipts constituted 17.3% of total personal income nationally, as well as for the state of Wisconsin. Similar to MHI, the Wisconsin state value is identical to the national value for this indicator, with the national value having the advantageous characteristic that it is less sensitive to changes within the state. This is appropriate and will allow for a more meaningful comparison of the health of a county relative to the nation.
County Jobs per Square Mile	Jobs per square mile measures the density of jobs within a community. In communities with fewer jobs per square mile, the loss of jobs in that community may be felt more strongly as other employment opportunities are limited. Phrased another way, retaining jobs in communities with few jobs per square mile is relatively more important than in communities with a high density of jobs. This indicator is met if a county has fewer than the 2013 statewide average of 50 jobs per square mile, as calculated by the Wisconsin Department of Workforce Development. The number of square miles will remain constant, so this indicator is only affected by changes in jobs. As noted in the <i>Final Determination</i> the job figures that are part of this calculation are based on employment covered by unemployment insurance laws, which vary across states. Thus it is appropriate to compare county data to a statewide average. In general, job density is lower in rural areas than urban areas; thus rural communities are more likely to meet this indicator.
County Population Change	This indicator measures the change in a county's population over a 10-year period. Population can be influenced by increasing or decreasing household size, as well as increasing or decreasing job opportunities. With a plethora of job opportunities, there will likely be in-migration into a county; with limited job opportunities, workers may leave to find employment elsewhere. This indicator is met if a county has a population change that is less than ½ the U.S. average rate. At the time the <i>Final Determination</i> was prepared, the most recent data available was from 2004-2014. Over this time, the US population change was 8.9% whereas the Wisconsin growth rate was 4.4%, which is approximately half of the U.S. average. By linking the benchmark value to half of the US average, Wisconsin is assuming that the state will continue to be in the lower range of population growth states. If Wisconsin, and thus its counties, grows at a rate closer to the national average this indicator will lose

	emphasis over time as a result of being tied to half of the national average instead of the state average.
County Change in Net Earnings	This indicator measures the change in net earnings by place of residence over a 10-year period and is given two points in scoring. This indicator can generally be thought of as capturing the change in personal income earned from work over this 10-year period. This indicator is met if a county has a change in net earnings less than the U.S. national average of 39.9%. Based on data from the Bureau of Economic Analysis, from 2003-2013 Wisconsin experienced a statewide growth rate of 31.7%, the ninth lowest in the nation. The selection of a national benchmark means that this indicator will continue to be met until a county experiences earnings growth similar to the rest of the nation. Given that Wisconsin has slow growth in earnings relative to the rest of the nation, it is appropriate to tie this indicator to the national average.
County Job Growth	This indicator measures job growth over a 10-year period; the most recent data available at the time the <i>Final Determination</i> was prepared was from 2003-2013. In general, job growth (or loss) indicates whether industry in a community is expanding or contracting over time. This indicator is met if a county experienced job growth of less than half of the U.S. National average rate of 9.8%. Based on data from the Bureau of Economic Analysis, over this same time period Wisconsin experienced job growth of 3.43%, the sixth lowest in the nation. By tying this indicator to a portion of the U.S. average, Wisconsin is essentially assuming that it will remain as a relatively slow job growth state over time. However, if the state experiences greater job growth than expected, it is likely that fewer counties will meet this threshold.
Capital costs as a share of wages by county	This indicator divides the estimated industry-specific capital costs of compliance for that county by the total wages in that county. This indicator is met if the costs of compliance are greater than 1% of total wages. If a county faces low compliance costs relative to total earnings, this indicator would not be met. Because Wisconsin does not anticipate updating the cost curves used to estimate compliance, moving forward this indicator will only be affected by changes in wages. If a county begins to experience growth in total wages, it will be less likely to meet this indicator.

To determine the Secondary Screener value reflecting a community's socioeconomic condition, two points are given if the benchmark for County Change in Net Earnings or capital costs as a share of wages is exceeded, reflecting Wisconsin's view that these two metrics are of particular value in considering the future socioeconomic status of the county; one point is given for any other indicators that fulfill the benchmark value. The total of the secondary indicator scores added together to arrive at the Secondary Screener value. A low Secondary Screener score indicates socioeconomic strength and a higher Secondary Screener score indicates socioeconomic weakness.

Like the *Interim Economic Guidance*, Wisconsin's determination economic impact eligibility criteria for publicly-owned entities has a sliding scale. Specifically, a publicly-owned entity with a Primary Screener less than 1% is deemed to not suffer significant economic impact (and therefore is not eligible for coverage under the MDV), regardless of the entity's Secondary Screener. A publicly-owned entity with a Primary Screener that is between 1% and 2% is only deemed to suffer a significant economic impact and therefore is potentially eligible for coverage under the MDV if the entity's Secondary Screener score is 3 or higher. A publicly-owned entity with a Primary Screener that is 2% or greater is only deemed to suffer a significant economic impact and therefore is potentially eligible for coverage under the MDV if the entity's Secondary Screener score is 2 or higher. Publicly-owned entities in the counties that meet these tests may face more difficulties in raising rates to cover the costs of treatment to meet the phosphorus criteria without causing significant impacts than publicly-owned entities in counties that do not.

Wisconsin's determination economic impact eligibility criteria for privately-owned entities also has a sliding scale, under which a stronger indication of significant impact (satisfying *both* Primary Screeners) requires a correspondingly weaker Secondary Screener value to determine that an entity would suffer significant impacts from the cost of measures necessary to achieve compliance. A privately-owned entity that satisfies neither Primary Screener is deemed to not suffer significant economic impact (and therefore is not eligible for coverage under the MDV), regardless of the entity's Secondary Screener. A privately owned entity that satisfies only a single Primary Screener is only deemed to suffer a significant economic impact and therefore be potentially eligible for coverage under the MDV if the entity's Secondary Screener score is 3 or higher. A privately-owned entity that satisfies both Primary Screeners is only deemed to suffer a significant economic impact and therefore be potentially eligible for coverage under the MDV if the entity's Secondary Screener score is 2 or higher.

Viewed as a group, these indicators capture different, but related, elements of the economic health of a community. For example, if a county experiences significant job growth, population will likely also increase as there is in-migration to the area. Income would likely also increase, as would job density. As income grows, there is also likely less reliance on transfer receipts. A growth in wages would be reflected in the change in net earnings and also decrease the ratio of compliance costs to total wages. These interrelationships are to be expected, and if viewed in isolation some information may be lost. For example, population can grow through growth in family size not necessarily through in-migration; job numbers could increase but wages could stagnate.

As explained in the *Final Determination* and the *Justification*, Wisconsin selected different Primary and Secondary Screeners than those in the *Interim Economic Guidance* because Wisconsin concluded that profitability of specific facilities does not adequately account for community-level impacts expected to result from the costs incurred to comply with water quality based effluent limitations derived from Wisconsin's phosphorus criteria. Based on discussions with stakeholders and a business survey, Wisconsin determined that privately-owned entities have two main options to deal with phosphorus compliance costs: absorb the costs or increase the costs of goods produced. Both of these options impact the profitability and competitiveness of Wisconsin's businesses. Both options also can impact the economic health of the community,

in that they can result in loss of investment, jobs, and tax revenue. See *2015 Economic Impact Analysis* at pp. 60-61 and *Justification Document* at pp. 3-4.

(4) The MDV's determination economic impact eligibility criteria ensure that the MDV only applies to dischargers that would suffer significant economic impacts if they were required to install phosphorus treatment equipment necessary to comply with water quality based effluent limits derived from Wisconsin's phosphorus criteria

As described above, the approach Wisconsin took in establishing the MDV's determination economic impact eligibility criteria for publicly owned entities is similar to the approach EPA recommends in its *Interim Economic Guidance* for assessing the economic impacts of requiring publicly owned entities to comply with the CWA's water quality based requirements in that it involves assessing (1) the costs of compliance to the community that owns the publicly owned entity as a percentage of the community's median household income and (2) the community's overall socioeconomic strength. Wisconsin reasonably chose eligibility criteria that screen out communities whose compliance costs result in a Primary Screener below 1% of MHI. Wisconsin also selected metrics and thresholds for assessing communities' socioeconomic strength. The approach Wisconsin took in establishing its determination economic impact eligibility criteria for privately-owned entities utilizes the same metrics and thresholds for assessing communities' socioeconomic strength that Wisconsin uses for publicly-owned entities. For the Primary Screener step for privately-owned entities, Wisconsin developed an indicator based on distributional analysis of facility compliance costs by category and an indicator based on total compliance costs by county. Both of these indicators are reasonable means of measuring significant economic impacts in light of retaining statewide competitiveness and assuring continued economic health of small, rural, less diversified counties facing large costs across multiple industries.

There were a number of public comments to WDNR that were critical of the MDV because of the commenters' beliefs that the MDV did not appropriately account for discharger-specific information that might show that the costs of achieving compliance for specific dischargers could be lower than the amounts that were assumed as part of the WDOA's *Final Determination*. These commenters asserted that there are many differences among dischargers: differing effluent phosphorus levels and flow rates, differing types of treatment facilities currently in place, differences in terms of the viability of biological phosphorus removal, and other factors that could mean that there are more affordable compliance alternatives available to some dischargers than others. However, the MDV accounts for these differences by requiring that individual dischargers provide current facility-specific compliance information, reflecting the lowest cost treatment option that can reliably achieve compliance with the phosphorous limitations. *Implementation Guidance* at p. 27. This information will be used to review if an individual facility is in fact eligible for the MDV. Additional detail on the information requested from facilities as part of their MDV application is included in Section 2.02 of WDNR's *Implementation Guidance*. The public will also have the opportunity to comment and provide information relevant to any proposed permit provision, including information relevant to the discharger-specific information used in evaluating whether the determination economic impact eligibility criteria have been met. Through this process, the facility-specific information the

commenters assert needs to be considered are in fact considered in the MDV process. A lengthier description of Wisconsin's process for developing and incorporating appropriate phosphorus-related limitations and conditions (including deciding whether and how to incorporate limitations and conditions based upon the MDV, taking into account site-specific information) is set forth in Section IV.A.1 of this document.

As described below, although EPA is not concluding that the economic impact to Wisconsin dischargers resulting from the costs of installing treatment equipment would on its own be sufficient to satisfy 40 CFR 131.10(g)(6), the MDV's determination economic impact eligibility criteria ensure that the MDV only applies to discharges that would suffer significant economic impacts if they were required to install phosphorus treatment equipment to meet water quality effluent limits based on Wisconsin's phosphorus standard.

iii. Requiring "[c]ontrols more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact"

In light of the factors described in Section III.B.1.g.i and ii of this document, the MDV is appropriate under 40 CFR 131.14(b)(2)(i)(A)(1) and 40 CFR 131.10(g)(6) because requiring "[c]ontrols more stringent than those required by sections 301 and 306 of the Act would result in substantial and widespread economic and social impact." Specifically, in light of the factors described in Section II.B.1.g.i and ii of this document, requiring dischargers to install controls necessary to comply with water quality based effluent limitations derived from Wisconsin's phosphorus criteria would result in:

(1) significant statewide economic and social impacts to the public in general, resulting from the fact that the significant nonpoint source phosphorus loading reduction measures that would otherwise occur under the MDV would not occur if dischargers are required to install costly phosphorus treatment equipment. This would mean that the large number of waters in Wisconsin that are impaired due to nonpoint source phosphorus pollution will continue to be impaired, resulting in lost opportunities for increased recreation and enjoying scenic beauty; lost opportunities for increasing tourism and decreasing risks to human and pet health; and lost opportunities to improve commercial fisheries; and

(2) significant economic impacts to dischargers covered by the MDV (i.e., dischargers who meet the MDV's determination economic impact eligibility criteria, who would be required to install costly phosphorus treatment equipment in order to comply with such limits if not for the MDV), which impacts would occur statewide because they could be felt by hundreds of municipalities and businesses throughout Wisconsin.

While the MDV's determination economic impact eligibility criteria serve to identify facilities for whom the impacts of compliance would be significant, EPA is not concluding that meeting those eligibility criteria alone would be sufficient to satisfy the requirements of 40 CFR 131.10(g)(6). Instead, EPA is deciding that the total economic and social impact resulting from the combination of the economic impacts on dischargers plus the broader impacts on society

resulting from foregoing measures to control nonpoint source phosphorus pollution is sufficiently substantial and widespread to satisfy the requirements of 40 CFR 131.10(g)(6).

A key factor in EPA's decision is that requiring dischargers to install controls necessary to comply with water quality based effluent limitations derived from Wisconsin's phosphorus criteria will in fact result in a foregoing of implementation of nonpoint control measures. This is because the MDV includes legally binding obligations to implement measures that must, as a matter of law, reduce nonpoint sources of phosphorus; legally binding obligations that, in most instances, should result in greater phosphorus loading reductions from nonpoint sources than would occur if the dischargers were only required to install treatment equipment necessary to reduce phosphorus discharges from their point sources. See Section II.B.1.b.ii(2), above, and EPA's *Phosphorus Loading Reductions Evaluation Document*. Absent the MDV, these legally binding obligations would not exist.

An additional consideration that was important in EPA's evaluation of the magnitude of the social impacts pertaining to the MDV is that foregoing implementation of nonpoint source control measures necessary to restore impaired water bodies would be inconsistent with the objective of the CWA specified in CWA Section 101(a)(2), which is to "restore and maintain the chemical, physical and biological integrity of the nation's waters;" inconsistent with "the national goal [specified in CWA Section 101(a)(2)] that . . . an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved;" and inconsistent with "the national policy [specified in CWA Section 101(a)(7)] that programs for the control of nonpoint sources of pollution [shall] be developed and implemented in an expeditious manner so as to enable the goals of this chapter to be met." This direct relationship between the impacts that would result from foregoing implementation of nonpoint source control measures and the objectives, goals and policies expressed in Section 101(a) of the CWA weighs heavily in support of the conclusion that the economic and social impact would be "substantial and widespread."

Finally, EPA is confident that the MDV should result in implementation of nonpoint source control measures that will meaningfully reduce phosphorus loadings into Wisconsin's waterbodies; and these measures and reductions will be documented in the plans and annual reports that counties and entities that implement "offsets" submit to WDNR as required by Wis. Stat. §§ 283.16(8)(b)(2m) and 283.16(8m)(b). If it turns out that, in fact, very little nonpoint source control of phosphorus is actually occurring, or that tremendous progress on nonpoint source control of phosphorus was being made in the early years of the 10-year MDV term but not much is occurring in the later years of MDV, then that information will need to be considered at the time of reevaluation of the HAC (at least once every five years) and also at the time of resubmittal, if Wisconsin seeks EPA approval of a new MDV that would be effective after the current MDV expires in 10 years.

h. The record in support of the MDV demonstrates that the term of the MDV is only as long as necessary to achieve the HAC (40 CFR 131.14(b)(2)(ii))

As explained in Section II.B.1.d of this document, the record submitted by Wisconsin in support of the MDV demonstrates that the 10-year term of the MDV is only as long as necessary to achieve the HAC and so the MDV complies with the requirements of 40 CFR 131.14(b)(2)(ii).

i. Wisconsin followed applicable legal procedures for adopting the MDV (40 CFR 131.5(a)(6))

The requirements of the MDV are set forth in Wis. Stat. § 283.16, as amended by 2015 Wis. Act 205; Wis. Stat. § 283.11(am) and NR 217.04; Wis. Stat. § 281.16(2), (3)(e) and (4) and NR 151; the determination economic impact eligibility criteria provisions of the *Final Determination* that was developed as required by Wis. Stat. § 283.16(2); and certain aspects of the *Justification and Implementation Guidance*.

i. Applicable State procedures

The WDOA and WDNR complied with all applicable state procedural requirements in adopting the MDV. Specifically, in accordance with Wis. Stat. § 283.16(2)(c), WDOA provided public notice through an electronic notification system and a 30-day comment period of its preliminary determination that attaining compliance with the phosphorus criteria is not feasible. Notice of this preliminary determination was published on May 5, 2015, on WDOA's website and a 30-day written comment period was provided. In addition, a public hearing was held on May 12, 2015. In accordance with Wis. Stat. § 283.16(2)(e), after considering public comments, WDOA submitted a notice that described its final determination under Wis. Stat. § 283.16(2)(a) to the legislative reference bureau for publication in the Wisconsin Administrative Register. Notice of the WDOA's final determination was published in the Wisconsin Administrative Register on October 7, 2015.

On March 1, 2016, Wisconsin enacted 2015 Wis. Act 205, which amended Wisconsin's Administrative Procedure and Review law to create a provision at Wis. Stat. § 227.01(13)(yt) that clarifies that the rulemaking requirements under Wisconsin's Administrative Procedure and Review law do not apply with respect to any WDOA or WDNR action or inaction which

Relates to implementing, interpreting, or administering s. 283.16, including determining social and economic impacts of compliance with phosphorus effluent limitations, establishing application and eligibility requirements for obtaining a variance, and providing guidance to the public.

2015 Wis. Act. 205 also amended Wis. Stat. § 283.16(9) to provide that “[n]otwithstanding any of the provisions of [the MDV statute], the [WDNR] shall comply with the provision of 40 CFR 131.14 when approving and implementing a variance under [the MDV statute].” In light of these statutory amendments, WDOA and WDNR had authority – without undergoing rulemaking -- to (1) include the determination economic impact eligibility criteria in the *Final Determination* as legally binding, enforceable elements of the MDV that must be met before a permittee can be

eligible for MDV-based permit effluent limitations, terms and conditions, in lieu of water quality based effluent limitations based Wisconsin's numeric phosphorus criteria; (2) specify in the *Justification* that the term of the MDV is 10 years after the date of EPA approval of the MDV; and (3) clarify in the *Implementation Guidance* that permittees that choose to implement watershed plans either directly or in collaboration with third parties under Wis. Stat. § 283.16(6)(b)(2) or (3) will be required as a condition of their NPDES permits to achieve specified offset load reductions on an annual basis.

Finally, WDNR's Chief Legal Counsel certified in a March 22, 2016, letter that the MDV was duly established in accordance with Wisconsin law.

ii. Applicable federal procedures

Although not required by state law, in order to comply with federal public participation requirements at 40 CFR 131.14, 40 CFR 131.20(b) and 40 CFR Part 25, WDNR provided a second public notice, hearing and 45-day comment period on the entire MDV package, including the *Final Determination*, the *Justification*, and WDNR guidance document and forms. Public notice of the hearing for the entire MDV package was published on October 23, 2015, on DNR's website and in fifteen newspapers throughout Wisconsin. WDNR also sent notice of the hearing and public comment period to interested stakeholders using WDNR's phosphorus govdelivery listserv as well as WPDES permit notification listserv. WDNR held the public hearing on the entire MDV package on December 9, 2015, at the Chula Vista Resort in the Wisconsin Dells. WDNR made a recording of the public hearing. The public comment period ended on December 16, 2015.

There were public comments to WDNR stating that the federal 45-day notice and public hearing requirements applicable with respect to state adoption of WQS were also applicable with respect to the WDOA's process for making its determination. However, in light of the fact that WDNR held a public hearing, after providing the requisite 45-day notice of the hearing and of the availability of supporting information, and took comment on the entire MDV, including WDOA's determination, Wisconsin was not required as a matter of federal law to also provide 45-day notice and a hearing as part of WDOA's process for making its determination.

There also were public comments indicating that the public comment and public hearing opportunities provided by WDNR on the MDV were inadequate because WDNR was not taking comment on either the MDV statute or WDOA's determination. However, WDNR's public notice announcing the public hearing and the opportunity for public comment indicated that all aspects of the proposed MDV, including the statute and WDOA's determination, were available for review. The public notice also stated, without limitation, that "[p]ersons wishing to comment on or object to the proposed multi-discharger variance are invited to do so by attending the public hearing or by submitting any comments or objections in writing to [WDNR]." Public commenters, including those commenters who suggested that WDNR was not taking comment on either the statute or the determination, proceeded to offer comments on both the statute and WDOA's determination. Finally, both the statute and the determination were revised as a "logical outgrowth" of comments that had been submitted during WDNR's public comment period, demonstrating that the opportunity to comment on the entirety of the proposed MDV

(including the state and the determination) was indeed a meaningful one. Consequently, WDNR's public comment and public hearing process did provide the public an adequate opportunity to comment on all aspects of the MDV.

iii. Conclusion regarding Wisconsin's following applicable procedures

Based upon the above, WDOA and WDNR followed all applicable state procedures and federal public participation requirements at 40 CFR 131.14, 40 CFR 131.20(b) and 40 CFR Part 25 in adopting the MDV and so complied with the requirements of 40 CFR 131.5(a)(6).

2. Wisconsin's submission in support of the MDV meets the relevant requirements included in 40 CFR 131.6 (40 CFR 131.5(a)(8))

a. Methods used and analyses conducted to support WQS revisions (40 CFR 131.6(b))

Wisconsin satisfied the submission requirements of 40 CFR 131.6(b) because the documents that it submitted to EPA that are described in Section I.C of this document adequately describe the methods used and analyses conducted by Wisconsin to support the MDV.

b. Certification by the State Attorney General or other appropriate legal authority within the State that the WQS were duly adopted pursuant to State law (40 CFR 131.6(e))

Wisconsin satisfied the submission requirements of 40 CFR 131.6(e) by submitting a March 22, 2016, letter from WDNR's Chief Legal Counsel, certifying that the MDV was duly established pursuant to Wisconsin law.

C. Conclusion Regarding the MDV

For the reasons described above, EPA has determined that the MDV is consistent with all relevant requirements of the CWA and 40 CFR Parts 131.5 and 131.6, and so EPA is approving the MDV. Specifically, EPA is approving the following:

The following sections in Wis. Stat. § 283.16, as amended by 2015 Wis. Act 205: Wis. Stat. §§ 283.16(1) (definitions); 283.16(3m) and 4(d) (highest attainable condition review); 283.16(4)(a)(1)-(3) (statutory eligibility criteria); 283.16(6) (statutory variance provisions); 283.16(7) (more stringent effluent limitations); 283.16(8) and 8(m) (payments to counties and projects and plans); and 283.16(9) (federal requirements).

The technology based effluent limitations for phosphorus established under Wis. Stat. § 283.11(am) in NR 217.04 (which are referenced in the MDV statute at Wis. Stat. § 283.16(6)(am)).

The cost share requirements applicable to municipalities under Wis. Stat. § 281.16 (3)(e) and (4) (which are referenced in the MDV statute at Wis. Stat. § 283.16(8)(b)); and, for

entities that construct a project or implement a plan to reduce nonpoint sources of phosphorus in accordance with Wis. Stat. § 283.16(6)(b)(2) or (3), the nonpoint source performance standards and prohibitions in NR 151 prescribed under Wis. Stat. § 281.16(2) and (3) which are referenced in the MDV statute at Wis. Stat. § 283.16(8m)).

Section 5 of the *Final Determination* and Appendix I to the *Final Determination*, which set forth the categories of facilities potentially eligible for the MDV and the determination economic impact eligibility criteria for the MDV.

WDNR's representation on page 14 of the *Justification* that the term of the MDV is 10 years following the date of EPA approval ("Presuming EPA approves the 10 year MDV term, the Department recognizes that the MDV will terminate at the end of the approved 10 year period, unless the Department submits and receives approval for an extension.").

The aspects of pages 31-32, 49, and 56-57 of the *Implementation Guidance* clarifying that permittees that choose to implement watershed plans either directly or in collaboration with third parties under Wis. Stat. § 283.16(6)(b)(2) or (3) will be required as a condition of their NPDES permits to achieve specified offset load reductions on an annual basis.

III. EPA's Review of Wisconsin's Provisions Pertaining to the State's Process for State Adoption, Review and Renewal of the MDV

40 CFR 131.13 provides:

States may, at their discretion, include in their State standards, policies generally affecting their application and implementation, such as mixing zones, low flows and variances. Such policies are subject to EPA review and approval.

As described in Sections I.B.2 and I.B.7 of this document, Wisconsin exercised its discretionary authority to include provisions pertaining to the state's process for adoption, review and renewal of the MDV in the new or revised water quality standards. Wisconsin's provisions require that any MDV adopted by the state must comply with the federal requirements for variances at 40 CFR 131.14 and also must be submitted to EPA for review and approved in accordance with the 40 CFR 131.21 before it can be available to permittees. *See* Wis. Stat. § 283.16(2)(em) and 3(g) (both requiring WDNR to submit any MDV to EPA for review and approval under 40 CFR 131.21); Wis. Stat. § 283.16(4)(a) (MDV not available to permittees unless EPA approval of the MDV is "in effect"); and Wis. Stat. § 283.16(9) ("[n]otwithstanding any of the provisions of [the MDV statute], the [WDNR] shall comply with the provision of 40 CFR 131.14 when approving and implementing a variance under [the MDV statute]"). The MDV statute also includes a number of unique, state-specific procedural and substantive requirements that must be met before an MDV can be adopted that have no counterparts in 40 CFR Part 131. *See* Wis. Stat. § 227.01(13)(yt); Wis. Stat. § 283.16(2)(a)-(e) & (f); Wis. Stat. § 283.16(2m); and Wis. Stat. § 283.16(3)(a)-(f). Read in conjunction with the state provisions requiring that the MDV must comply with 40 CFR 131.14 and be submitted to EPA for review and approval in accordance with 40 CFR 131.21 before the MDV can be available to permittees, it is clear that these unique,

state-specific provisions supplement, not supplant, the federal requirements for variances and submission of variances to EPA for review and approval in 40 CFR Part 131.

Because the state's provisions pertaining to the state's process for adoption, review and renewal of the MDV include requirements that the MDV comply with 40 CFR 131.14 and be submitted to EPA for review and approval in accordance with 40 CFR 131.21 before it can be effective under state law, EPA approves these provisions in accordance with 40 CFR 131.13 as the provisions are not inconsistent with 40 CFR 131.14. Specifically, EPA approves Wis. Stat. § 227.01(13)(yt) (providing that the rulemaking requirements under Wisconsin's Administrative Procedure and Review law do not apply with respect to any WDOA or WDNR action or inaction relating to implementing, interpreting, or administering Wisconsin's MDV statute); Wis. Stat. § 283.16(2) (state requirements for the state's initial adoption of the MDV); Wis. Stat. § 283.16(2m) (state requirements pertaining to WDNR review during Wisconsin's triennial WQS review of WDOA's original determination in support of the original MDV); Wis. Stat. § 283.16(3) (state requirements pertaining to renewal of the MDV and submission to EPA for approval in accordance with 40 CFR 131.21); Wis. Stat. § 283.16(4)(a) (MDV not available to permittees unless EPA approval of the MDV is "in effect"); and Wis. Stat. § 283.16(9) (requiring WDNR to "comply with the provisions of 40 CFR 131.14 when approving and implementing a variance under [the MDV statute]").

IV. Provisions That EPA is Not Taking Action on Under Section 303(c) of the Clean Water Act Because They Are Not New or Revised WQS

Three major components of water quality standards are designated uses for waters of the United States, water quality criteria for waters of the United States to protect such uses, and antidegradation requirements. There are other optional provisions such as WQS variances, mixing zone policies and compliance schedule authorizing provisions that states may adopt. In October 2012, EPA issued a set of Frequently Asked Questions to explain how EPA determines whether a provision constitutes a new or revised WQS that EPA has the authority and duty to act on. EPA's understanding of what constitutes a new or revised WQS under CWA Section 303(c)(3) derives from the CWA itself, EPA's implementing regulations, and case law. Section 303(c)(2) of the CWA and 40 CFR 131.20(c) require states to submit new or revised WQS to the EPA for review. EPA is required by Section 303(c)(3) of the CWA and 40 CFR 131.21 to review new or revised WQS to determine whether they are consistent with the CWA and 40 CFR Part 131.

EPA considers four questions when evaluating whether a provision constitutes a new or revised WQS. If all four questions are answered "yes," then the provision would likely constitute a new or revised WQS that EPA has the authority and duty to approve or disapprove under CWA Section 303(c)(3). If any of the four questions are answered "no," then the provision would likely not be a new or revised WQS that EPA has the authority and duty to approve or disapprove under CWA Section 303(c)(3):

- (l) Is it a legally binding provision adopted or established pursuant to state or tribal law?

- (2) Does the provision address designated uses, water quality criteria (narrative or numeric) to protect designated uses, and/or antidegradation requirements for waters of the United States?
- (3) Does the provision express or establish the desired condition (e.g. uses, criteria) or instream level of protection (e.g. antidegradation requirements) for waters of the United States immediately or mandate how it will be expressed or established for such waters in the future?
- (4) Does the provision establish a new WQS or revise an existing WQS?

See EPA's *What Is a New or Revised Water Quality Standard Under CWA 303(c)(3)? Frequently Asked Questions*, October 2012 at <https://www.epa.gov/sites/production/files/2014-11/documents/cwa303faq.pdf>.

After considering these questions, EPA has determined that each of the provisions that Wisconsin submitted to EPA for review and approval under Section 303(c) of the CWA and 40 CFR Part 131 specified in Sections II.C and III of this document that EPA is approving constitutes a new or revised WQS. This is because those provisions are all related to the terms and conditions of the MDV, or constitute provisions that states are free to adopt and seek EPA approval of pertaining to adoption, review and renewal of variances, and the provisions: (1) are legally binding and were adopted or established pursuant to state law, (2) address designated uses in that they establish a “time-limited designated use[s] and criteri[a] for a specific pollutant(s) or water quality parameter(s) that reflect the highest attainable condition during the term of the WQS variance,” (see 40 CFR 131.3(o)), (3) express or establish a desired condition for waters of the United States or mandates how it will be expressed or established for waters in the future (the HAC for the waterbodies impacted by the MDV), and (4) are new provisions.

As described below, EPA has also determined that the provisions at Wis. Stat. §§ 283.16 (4)(am), (b), (c), (e) & (f), as amended by 2015 Wis. Act 205, are not new or revised WQS subject to EPA review under Section 303(c) of the CWA and 40 CFR Part 131 because they do not establish terms or conditions of the MDV and/or do not express or establish a desired condition or instream level of protection. Instead, as described below, they constitute NPDES permitting provisions, subject to NPDES permitting requirements in Sections 301 and 402 of the CWA and 40 CFR Parts 122-123. EPA has also determined that none of the provisions in the *Final Determination, Justification and Implementation Guidance* except for the provisions of those documents specified in Section II.C of this document constitute new or revised WQS because they are not legally binding terms or conditions of the MDV and/or they are not legally binding provisions that express or establish a desired condition or instream level of protection.

A. Provisions Pertaining to NPDES Permitting

1. Provisions Pertaining to Development and Effectiveness of Water Quality Based Effluent Limitations

Wis. Stat. §§ 283.16(4)(am), (b), (c), (e) & (f), as amended by 2015 Wis. Act 205, are not new or revised WQS because they do not establish a desired condition for the water or address designated uses, criteria or antidegradation because they do not impact either Wisconsin's

phosphorus criteria or the terms and conditions of the MDV (which are specified in Section II.C of this document). Instead, as explained below, these are NPDES permit and permit program provisions pertaining to development, inclusion and effectiveness of water quality based effluent limitations in NPDES permits that are derived from and comply with all applicable WQS (i.e., Wisconsin's phosphorus criteria and/or the MDV) in NPDES permits in accordance with 40 CFR 122.44(d)(vii). EPA will evaluate these provisions in the context of overseeing Wisconsin's approved NPDES permitting program in accordance with 40 CFR Part 123.

a. Wis. Stat. § 283.16(4)(am), (b), & (e)

Wis. Stat. § 283.16(4)(am) provides:

1. The department [WDNR] shall approve an application for [coverage under the MDV] if the [statutory eligibility criteria and the determination economic impact eligibility criteria] are complied with, unless the department determines that the certification under par. (a)(2). is substantially inaccurate.

2. The department shall act on an application for [coverage under the MDV] under this section no later than the 30th day after the day on which the department receives the application for [coverage under the MDV].

3. If the department does not act on the application for [coverage under the MDV] by the deadline under subd. 2., the application is approved.

Wis. Stat. § 283.16(4)(b) specifies the procedural requirements governing the process that a permittee must follow to apply for coverage under the MDV. Wis. Stat. § 283.16(4)(e) provides that there is no right to a hearing with regard to WDNR's action under Wis. Stat. § 283.16(4)(am) on an application for coverage under the MDV.

As explained in Section 5.03 of WDNR's *Implementation Guidance*, any approval of a variance application under Wis. Stat. §§ 283.16(4)(am) -- whether as a result of either a decision by WDNR to affirmatively approve an application (Wis. Stat. § 283.16(4)(am)(2)) or because WDNR failed to act on the application within 30 days (Wis. Stat. § 283.16(4)(am)(3)) -- is deemed by WDNR to be only a "tentative approval," that must then be subject to Wisconsin's full NPDES permitting process.

Specifically, once the application is approved under either Wis. Stat. § 283.16(4)(am)(2) or (3), WDNR then public notices a draft permit that would include effluent limitations and other conditions for phosphorus based on the MDV, as well as other permit terms and conditions, and solicits public comment on that draft permit. As with any other draft permit, the public will have a 30-day public comment period to provide input on any issues associated with the permit, including input on: (1) whether the point source discharger meets the statutory eligibility requirements and determination economic impact eligibility criteria and, assuming those criteria are met, (2) whether WDNR has included appropriate permit provisions necessary to "[a]chieve water quality standards under section 303 of the CWA" (40 CFR 122.44(d)(1)), including conditions consistent with the MDV. Thus, for example, if WDNR has tentatively concluded that

a permittee's compliance costs in conjunction with other information are sufficiently high to satisfy the eligibility criteria, the public will have an opportunity to present information if they wish to question WDNR's tentative permitting conclusion. This allows the public an opportunity to present site-specific information (which WDNR would be required to consider) on effluent phosphorus levels, discharge flowrate, alternative treatment technologies (such as biological phosphorus removal and "package plants"), adaptive management, water quality trading and any other site-specific information relevant to a permittee's eligibility for obtaining coverage under the MDV. Similarly, the public will have an opportunity to present information on all other aspects of WDNR's tentative permitting determination, including information on the appropriateness of any phosphorus water quality based effluent limit that WDNR proposes including in the draft permit as being necessary to achieve water quality standards.

Following the close of the public comment period, and after considering all of the public comments received, WDNR will finalize the permit, with appropriate water quality based effluent limitations for phosphorus; which could range from water quality based effluent limitations based upon the phosphorus criteria to protect the underlying designated use (if WDNR concludes, based upon the public comments or otherwise, that the permittee does not meet the statutory and determination economic impact eligibility criteria) to a phosphorus water quality based effluent limit and other terms and conditions based on the MDV. The public has the right to challenge WDNR's final decisions on the permit and a permittee's eligibility for coverage under MDV in actions for state administrative and judicial review under Wis. Stat. §§ 227.52 and 283.63.

Wis. Stat. § 283.16(4)(am), (b) & (e), therefore, are simply state procedural provisions governing preliminary steps and actions that that must be taken in advance of the state's NPDES permitting process as they are implementing the MDV approved by EPA today. They do not "address designated uses, water quality criteria (narrative or numeric) to protect designated uses, and/or antidegradation requirements for waters of the United States" or "express or establish the desired condition (e.g. uses, criteria) or instream level of protection (e.g. antidegradation requirements) for waters of the United States immediately or mandate how it will be expressed or established for such waters in the future." Consequently, they are not a new or revised WQS subject to EPA review and approval under Section 303(c)(3) of the CWA and 40 CFR 131.21. Instead, as noted above, these are NPDES permit and permit program provisions that are not effective as aspects of Wisconsin's approved NPDES permitting program until they are approved by EPA in accordance with 40 CFR 123.62. *See* 40 CFR 123.62(b)(4).

b. Wis. Stat. §§ 283.16(4)(c) & (f)

Wis. Stat. § 283.16(4)(c) provides that:

After an application for a variance is submitted to the department under par. (b) 2., 3., or 4., and until the last day for seeking review of the department's final decision on the application or a later date fixed by order of the reviewing court, the water quality based effluent limitation for phosphorus and any corresponding compliance schedule are not effective. All other provisions of the permit continue in effect except those for which a petition for review has been submitted under s. 283.63.

Wis. Stat. § 283.16(4)(f) provides that:

If the department approves a variance under this section and the department issues a modified water quality based effluent limitation under s. 283.63 for phosphorus, the permittee shall comply with the least stringent of the 2 effluent limitations.

These provisions governing when NPDES water quality based effluent limitations and compliance schedules are effective and a permittees' compliance obligations following WDNR's completion of administrative actions pertaining to phosphorus effluent limitations do not "address designated uses, water quality criteria (narrative or numeric) to protect designated uses, and/or antidegradation requirements for waters of the United States" or "express or establish the desired condition (e.g. uses, criteria) or instream level of protection (e.g. antidegradation requirements) for waters of the United States immediately or mandate how it will be expressed or established for such waters in the future." Consequently, the provisions are not new or revised WQS subject to EPA review and approval under Section 303(c)(3) of the CWA and 40 CFR 131.21. Instead, EPA will evaluate these provisions in the context of overseeing Wisconsin's approved NPDES permitting program in accordance with 40 CFR Part 123.

2. Transfer of NPDES Permitting Authority from WDNR to WDOA

Some commenters argued that the MDV statute transferred aspects of WDNR's NPDES permitting authority from WDNR to WDOA by requiring that WDOA make the determination as to whether requiring attainment with the phosphorus criteria would result in substantial and widespread social and economic impact. However, the state's development of the MDV that it has submitted to EPA for review and approval under Section 303(c) of the CWA is separate and distinct from the state's implementation of the state's federally-approved NPDES permitting program under Section 402(b) of the CWA. The WDOA's role under the MDV statute pertained to development of the MDV, not to implementation of the state's federally-approved NPDES permitting program, and so the statute did not result in a transfer of permitting authority requiring EPA approval under EPA's NPDES permitting regulations at 40 CFR 123.62(c). In any event, the state statutory provisions pertaining to WDOA do not establish a desired condition for the water or address designated uses, criteria or antidegradation or otherwise affect the terms or conditions of the MDV, and so those provisions are not new or revised WQS.

B. Other Provisions in Documents Submitted by WDNR

As explained in Section II.C of this document, the following specific provisions within Wisconsin's *Final Determination, Justification and Implementation Guidance* established legally binding terms and conditions of the MDV: Section 5 of the *Final Determination* and Appendix I to the *Final Determination*, which set forth the categories of facilities potentially eligible for the MDV and the determination economic impact eligibility criteria for the MDV; WDNR's representation on page 14 of the *Justification* that the term of the MDV is 10 years following the date of EPA approval; and the aspects of pages 31-32, 49, and 56-57 of the *Implementation Guidance* clarifying that permittees that choose to implement watershed plans either directly or in collaboration with third parties under Wis. Stat. § 283.16(6)(b)(2) or (3) will be required as a

condition of their NPDES permits to achieve specified offset load reductions on an annual basis. As described in Section II.B.1.d.i of this document, EPA concluded that these specific provisions constituted legally binding terms and conditions of the MDV because of the amendments added by 2015 Wis. Act 205 to Wisconsin's Administrative Procedure and Review law and the MDV statute that clarified that the rulemaking requirements under Wisconsin's Administrative Procedure and Review law do not apply with respect to WDOA or WDNR action or inaction pertaining to the MDV and that WDNR is required to "comply with the provision of 40 CFR 131.14 when approving and implementing a variance under [the MDV statute]." Nothing else in those three documents establishes legally binding terms and conditions of the MDV or otherwise establish legally binding provisions that express or establish a desired condition or instream level of protection. Consequently, nothing else in those three documents are new or revised WQS.

V. Endangered Species Act (ESA) Section 7 Evaluation

As required under section 7 of the ESA and federal regulations at 50 CFR Part 402, EPA evaluated whether this standards action would affect federally-listed threatened or endangered species or designated critical habitat. As described in the biological evaluation (BE), EPA determined that the action may affect, but is not likely to adversely affect, aquatic, aquatic-dependent, or wetland species in Wisconsin. Further, EPA determined that the action will not destroy or adversely modify designated critical habitat. Accordingly, EPA does not expect impacts of concern to occur to listed aquatic, aquatic dependent, and wetland species or their designated critical habitat in the action area prior to the completion of consultation.

To date, EPA has initiated, but not completed, consultation with U.S. Fish and Wildlife Service (FWS) on its action. EPA has determined that this approval action does not violate section 7(d) of the ESA, which prohibits irreversible or irretrievable commitments of resources that have the effect of foreclosing the formulation or implementation of reasonable and prudent alternatives. While EPA does not believe that FWS will conclude that its action violates section 7(a)(2), its action does not foreclose either the formulation by the FWS, or the implementation by EPA, of any alternatives that might be determined in the consultation to be needed to comply with section 7(a)(2) of the ESA. By approving the standards subject to the results of consultation under section 7(a)(2) of the ESA, EPA has explicitly stated that it retains its discretion to take appropriate action if the consultation identifies deficiencies in the WQS requiring remedial action. EPA retains the full range of options available under section 303(c) for ensuring WQS are environmentally protective. For example, EPA can work with Wisconsin to ensure that the standards are revised as needed to ensure the protection of listed species, initiate rulemaking to promulgate federal standards to supersede the standards, or in appropriate circumstances, change EPA's approval to a disapproval.

Consistent with section 7 of the ESA and federal regulations at 50 CFR Part 402, EPA is required to consult with the Services on any action taken by EPA that may affect federally-listed threatened or endangered species or their designated critical habitat.

On December 30, 2010, EPA initiated informal consultation with FWS on Wisconsin's TP WQS. EPA prepared a BE and submitted it to FWS on December 16, 2011. Also on December 16, 2011, EPA submitted to FWS a memo that identified listed species on which

EPA's action would have no effect; this analysis was based upon the fact that these species have limited contact with surface water (i.e., they are terrestrial species) and are therefore not impacted by revisions to WQS. On February 21, 2012, FWS concurred with EPA's effects determinations for the Hine's emerald dragonfly, winged mapleleaf, Higgins eye pearly mussel, sheepnose, spectaclecase, eastern prairie fringed orchid, and whooping crane.

On July 28, 2016, in a conference call with Phil Delphey of FWS's Twin Cities office, EPA initiated informal consultation on its approval of Wisconsin's MDV. During that call, EPA inquired about whether FWS would be comfortable with a general analysis that discussed the anticipated (positive) effects of EPA's approval of Wisconsin's MDV. FWS indicated that such an analysis would be appropriate, as long as EPA supplemented this general analysis with specific analyses of potential effects on the piping plover, freshwater mussels, and Hine's emerald dragonfly. EPA conducted its analysis consistent with FWS's request.

During EPA's review of Wisconsin's MDV, EPA developed a biological evaluation (BE). EPA conveyed this document to FWS's Twin Cities field office upon approval of Wisconsin's MDV. As explained in its BE, EPA determined that its approval of the Wisconsin MDV would have no effect on the following species (and critical habitat): gray wolf, Kirtland's warbler, Karner blue butterfly, Canada lynx, Fassett's locoweed, dwarf lake iris, Mead's milkweed, prairie bush-clover, Pitcher's thistle, northern monkshood, Poweshiek skipperling (and its critical habitat), rusty patched bumble bee, piping plover critical habitat, and Hine's emerald dragonfly critical habitat. EPA determined that its approval of Wisconsin's MDV may affect but is unlikely to adversely affect the following species: northern long-eared bat, whooping crane, piping plover, rufa red knot, eastern massasauga, Higgins eye pearly mussel, sheepnose, spectaclecase, eastern prairie fringed orchid, Hine's emerald dragonfly, snuffbox, and winged mapleleaf.

Section 7(a)(2) requires that federal agencies, in consultation with the Services, ensure that actions are not likely to jeopardize the existence of federally-listed species or result in the adverse modification of designated critical habitat of such species. Upon initiation of consultation, section 7(d) of the ESA prohibits irreversible or irretrievable commitments of resources that have the effect of foreclosing the formulation or implementation of reasonable and prudent alternatives which would not violate section 7(a)(2) of the ESA. EPA's approval decision does not foreclose either the formulation by the Services, or the implementation by EPA, of any alternatives that might be determined in the consultation to be needed to comply with section 7(a)(2). By approving the standards "subject to the results of consultation under section 7(a)(2) of the Endangered Species Act," EPA has explicitly stated that it retains its discretion to take appropriate action if the consultation identifies deficiencies in the standards requiring remedial action by EPA. EPA retains the full range of options available under section 303(c) for ensuring WQS are environmentally protective. EPA can, for example, work with Wisconsin to ensure that Wisconsin revises its standards as needed to ensure listed species' protection, initiate rulemaking to promulgate federal standards to supersede Wisconsin's standards or, in appropriate circumstances, change EPA's approval to a disapproval.

As further described in the BE, EPA believes that it is highly unlikely that the FWS will conclude that Wisconsin's MDV violates section 7(a)(2), since the variance caps phosphorus

discharges allowed in NPDES permits and is expected to result in reduced ambient phosphorus concentrations in Wisconsin's surface waters.

VI. Tribal Consultation Requirements

On May 4, 2011, EPA issued the "EPA Policy on Consultation and Coordination with Indian Tribes" to address Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments." EPA's Tribe Consultation Policy states that "EPA's policy is to consult on a government-to-government basis with federally recognized tribes when EPA actions and decisions may affect tribal interests."

Multiple tribes have resources in the state of Wisconsin. In a letter dated April 26, 2016, EPA extended an invitation to these tribes to consult on the MDV. Two tribes, Bad River and Red Cliff submitted written comments in response to the invitation to consult. Consultation was concluded with letters from Christopher Korleski, Water Division Director of Region 5, to the chairs of Bad River and Red Cliff that were dated on the same date that EPA signed the letter approving the MDV. In these letters, EPA summarized the issues identified by the Tribes during consultation related to EPA's review of the MDV and provided EPA's responses to the Tribes' comments.