April 14, 2013

ATTACHMENT TO ADMINISTRATIVE RULES
FISCAL ESTIMATE AND
DRAFT ECONOMIC IMPACT ANALYSIS
Revision of Rules on
Ch. NR 115, Wisconsin's Shoreland Protection Program

PART I

Policy Problem Addressed by the Rule

Section 281.31(6), Stats. requires the department prepare and adopt general recommended standards and criteria for municipalities to protect navigable waters giving "particular attention to safe and healthful conditions for the enjoyment of aquatic recreation…the capability of the water resources…building setbacks from the water; preservation of shore growth and cover; shoreland layout for residential and commercial development; suggested regulations and suggestions for the effective administration and enforcement of such regulations." Section 59.692(1m), Stats. requires counties to adopt zoning and subdivision regulations for the protection of shoreland areas to effect the purposes of section 281.31 and to promote public health, safety, and general welfare.

The State's shoreland management program under Chapter NR 115 provides that shoreland zoning regulations shall: "further the maintenance of safe and healthful conditions: prevent and control water pollution: protect spawning grounds, fish and aquatic life: control building sites, placement of structures and land uses, and reserve shore cover and natural beauty." NR 115, Wis. Adm. Code, contains the statewide minimum standards for shoreland zoning in unincorporated areas. Although the rule was recently revised in 2009 and went into effect on February 1, 2010, some counties have expressed concerns about implementation and enforcement of the minimum standards regulating impervious surfaces and nonconforming structures. The proposed revisions would address concerns associated with administering and implementing the impervious surface standards and the nonconforming structure standards in the rule. Further, minor changes to the vegetative management and administrative reporting standards will clarify the requirements under the rule and ease reporting requirements.

Impervious Surface standards

Current standards under ch. NR 115.05(1)(e), Wis. Adm. Code, specify that the impervious surface standards be applied to land within 300 feet of the ordinary high water mark. Shoreland mitigation is required if a property expands the impervious surfaces on the property above 15% and limits the amount of impervious surfaces on a property to a maximum of 30%. The proposed rule revisions would ease the application of the impervious surface standards by: 1) limiting application of the impervious surface standards to only riparian lots or non-riparian lots that are entirely within 300 feet of the ordinary high water mark; 2) allowing properties to exceed the maximum impervious surface standards if the property owner can show that the runoff from the impervious surfaces is not draining towards a lake or river or is being treated by an engineered system; 3) allowing counties to develop higher impervious surface limits in certain areas of the county that are already highly developed.

The current rule provides that counties shall regulate any impervious surface that is located within 300 feet of ordinary high water mark. Some counties have indicated that measuring 300 feet from the ordinary high water mark is administratively burdensome and result in properties where the impervious surface standards are only applied to a portion of a property and will thus; require variances or complex calculations of the impervious surface standards. The proposed modifications to the rule would limit application of impervious surface standards to only riparian lots or non-riparian lots that are located entirely within 300 feet of the ordinary high water mark.

Further, the impervious surface regulations currently provide that shoreland property may contain impervious surfaces up to 15%, without a permit. Once a property exceeds 15% impervious surfaces, then the property owner must receive a permit from the county and conduct shoreland mitigation to offset the impacts to the shoreland zone and adjacent waterway. Expanding the impervious surfaces above 30% would require a variance. Some counties and property owners have suggested that impervious surfaces that do not drain toward the waterbody or those that receive some kind of stormwater treatment have less of an impact on water quality than impervious surfaces that drain directly to the waterbody. The proposed rule language would allow property owners to develop or expand the impervious surfaces on their property, above the maximum impervious surface limit, if the property owner can show that the runoff from the impervious surface is not draining directly to the lake or river or that the impervious surface is being treated by an engineered stormwater system.

As described above, the current rule requires that property owners obtain a variance from the county, if the property owner wishes to expand the impervious surfaces on their lot above 30%. In some developed areas, the current maximum impervious surface standards already exceed the maximum impervious surface limit. Any further addition of impervious surfaces on these lots, even minor additions, would require a variance, representing an increased workload for counties.

The proposed rule language allows counties to adopt an ordinance that allows a higher percentage of impervious surfaces for areas of already highly developed shorelines. A highly developed shoreline areas, in the proposed rule language, are areas that were identified as an urbanized area or urban cluster in the 2010 US Census, areas that have a commercial, industrial or business land use classification, or any additional areas that meet the specifications in the proposed rule. Property owners in areas of highly developed shorelines would be allowed to expand the impervious surfaces on their lots, up to 30% for residential and 40% for commercial, industrial or business land uses, without a shoreland zoning permit. To expand the impervious surfaces above this limit, the property owner will have to receive a permit and provide shoreland mitigation. Finally, to expand the impervious surfaces on the property above 40% for residential and 60% for commercial, industrial or business land uses, the property owner would either have to obtain a variance or show that the additional impervious surface does not drain directly to the lake or river, or that the additional impervious surface is treated by an engineered system.

Nonconforming Structure standards

The nonconforming structure standards in ch. NR 115.05(1)(g), Wis. Adm. Code, allow property owners, whose principal structures are greater than 35 feet from the waterbody, to expand vertically within the required setback and relocate or reconstruct the principal structure if the property owner completes a shoreland mitigation project. If the property owner chooses to relocate or reconstruct the principal structure, the county must also determine whether there is any other compliant building location on the property and must require that all other nonconforming accessory structures be removed or relocated beyond the required setback. Further, property owners may expand principal structures vertically or horizontally beyond the required setback. All property owners are allowed unlimited maintenance and repair of their nonconforming structures, and the scope of these repairs is defined by the county ordinance.

The proposed rule language on shoreland standards would allow a one-time horizontal expansion within the setback with shoreland mitigation. This revision is to address concerns that some nonconforming principal structures, which are located within the shoreland setback, are either structurally inadequate to allow for the addition of a second story or it is more desirable to build a minor first floor addition to accommodate the needs of the property owner. In addition, the proposed standards would eliminate the requirement that property owners must remove all other nonconforming accessory structures to relocate or reconstruct their nonconforming principal structure. Removal of nonconforming accessory structures is

often a key component of shoreland mitigation and if it is a requirement, the counties are not allowed to give credit for the removal of these structures, despite the benefits to the shoreland zone. Further, the counties identified that property owners tend to view the removal of accessory structures more favorably if removal of these structures is optional rather than a requirement.

Finally, two other minor changes to the nonconforming structure standards will clarify the statutory language and requirements associated with nonconforming uses and wet boathouses. Under s. 59.69(10)(am), Wis. Stats., if a nonconforming use ceases operation for more than 12 months, counties may require the use of the property to come into compliance with the county ordinances. The proposed changes to the rule would clarify the rule language to reflect this statutory language. The other minor change in the proposed rule seeks to eliminate the reference to the maintenance and repair of nonconforming wet boathouses, which are regulated by the department under s. 30.121, Wis. Stats.. This reference in NR 115.05(1)(g)7. to wet boathouses and compliance with s. 30.121, Wis. Stats. has caused some confusion because counties do not regulate boathouses based upon s. 30.121, Wis Stats.

Vegetative Management Standards
The current rule provides standards for when counties may allow vegetation to be removed from the vegetative buffer zone, which is the area within 35 feet of the ordinary high water mark. One of the standards provides that counties may allow a property owner to remove vegetation within the buffer zone if they are managing for exotic, invasive, damaged or diseased vegetation or vegetation that poses an imminent safety hazard if the area is replanted. However, the standard is unclear whether or not a county must require a permit for the removal of this type of vegetation. Therefore, the proposed rule revision would clarify that the county is not required to issue a permit for such activities.

Reporting Standards
Under NR 115.05(4), Wis. Adm. Code, counties are required to adopt an ordinance that contains a number of administrative and reporting requirements. One of those requirements is to submit any permit the county issues for a nonconforming structure, if requested by the department. The proposed rule would eliminate this requirement because of the administrative burden and cost to the counties and department.

PART II

Summary of Rule's Economic and Fiscal Impact on Businesses and Local Government.

Wisconsin's shoreland protection standards, under NR 115, Wis. Adm. Code, do not distinguish or contain different standards for businesses within the shoreland zone. Therefore, businesses or business sectors are either not directly impacted by the proposed rule, or businesses located within the shoreland zone must meet the same requirements as any other property owner in the shoreland zone. If a business is located in the shoreland zone and the structure is nonconforming or the property exceeds the impervious surface limits, the business may keep what they have and repair or maintain those structures. Specific businesses and business sectors may be indirectly impacted by the proposed rule, depending upon the type of business and location of the business. Given that a primary purpose of the proposed revisions is to ease the administrative burden on counties, some businesses including builders, contractors, building centers, landscapers, nurseries and garden centers may experience some positive economic impacts. The proposed rule language will provide shoreland property owners with increased flexibility for use of their property.

Local county governments will be the primary party affected by the proposed changes in this rule. However, the level of that impact will vary county by county, and it will also vary over time. The initial fiscal impacts will result from ordinance adoption or revision and the costs will depend upon whether or not a county merely adopts the minimum standards, if the county adopts an ordinance that is more

restrictive than the minimum standards, or if a county chooses to adopt an ordinance that allows higher impervious surface standards for highly developed shorelines. A 2006 survey asked counties to predict the average cost for initial adoption and implementation of NR 115, Wis. Adm. Code. 38% of the counties responded to the survey, identifying an average cost of $17,841, with a standard deviation of $33,059.

It is likely that the costs to adopt a shoreland ordinance including the proposed rule language, may be similar to the projected costs above, but may also be higher if a county chooses to adopt an ordinance that provides higher impervious surface standards for highly developed shorelines. Potential increase in costs for adoption of an ordinance, which provides higher impervious surface limits for highly developed shorelines, will be limited to approximately 15 counties with highly developed shorelines if those counties choose to adopt the higher impervious surface standards into a shoreland ordinance. To help counties defray the cost of ordinance amendments, the proposed rule language would allow counties at least one year to bring their ordinance into compliance. Counties may also be able apply for and obtain Lakes Planning grants and River Planning grants from the department to help further defray amendment costs. Currently there are 12 counties that have adopted the standards in the current NR 115, Wis. Adm. Code. It is unclear whether or to what extent these 12 counties would further revise their shoreland zoning ordinance as a result of the proposed rule language.

Once the county adopts an ordinance, initial implementation of the ordinance will have short-term costs associated with county staff time explaining the new ordinance language to landowners and businesses. However these costs will decrease over time as county staff, landowners and businesses become more familiar with the new requirements. Additionally, each county will realize cost savings from the proposed rule language due to the reduced number of variances needed if the impervious surface and nonconforming structure standards are adopted.

An example of the potential costs and savings compared to the current rule was provided by the Waukesha County Division of Planning and Zoning. Waukesha County issues approximately 281 permits per year for activities that involve either increasing or modifying the existing impervious surfaces within the shoreland zone. (Table 1) The county does not currently require permits for driveways or walkways, which under the current and proposed NR 115, Wis. Adm. Code, may require a permit. Therefore, utilizing 281 permits per year for comparative analysis is a conservative estimate of the potential workload and costs savings for the county. A random sample by Waukesha County of 41 shoreland properties revealed that none of the properties were below the existing impervious surface standard of 15%, approximately half of the properties were above 15% but below the current maximum impervious standard of 30% and the remaining half of the properties exceeded the maximum impervious surface standards. (Table 2) Extrapolating that data across the entire county suggests that any increases in impervious surfaces within the shoreland zone of Waukesha County will likely require permits and shoreland mitigation, or a variance.

The proposed rule would ease the administrative workload and costs for the county because most of the lakes and some of the rivers within Waukesha County would be considered highly developed shorelines. Thus the proposed changes to the impervious surface standards would reduce the number of administrative permits required with mitigation by 49%, because properties within highly developed shorelines that have less than 30% impervious surface on their lot would not be required to obtain a permit from the county or implement a shoreland mitigation plan. Further, the number of variances required for properties to exceed the maximum impervious surface standards would decrease at least 36% but could also decrease more if those properties could show that the impervious surfaces are draining away from the waterbody or are being treated by an engineered stormwater system.

Table 1. Waukesha County Shoreland Permitting
Average number of annual permits 2006-2011

Activity	Average # Permits
New Homes	48
Remodel/Additions	120
Accessory Buildings	46
Decks/Patios	67
Total	281

*Note- Permits are not currently issued for driveways/walkways

Table 2. Waukesha County Average Percentage of Impervious Surface for Riparian Lots

% Impervious Surface	# of Example Sites	% of Example Sites
0-15%	0 of 41	0%
>15-30%	20 of 41	49%
>30-40%	15 of 41	36%
>40-60%	6 of 41	15%

PART III

Long Range Implications of Implementing the Rule

Water Quality, Natural Scenic Beauty and Fish & Wildlife Habitat

The primary impacts to Wisconsin's lakes and rivers from the proposed rule language will result from the changes to the impervious surface limits, particularly the proposed increase in impervious surface limits for highly developed shorelines, and the proposed change that would allow lateral expansion of nonconforming structures within the setback. These proposed changes to the current rule will allow more development within the shoreland zone than what is currently allowed under NR 115, Wis. Adm. Code, which is likely have long range implications on the water quality, natural scenic beauty, and fish and wildlife habitat of Wisconsin's lakes and rivers.

Impervious surfaces and development within the shoreland zone impact water quality by increasing runoff and pollutant loading into the waterway, which can result in sedimentation, soil erosion, increases in water temperature, increases in phosphorous and algae in lakes and rivers. Impervious surfaces and development within the shoreland zone impact fish and wildlife habitat due to declines in water quality and elimination of shoreline and nearshore habitat by the removal of vegetation or sedimentation that covers important habitat. Numerous studies have shown that fish and amphibian species decline significantly as impervious surfaces and development increases within the shoreland zone. Additionally the diversity of species, including birds and aquatic insects, declines as development occurs. Most of the studies have found that when impervious surfaces exceed 12% within a watershed, that the fish and wildlife diversity declines sharply.

While some studies have shown that maintenance of a shoreland buffer and stormwater ponds may mitigate some of these impacts to fish and wildlife habitat, the studies agree that there are no longer detectable benefits once the impervious surfaces in the watershed exceed 30%. However, it is important to note that once impervious surfaces exceed 30% within the watershed, the impacts on water quality and fish and wildlife habitat begin to be marginalized over time. Consequently, those watersheds that already exceed 30% impervious are likely already experiencing impacts to water quality and fish and wildlife habitat, such that the proposed rule changes may not result in any further measurable impacts over time. Therefore, while the proposed changes to the impervious surface limits and the nonconforming structure standards may result in impacts to the shoreland zone over time, the impacts are expected to be larger for those watersheds that currently have a lower percentage of impervious surfaces or development, whereas the already highly developed watersheds in the state may not have any noticeable or significant changes in water quality or fish and wildlife habitat.

Although studies have shown the substantial benefits to water quality, habitat and natural scenic beauty from maintaining a shoreland buffer and limiting impervious surfaces within a watershed, there is insufficient data or robust models that can calculate the actual costs and dollar values. To calculate the costs of declining water quality, habitat, and natural scenic beauty, a model would need to determine people's willingness to pay via contingent valuation surveys of riparian property owners, recreational users of the waterways and passive users, who would enjoy the shoreland zone for the important functions it provides, such as bird habitat for bird watchers and ornithologists.

Counties & shoreland property owners

The long-term effects of the proposed rule revision for counties are reduced administrative costs and greater flexibility for administering a shoreland zoning ordinance as described above. Additionally shoreland property owners will benefit from the increased flexibility and decreased permit requirements when the property owner seeks to expand the impervious surfaces or a nonconforming principal structure. Shoreland property owners enjoy many benefits from higher water quality, including improved fishing and wildlife viewing, opportunities to recreate in clear water, and increased enjoyment of natural beauty. Consequently, property owners may also experience costs from the proposed rule revisions in the form of decreased property value as a result of additional development.

A number of different studies have estimated the effects of increased water clarity (Secchi measurements) on property values. These studies used hedonic pricing models to examine the change in property values occurring over time. Studies, particularly those in Wisconsin, have found a change of $7,894 to $17,892 in property value for an increase in water clarity of one meter in depth. Lower valued properties would probably experience less of a change than higher valued properties. Therefore, if the proposed rules allow for additional development within the shoreland zone and if some waterbodies experience a decline in water quality over time, it is reasonable to conclude that the proposed rule language may have a negative impact on property values over time. However, it is difficult to estimate the potential impacts to property value, in large part because it will depend upon many variables, including the degree of impacts, the real estate market and the type of waterbody.

PART IV

Compare with Approaches Being Used by Neighboring States (Illinois, Iowa, Michigan and Minnesota)

Minnesota and Wisconsin have considerable inland water resources and have developed shoreland zoning standards with similar goals and standards for development. Other neighboring states to Wisconsin lie within a different ecological landscape and contain few inland water resources. The approaches to shoreland zones taken by other neighboring states have less in common than Minnesota and Wisconsin and in general offer fewer protections for the shoreland zones.

Minnesota

The State of Minnesota has a shoreland program that is also being revised. The Minnesota DNR's website states that an increase in development pressure around lakes and rivers has raised concerns about water quality and impacts on lake use, therefore resulting in the need to review current shoreland minimum standards in the state. Minnesota bases their shoreland program on statewide classification of all surface waters based on size and shape, amount and type of existing development, road and service accessibility, existing natural character of the water and other parameters. Waterbodies are classified as natural environment lakes, recreational development lakes, general development lakes, remote river segments and forested rivers. Each class has specific standards associated with the shoreland ordinance including building setbacks, lot sizes and widths, bluff impact zones, slope requirements, impervious

surface limits and others. The state has a somewhat similar standards in treatment of nonconforming structures and limits impervious surfaces to 20%, which is a lower limit than Wisconsin's current rule and would be significantly less than the proposed highly developed shoreline standard in the proposed rule.

Michigan
The State of Michigan has a wild and scenic rivers protection program to provide special protection to designated rivers. This program is managed similarly to other wild and scenic river protection programs nationwide. The protection standards are outlined in Natural River Zoning Rule 281 which outlines standards for river setbacks, minimum lot widths, special vegetation management standards, and nonconforming structure improvements. The program applies only to wild and scenic rivers. Inland lakes or rivers that are not designated are not protected under the program. Additional activities that may have potential impacts to the public trust or riparian rights, or that may impair or destroy the waters or other natural resources of the state, including inland lakes and streams, the Great Lakes, wetlands, and groundwater, are regulated by the Department of Environmental Quality.

Illinois
The State of Illinois regulates inland waters through an administrative code detailing conservation measures for public waters. The purpose of the program is to protect the public's interests, rights, safety and welfare in the State's public bodies of water. More specifically, construction is regulated to prevent obstruction to, or interference with, the navigability of any public body of water; encroachment on any public body of water; and impairment of the rights, interests or uses of the public in any public body of water or in the natural resources thereof. Illinois does not have a specific program for shoreland management or shoreland ordinance requirements.

Indiana
The state of Indiana regulates lake-side construction activities and provides standards for the activities along and within public freshwater lakes. The state also has standards for nonconforming uses and nuisances including the removal of a lawful nonconforming use if the structure or facility affects public safety, natural resources, natural scenic beauty or the water level of a public freshwater lake. Indiana does not have a specific program for shoreland management or shoreland ordinance requirements.

Iowa
The state of Iowa has an integrated watershed management and surface water regulation program which includes motor regulations and slow-no-wake areas to reduce shore erosion and an invasive species program to help safeguard the biological integrity of the lakes and river systems in Iowa. Iowa does not have a specific program for shoreland management or shoreland ordinance requirements. Most of Iowa's environmental programs are directly mandated by the federal government and required components of Environmental Protection or Federal Emergency Management Agency programs.