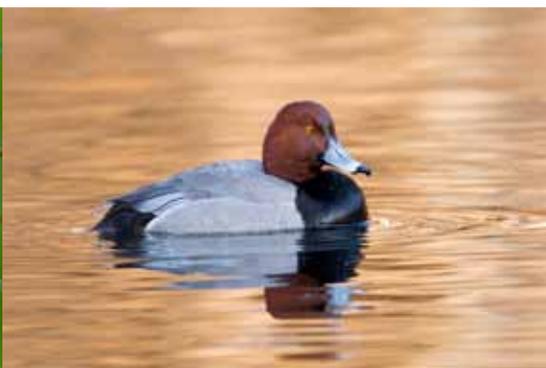


# LAND USE AND WETLANDS: Zoning Opportunities to Improve Wetland Protection



[www.wisconsinwetlands.org](http://www.wisconsinwetlands.org)





# **Land Use and Wetlands: Zoning Opportunities to Improve Wetland Protection**



February 2013



### *Acknowledgments*

This publication was developed by Wisconsin Wetlands Association with the review and input of many partners, including but not limited to members of the Wisconsin County Code Administrators (WCCA) and staff with the University of Wisconsin Cooperative Extension Center for Land Use Education, Wisconsin Land and Water Conservation Association and the Wisconsin Department of Natural Resources (WDNR). The WCCA Wetlands Ad-Hoc Committee (December 4, 2012) and WCCA Executive Board (January 17, 2013) endorsed this publication as a guidebook for counties looking to explore, adopt, and implement local wetland conservation policy options.

Funding for this project was provided by the WDNR Lakes Program, the Wisconsin Coastal Management Program, and the National Oceanic & Atmospheric Administration, Office of Ocean and Coastal Resource Management under the Coastal Zone Management Act Grant #AD109367-010.41. Special recognition is owed to Travis Olson with the Wisconsin Coastal Management Program for his ongoing support and assistance with WWA's local government outreach efforts.



Cover Photos (from top, left to right):

Gerald H. Emmerich, Jr.: Crooked Creek / Lulu Lake Wetland Gem in Walworth County

David Schwaegler: Red Columbine – *Aquilegia canadensis*

Gary Shackelford: Redhead – *Aythya americana*

Gary Shackelford: Northern Leopard Frog – *Rana pipiens*

### *About the Land Use and Wetlands Publication Series*

Wisconsin Wetlands Association's Land Use and Wetlands Publication Series was created to educate local decision-makers about the public benefits of wetlands and to provide tools and resources that help local decision-makers improve wetland conservation at the local level.

### *About the Wisconsin Wetlands Association*

Wisconsin Wetlands Association (WWA) is dedicated to the protection, restoration, and enjoyment of wetlands and associated ecosystems through science-based programs, education, and advocacy. WWA is a non-profit 501(c)(3) organization.

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## *Preface*

In 2009, Wisconsin Wetlands Association (WWA) launched a series of projects to educate local decision-makers about the public benefits of wetlands, and to help local governments better protect local wetlands. Through this work, we have significantly improved our own understanding of the challenges local governments face when administering wetland protection land use policies, and have come to recognize that local governments need better tools and resources, and much more support, for their wetland protection efforts. To begin to address this need, WWA has developed detailed recommendations for how local governments can amend land use ordinances to improve the efficiency and effectiveness of existing wetland land use policies and programs.

In this publication, we address an array of topics ranging from how to use purpose statements to clarify your community's intent to protect wetlands, to opportunities to make better use of existing technologies to improve the reliability of information gleaned from wetland maps. As you would expect from an organization whose mission is focused on wetland protection, several of our recommendations describe ways that local governments can exceed state minimum standards for wetland protection. In other recommendations we aim to help local governments clarify what is already protected and improve the integration of local land use decision-making with project reviews conducted under state and federal wetland laws. Also included are ideas to help local governments improve public understanding of the value of wetlands and reduce unauthorized wetland fill.

Many of our recommendations are based on findings from *An Inventory of Wisconsin Coastal Counties' Zoning and Land Division Ordinances*, a WWA research publication in which we reviewed the zoning and subdivision ordinances of Wisconsin's 15 Coastal Counties and evaluated how these counties use land use policies to facilitate wetland protection. Research on an additional 30 county zoning ordinances was completed in 2012.<sup>1</sup> This research provided insights into the current variability between county programs and helped us identify gaps in current protections. It also enabled us to identify examples of programs where Wisconsin counties exceed state minimum standards for wetland protection or have enacted special provisions to improve consistency between state and local programs. We describe and cite those examples throughout this publication.

The findings and recommendations derived from our research have applications for counties across the state. Towns, cities, villages, and tribes can also find information and recommendations relevant to their local ordinances. It is our hope that you will consider implementing some or all of these recommendations as part of your or community's effort to amend your shoreland and/or comprehensive zoning ordinance(s) to comply with recent revisions to Chapter NR 115, Wis. Adm. Code. The recommendations can also be used to help guide any future ordinance revisions resulting from your communities' ongoing zoning, planning, and conservation efforts.

It is also our interest to work with you to help you to determine which recommendations may be viable in your community, and to help build community and leadership support for new or

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<sup>1</sup> County reports can be found online at: <http://wisconsinwetlands.org/localgovs.htm>

revised land use and wetland policies. Additional information on how Wisconsin Wetlands Association can assist your community in these efforts is provided on page 3 of this publication.

Please consider us a resource and a partner in these efforts and please do not hesitate to share any questions, concerns, or feedback you have that would help us improve our local government outreach efforts.

A handwritten signature in black ink, appearing to read "Kyle Magyera". The signature is stylized with a large, sweeping flourish at the end.

Kyle Magyera | Policy Specialist  
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## **I. Why Adopt and Implement Local Wetland Protections?**

Many people think that federal and state wetland laws adequately protect wetlands and that local governments have no authority to enact policies that meet or exceed state and federal wetland laws. Some view local wetland policies as unnecessary or redundant. And leaders in many communities still view wetlands as impediments to development and economic growth. If you or members of your community share some or all of these perspectives, please consider the following:

- 1) Home rule provides local governments with the authority and opportunity to improve wetland protection.** In Wisconsin, local governments control land use. This provides them with the clear authority to enact shoreland or inland wetland protection policies that conform to or exceed state and federal standards. Counties, cities, villages, and towns follow different processes for enacting zoning ordinances, and the extent to which these communities have exercised their authority varies across the state (e.g., adoption of general vs. special purpose zoning). Despite this, as long as locally adopted wetland protections are not weaker than what is required by federal and state laws, home rule offers all local governments the *opportunity* to choose how they would like to protect wetlands. Be aware that local governments *are not restricted* from adopting and implementing local wetland policies that are more protective than federal and state wetland laws.
- 2) Local ordinances can clarify and stabilize what wetlands are protected and how.** Over the last decade, United States Supreme Court decisions and new state laws have changed which wetlands are protected and the extent of those protections. State and federal wetland laws also only regulate direct impacts (e.g., filling). With limited federal or state authority over activities occurring in, adjacent to, or upstream from wetlands (e.g., excavation, vegetation removal, stormwater runoff), many activities with wetland impacts proceed without review or approval. Local governments can enact ordinances to ensure that wetlands are protected from a wider range of land use activities.
- 3) Protecting local wetlands helps communities reduce the cost of water-related services.** Wetlands naturally provide stormwater management, flood control, drinking and surface water protection, shoreland stabilization, and other benefits. As wetland losses increase, so too do communities' expenses to construct and maintain the engineered infrastructure needed to replace wetland functions.
- 4) Local governments are better positioned to consider and respond to wetland concerns at a watershed scale.** Federal and state wetland permitting decisions are made on a case-by-case basis with little consideration of how wetland loss and degradation has or will affect the watershed or surrounding landscape. Through a combination of regulatory (e.g., ordinances) and non-regulatory (e.g., planning, mapping, restoration) approaches, local governments can move away from this case-by-case approach and ensure that decisions about development in or near wetlands are consistent with the community's plans and priorities.

## II. Points to Consider About These Recommendations

**1) All of these recommendations have been endorsed by the Wisconsin County Code Administrators (WCCA) Wetlands Ad-Hoc Committee and WCCA Executive Board.**

Additionally, Recommendations A and B are included in the WCCA *Wisconsin Shoreland Zoning Revision NR 115 Guidebook*. Both of these documents can be viewed and downloaded by visiting the WCCA webpage at: <http://www.wccadm.com>. The NR 115 Guidebook is also available at: <http://www.ncwrpc.org/NR115>.

2) The recently revised Shoreland Zoning Rule (NR 115) and WDNR's accompanying Minimum Shoreland Wetland Zoning Model Ordinance (Model Ordinance) did not address many of the long-standing challenges county and municipal governments face in implementing shoreland wetland zoning programs. The enclosed recommendations were written to help communities address some of these gaps. The WDNR Model Ordinance can be found at: [http://www4.uwsp.edu/cnr/uwexplakes/ecology/shorelands/NR%20115%20model%20revisions%20\(with%20markups\)%2014%20December%202010.pdf](http://www4.uwsp.edu/cnr/uwexplakes/ecology/shorelands/NR%20115%20model%20revisions%20(with%20markups)%2014%20December%202010.pdf).

3) NR 115.04(3) includes the following note: "*Local units of government, in the development and application of ordinances which apply to shoreland areas, must consider other programs of statewide interest and other state regulations affecting the lands to be regulated.*" However, the WDNR Model Ordinance does not provide detailed guidance to help counties adopt standards that are consistent with the standards with which permit applicants must comply under other sections of state law (e.g., stormwater and polluted runoff rules). This publication includes suggestions for how local governments can achieve this integration.

4) NR 115 requires counties to adopt the most recent version of the Wisconsin Wetland Inventory Maps and provides local governments with the discretion to make use of additional mapping tools. This publication describes how recently developed wetland mapping tools can be used to improve landowners' and staff's ability to determine whether a parcel contains wetlands.

5) The most effective way to significantly advance wetland protection is through enactment of policies that clearly articulate how wetlands within and outside of the designated shoreland zone are to be managed. This package contains detailed recommendations to help local governments clarify the extent and limits of local wetland protection policies.

### III. Opportunities for Further Assistance from Wisconsin Wetlands Association

If you or other local officials would like more information on the benefits of wetlands or these recommendations, Wisconsin Wetlands Association can help in the following ways:

**1) Provide copies of the *Land Use and Wetlands: A Local Decision Makers' Guide to Wetland Conservation* for distribution in your community.** This 8-page brochure provides basic information about the benefits of wetlands and requirements under wetland laws. It can be used to educate elected officials and/or to help facilitate discussions about wetlands and wetland priorities. Download the brochure for free at: <http://wisconsinwetlands.org/localgovs.htm>.



See Appendices I to III (pages 48-52) for more resources available from WWA and federal and state agencies that can help your local wetland conservation efforts.

**2) Provide one-on-one consultation with staff.** We are available by phone or e-mail to discuss any questions or concerns about local wetland protection.

**3) Present at, or participate in, relevant board or committee meetings or hearings.** We welcome the opportunity to provide wetland education and information or input at meetings pertaining to the adoption or implementation of these wetland zoning recommendations. Every effort will be made to accommodate requests for in-person assistance (as funding and capacity allow).

**4) Review and provide feedback on proposed ordinance language.** We also welcome the opportunity to help communities think through any new or desired revisions to their local wetland policies. Every effort will be made to accommodate requests for in-person assistance (as funding and capacity allow).

**5) Provide and deliver wetland trainings.** We can plan and deliver field-based workshops that can help local officials recognize wetlands, address wetlands in planning and zoning scenarios, and understand how wetlands benefit local communities. WWA can help organize workshops for specific communities or for a regional audience. Workshops can also be tailored to meet the training needs of various audiences (e.g., board members, plan commissions, building inspectors, transportation planners, etc.).

*Requests for assistance with local wetland policy development or training should be directed to Policy Specialist Kyle Magyera. 608-250-9971 / [kyle.magyera@wisconsinwetlands.org](mailto:kyle.magyera@wisconsinwetlands.org).*

*Additional information, including links to all of Wisconsin Wetlands Association's Land Use and Wetlands publications, can be found at <http://wisconsinwetlands.org/localgovs.htm>.*

## IV. Zoning Recommendations



Photo: Eric Epstein – Bark Bay Slough (Bayfield County), a *Wetland Gem*<sup>™</sup> as designated by the Wisconsin Wetlands Association.

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***Recommendation A: Modify the Purpose and Intent section of the ordinance to identify wetland protection as a distinct goal and to recognize how wetland protection and restoration advances other zoning objectives.***

The Purpose and Intent section of an ordinance articulates the goals and objectives of an ordinance, and sometimes includes a description of the means by which these goals will be met. These statements reflect local governments' land use priorities, provide the basis for decision-making, and help educate the public on the range of concerns the ordinance aims to address. Conversely, omissions from these statements may imply a lack of commitment to certain goals.

Including wetland protection as a distinct goal in the Purpose and Intent statement of a shoreland or general zoning ordinance confirms your jurisdiction's commitment to implement and enforce its wetland zoning requirements.

Local governments can also bolster public understanding of wetlands and support for wetland preservation by adding ordinance language that outlines how protecting and restoring wetlands can help the community meet other traditional zoning objectives.

For example, zoning ordinances often include standard objectives such as "reduce water pollution," "protect public safety," and "preserve fish and wildlife habitat." Many people, including policy makers, may not know that wetlands provide a suite of related public benefits (i.e., wetland functions). These include water quality improvement, flood attenuation, fish and wildlife habitat, groundwater recharge, shoreland erosion control, and preservation of natural scenic beauty.<sup>2</sup>

**What options are available to implement this recommendation?**

These recommendations correspond to Sections 1.3-1.34 (Purpose and Intent) of the WDNR Minimum Shoreland Wetland Model Ordinance and/or similar sections of a typical General Zoning Ordinance.

1. Add the following bullet to Section 1.31 (*Further the Maintenance of Safe and Healthful Conditions and Prevent and Control Water Pollution Through*):
  - (5) Preserving wetlands to minimize runoff and soil erosion.
  
2. Add the following bullets to Section 1.34 (*Preserve and Restore Shoreland Vegetation and Natural Scenic Beauty Through*):
  - (5) Preventing the destruction and degradation of wetlands.
  - (6) Preserving native wetland plant/tree communities.
  
3. Add Section 1.35 (*Protect and Preserve Wetlands Through*):
  - (1) Restricting the placement of fill material in wetlands.
  - (2) Encouraging avoidance and minimization of wetland impacts.
  - (3) Preserving native wetland plant/tree communities.

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<sup>2</sup> <http://dnr.wi.gov/topic/wetlands/function.html>

4. Add Section 1.36 (*Prevent Flood Damages Through*):

- (1) Restricting filling, grading, and the placement of buildings and structures in floodplains and wetlands.
- (2) Preserving the ecological integrity of floodplains and wetlands.
- (3) Restoring floodplains and wetlands to increase floodwater storage.

**Are these recommendations mandatory per recent State law revisions?**

No. However, the recommendation to include wetland protection as a distinct goal is consistent with the intent of the minimum state standards, which require the establishment of shoreland wetland zoning districts to reduce development in shoreland wetlands.<sup>3</sup>

The WDNR Model Ordinance does recommend including wetland preservation as a means to protect spawning grounds, fish, and aquatic life.<sup>4</sup>

The model ordinance fails to include wetland preservation as a means to prevent water pollution or protect scenic beauty and fails to recognize the reduction of floods and flood damages as a distinct goal. Protecting people and property from floods is yet another common zoning objective that can be advanced through wetland protection and restoration.

**Have other local governments already adopted a similar recommendation?**<sup>5</sup>

*Yes, as follows:*

***Clearly State How Wetlands Can Help Advance Other Zoning Goals:***

**Vilas County** identifies “preserving wetlands and other fish and aquatic habitat” as a method or strategy for achieving the goals of “promoting the public health, safety, convenience and welfare, to: further the maintenance of safe and healthful conditions; protect spawning grounds, fish and aquatic life; preserve shore cover and natural beauty; prevent and control water pollution; prevent erosion of the soil; preserve the compatibility of proposed development with existing land and water usage; and control building sites, placement of structures and land uses.”<sup>6</sup>

**Dodge County**, though not in its ordinance’s purpose statement, clearly recognizes the role that wetlands can play in meeting certain zoning objectives by stating that the Wetland District is intended to:

- a) reduce water pollution by filtering surface water runoff through existing wetlands;
- b) reduce the impact of flooding by maintaining the floodwater storage capacity of existing wetlands;
- c) protect spawning grounds, fish and wildlife habitat, and other aquatic life; and preserve natural resources associated with wetlands, lakes, rivers, and streams;

<sup>3</sup> NR 115.04

<sup>4</sup> Wisconsin Department of Natural Resources (DNR) “Minimum Shoreland Wetland Zoning Model Ordinance” (June 3, 2010), page 5.

<sup>5</sup> Results based on a Wisconsin Wetlands Association inventory of ordinances in 15 WI coastal counties and 30 non-coastal counties.

<sup>6</sup> Section 1.3 Vilas County Shoreland Zoning Ordinance

- d) protect wetland vegetation as a component of the natural environment, beauty, and rural character of the County; and promote permanent open space to define and buffer areas of more intense development.<sup>7</sup>

***Identify Wetland Protection and/or Restoration as a Distinct Goal of the Ordinance:***

**Dodge County** has a goal in its ordinance “to prevent the adverse impacts of development on sensitive natural resources and the availability of water, water quality, roads and transportation, floodplains, wetlands, areas of shallow soils, and steep slopes in critical areas of the County.”<sup>8</sup>

**Door and Outagamie County** include “to preserve wetlands” as a distinct goal in the purpose statement of their ordinances.<sup>9</sup>

**Dunn and Eau Claire County** include a goal in their ordinances “to protect and conserve the natural resources of the county, including agricultural lands, forests, wetlands, surface and groundwater, by conserving the most appropriate use of land.”<sup>10</sup>

**Kenosha, Racine, and Walworth Counties’** purpose statements all read: “to obtain the wise use, conservation, development and protection of the county’s water, soil, wetlands, woodlands, wildlife and other natural resources and attain a balance between land uses and the ability of the natural resource space to support and sustain such uses.”<sup>11</sup>

**Walworth County’s** purpose statement also includes a goal “to encourage the restoration of previously drained wetlands.”

**Waukesha County** seeks “to provide for conservation of wetlands.”<sup>12</sup>

**Ashland, Brown, Chippewa, Columbia, Douglas, Fond du Lac, Florence, Iowa, Iron, Kewaunee, Langlade, Lincoln, Marinette, Oneida, Outagamie, Ozaukee, Price, Rock, Sauk, and Shawano Counties** list “wetland preservation” as a means to protect spawning grounds, fish, and aquatic life (as recommended in the WDNR model ordinance).<sup>13</sup>

<sup>7</sup> Chapter 3.5.2 Dodge County Land Use Code

<sup>8</sup> Chapter 1.3.4 Dodge County Land Use Code

<sup>9</sup> Chapter 1.04(9) of the Door County Zoning Ordinance and Section 54-2 Outagamie County Zoning Code

<sup>10</sup> Chapter 1.8 Dunn County Zoning Ordinance and Chapter 18.01.010 Eau Claire County Code

<sup>11</sup> Section 12.01-3 (26) of the Kenosha County Zoning Ordinance; and Section 20-4(b)(3) of the Racine County Zoning Ordinance

<sup>12</sup> Section 1.01 The Waukesha County Zoning Code

<sup>13</sup> Section 1.3 Ashland County Shoreland Amendatory Ordinance; Chapter 22.03 Brown County Shoreland Wetland Zoning Ordinance; Section 54-4 Chippewa County Shoreland Zoning Ordinance; Section 16-5-3 Columbia County Code of Ordinances; Section 1.3, Chapter 8.4 Douglas County Shoreland Zoning Ordinance; Chapter 44-4 Fond du Lac County Shoreland Zoning Ordinance; Chapter 1.03 (B) Florence County Shoreland and Wetland Zoning Ordinance; Section 1.32 Iowa County Shoreland/Wetland Ordinance Section 1.3 Iron County Land Use Ordinance; Section 1.32(1) Kewaunee County Shoreland Zoning Ordinance; Section 17.30(3) Langlade County Zoning Code; Chapter 21.03(4) Lincoln County Shoreland Zoning Ordinance; Chapter 21.01(3) Marinette County Shoreland / Wetland Zoning Ordinance; Chapter 9.11 Oneida County Zoning and Shoreland Protection Ordinance; Section 44-3 Outagamie County Shoreland Wetland Zoning Ordinance; Chapter 7.0104 Ozaukee County Floodplain and Zoning Ordinance; Section 16.02(2)(d) Rock County Zoning Ordinance; Section 8.01(3) Sauk County Shoreland Protection Ordinance; Section 1.32 Shawano County Shoreland Zoning Ordinance; Section 1(b) Waukesha County Shoreland & Floodland Protection Ordinance

Beyond Vilas County, the purpose statements we reviewed do not expressly recognize that wetland protection and restoration provide other benefits including: water quality improvement, flood damage prevention, wildlife habitat, and scenic beauty.

**Adoption of this recommendation will enable local governments to:**

<input checked="" type="checkbox"/> Improve implementation/effectiveness of shoreland and/or general zoning ordinances	<input checked="" type="checkbox"/> Advance goals already identified in most zoning ordinances
<input type="checkbox"/> Address wetland mapping deficiencies	<input checked="" type="checkbox"/> Have more flexibility to condition zoning approvals to protect sensitive resources
<input type="checkbox"/> Reduce wetland regulatory disputes, unauthorized wetland impacts, and/or confusion over which wetlands are protected	<input type="checkbox"/> Improve integration/collaboration between zoning offices and state and federal wetland regulatory authorities
<input checked="" type="checkbox"/> Improve consistency between local zoning laws and state and federal wetland regulations <sup>+</sup>	<input type="checkbox"/> Make use of best available technology and/or external expertise
<input checked="" type="checkbox"/> Educate applicants about the benefits of wetlands and/or wetland laws	

**Additional comments:**

<sup>+</sup> Wisconsin’s Water Quality Standards for Wetlands<sup>14</sup> recognize and protect the following water quality–related functional values or uses of wetlands: Storm and floodwater storage and retention; groundwater discharge and recharge; filtration or storage of sediments, nutrients, or toxic substances; shoreline protection against erosion; habitat for aquatic organisms and resident and transient wildlife species; and recreational, cultural, educational, scientific, and natural scenic beauty values and uses.

As with zoning ordinances, many other local policies and plans include a purpose and intent section with clearly stated goals and objectives (e.g., subdivision regulations, stormwater ordinances, local comprehensive plans, and land and water resource management plans). Incorporating wetland protection and restoration goals and objectives into these types of policy and planning documents can improve wetland protection and improve the consistency of conservation objectives across projects and programs.

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<sup>14</sup> NR 103.03

***Recommendation B: Protect all wetlands in the shoreland zone.***

*(Establish a wetland district based on wetland definitions and field conditions; Use best available technology and information generated in state and federal wetland permit reviews to implement.)*

State law defines *wetlands* as “those areas where water is at, near or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which have soils indicative of wet conditions.”<sup>15</sup> The State of Wisconsin regulates (requires review and approval of) construction activities in all wetlands, regardless of wetland size or location. Though local governments have the authority to exceed state minimum shoreland zoning standards (i.e., Chapter NR 115, Wis. Adm. Code),<sup>16</sup> the minimum standards only require local protection of wetlands that fall within the shoreland zone and appear on the Wisconsin Wetland Inventory (WWI).<sup>17</sup> Because the minimum mapping unit is 2 or 5 acres, depending on the county, projects that impact wetlands of less than 2 or 5 acres can proceed with no local land use review in many counties. As time passes between ordinance updates, the most recent version of the WWI maps (i.e., the most accurate) may also not be referenced in the code.

The adoption and strict use of a particular version of the WWI for the regulation of shoreland (or inland) wetlands can be confusing to the public and can pose challenges. These challenges include but are not limited to:

1. A public perception that “if it’s not on a map it’s not a wetland”;
2. A public perception that wetlands less than 2 (or 5) acres are not regulated under any laws;
3. Confusion over where a wetland starts and stops due to discrepancies between map boundaries and field conditions;
4. A need to update the ordinance if/when new WWI maps are released;
5. An unnecessary restriction of the county’s authority to discourage development in small wetlands (< 2-5 acres), ephemeral ponds, forested wetlands, and other wetlands that tend to be underrepresented on the WWI due to the limitations of using remotely sensed information as the primary data source;<sup>18</sup>
6. The need for a dispute-resolution process in counties that wish to regulate based on field conditions but rely on WWI maps as the baseline for their jurisdiction.

These challenges can be easily addressed by designating the Shoreland-Wetland district to include all wetlands (regardless of depiction on WWI maps) and adopting some or all of the

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<sup>15</sup> NR 115.03(13)

<sup>16</sup> NR 115.01 states “*Nothing in this rule shall be construed to limit the authority of a county to enact more restrictive shoreland zoning standards under s. 59.69 or 59.692, Stats., to effect the purposes of s. 281.31, Stats.*”

<sup>17</sup> NR 115.04(2)(b)

<sup>18</sup> In the Wisconsin Wetland Inventory Disclaimer, the Wisconsin Department of Natural Resources states “there is no attempt, in either the design or products of this inventory, to define the limits of jurisdiction of any Federal, State, or local government or to establish the geographical scope of the regulatory programs of government agencies.”

implementation recommendations below. These changes can help local governments enhance wetland protection and reduce regulatory confusion and conflicts. We note that many of the recommendations can be implemented at little to no additional expense to the local community and may improve the efficiency of shoreland-wetland zoning program implementation. Additionally, the policy options can specifically help local governments comply with the Wisconsin Department of Natural Resources (WDNR) requirement that local ordinances do not limit the application of shoreland-wetland zoning protections to wetlands of a certain size (i.e., references to acreages associated with WWI maps).<sup>19</sup>

### **What options are available to implement this recommendation?**

These recommendations correspond to Sections 2.2 (Shoreland-Wetland Maps); 2.3 (Compliance); 2.52 (Abrogation and Greater Restrictions); 3.1 (Designation); 3.11 (Locating Shoreland-Wetland Boundaries); 8.13 (General Standards); and 8.4 (Permit Conditions) of the WDNR Minimum Shoreland-Wetland Zoning Model Ordinance and/or the similar sections of a typical General Zoning Ordinance.

1. Modify Section 3.1 *Designation* to clearly indicate that all wetlands are protected in the intended jurisdiction (within or outside the shoreland zone). Include language to establish that maps are used to help identify wetlands but that the regulations apply to lands where field conditions meet the definition of wetlands. This section could be written as follows:

*The Shoreland-Wetland District shall include those [shoreland] areas meeting the wetland definition as defined in Wis. Adm. Code ch. NR 115.03(13).<sup>20</sup> All wetlands, regardless of whether they appear on a map, are subject to regulations contained in the [Shoreland-] Wetland District, and also to applicable federal and state wetland regulations.*

*The maps adopted as part of this ordinance show the general location of wetlands and are intended to alert landowners when a wetland is likely to be present. Maps are intended to be used as a guide and should not be relied upon for definitively determining if a wetland is present or for delineating the wetland boundary. Maps cannot serve as a substitute for having a wetland identified or wetland boundary delineated by a certified wetland delineator, trained wetland professional, or staff from the Wisconsin Department of Natural Resources (WDNR) or the United States Army Corps of Engineers (USACE).*

In addition, we recommend specifying that all wetlands partially located in the shoreland zone are protected and included in the shoreland jurisdiction.

2. Modify Section 2.2 *Shoreland Wetland Maps* to allow the use of best available information to identify known and potential wetlands in the Shoreland Wetland District, including but not limited to:

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<sup>19</sup> H. Kennedy, WDNR, personal communication, October 2012

<sup>20</sup> NR 115.03(13) and also Wis. Stat. ch. 23.232 define wetlands as “those areas where water is at, near or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which have soils indicative of wet conditions.”

- (1) Any current *and revised* WWI maps. This avoids the need to formally adopt new maps as the most recent version of the WWI maps *shall* be considered part of the zoning ordinance);
- (2) WDNR's Wetland Indicator Maps. These maps show potential wetlands, based on the locations of hydric or wetland soils, and are available for free, on-line, through WDNR's Surface Water Data Viewer;<sup>21</sup>
- (3) Other maps and images that can be readily used to help zoning staff and landowners evaluate the presence or absence and likely extent of wetlands.

The *Shoreland Wetland Maps* section should also include the following caveat: *Due to inherent inaccuracies in wetland mapping tools, maps are to be used for planning purposes only.*

If relying on maps for zoning purposes, we suggest adding the following statement in relevant sections of the ordinance:

*Landowners shall consult the Wisconsin Wetland Inventory maps, WDNR Wetland Indicator maps, and other pertinent resources to determine if a wetland may be impacted by their proposed project.*

3. Amend Section 3.11 *Locating Shoreland Wetland Boundaries* to outline a dispute resolution process for verifying the presence and boundaries of wetlands when discrepancies exist between wetlands identified through a map review and actual field conditions. An ordinance can clearly state that this resolution process is to be used when both a wetland and non-wetland have been discovered through the local permit review. Section 3.11 of the new WDNR Model Ordinance reads:

*Where an apparent discrepancy exists between the Shoreland-Wetland district boundary shown on the Wisconsin Wetland Inventory maps and actual field conditions, the county shall contact the Department to determine if the map is in error. If the Department determines that a particular area was incorrectly mapped as wetland **or meets the wetland definition** but was not shown as wetland on the map, the county shall have the authority to immediately grant or deny a shoreland zoning permit in accordance with the applicable regulations based on the Department determination as to whether the area is wetland. In order to correct wetland mapping errors on the official zoning map, an official zoning map amendment must be initiated within a reasonable period of time.*

4. Require a permit for any project proposed within a wetland or within a specified distance (e.g., 100 feet) of a wetland. Establishing permit requirements (e.g., conditional use permit process) can clarify that all wetlands are protected. Compared to a rezoning process, local permitting requirements can provide a more straightforward way to regulate projects that may affect wetlands. These permit requirements can also help account for the inherent inaccuracies of wetland mapping tools and to ensure that more, if not all, of the wetland area is protected. See Recommendation D for more details.

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<sup>21</sup> <http://dnr.wi.gov/topic/wetlands/mapping.html>

The resources and expertise of state and federal regulatory staff can be leveraged by deferring to their jurisdictional determinations to establish when an area meets the criteria for inclusion in the Shoreland-Wetland District. This could be accomplished by establishing a blanket permit condition requiring that zoning approvals of projects with wetland impacts are not valid until federal and/or state wetland permits are received. Such a provision could be inserted in Section 8.13 or 8.4 of the WDNR’s model ordinance. See Recommendation D for more details.

**Is this recommendation mandatory per recent State law revisions?**

Partly. WDNR is requiring communities to remove references in their ordinances to the acreage limits associated with the WWI maps. To be compliant with NR 115, an ordinance may no longer refer to wetlands 2 or 5 acres or more when specifying which wetlands are to be designated in the Shoreland-Wetland district.<sup>22</sup> This does not mean that WDNR will require communities to regulate wetlands based on field conditions, but it does mean that communities cannot restrict the size of wetlands that will be protected by a shoreland-wetland zoning ordinance.

In addition, some of the policy options outlined above are recommended in the WDNR Minimum Shoreland Wetland Zoning Model Ordinance. For example, Section 3.11 *Locating Shoreland-Wetland Boundaries of the Model Ordinance* outlines the dispute resolution process that reserves local governments the right to regulate based on actual field conditions.

The recommended definition of “Shoreland-Wetland District” in Section 16.2(24) of the model ordinance provides local governments with the flexibility to define for themselves which maps or mapping tools shall be adopted for use in the implementation of this ordinance as follows:

*Shoreland-wetland district means the zoning district, created as a part of this shoreland zoning ordinance, comprised of shorelands that are designated as wetlands on the wetland maps which have been adopted and made a part of this ordinance.*

**Have other local governments already adopted a similar recommendation?<sup>23</sup>**

*Yes, as follows:*

***Regulation Based on Field Conditions:***

**Door, Florence, Marinette, Oconto, Sawyer, Sheboygan, Vilas, and Walworth Counties** have adopted dispute resolution language similar to the recommendation contained in Section 3.11 *Locating Shoreland Wetland Boundaries* in the WDNR Model Ordinance.<sup>24</sup> See excerpt above for more information on Section 3.11 in the WDNR Model Ordinance.

<sup>22</sup> H. Kennedy, WDNR, personal communication, October 2012

<sup>23</sup> Results based on a Wisconsin Wetlands Association inventory of ordinances in 15 WI coastal counties and 30 non-coastal counties.

<sup>24</sup> Chapter 2.02(2)(h) Door County Zoning Ordinance; Chapter 2.02 (B) and Chapter 10.01 Florence County Shoreland and Wetland Zoning Ordinance; Chapter 21.09(4)(a)(1) Marinette County Shoreland-Wetland Zoning Ordinance; Chapter 72.08 Sheboygan County Shoreland Zoning Ordinance; Section 10.1 Vilas County Shoreland Zoning Ordinance; Section 74-179 (4) Walworth County Zoning Ordinance

**Kenosha County** outlines a dispute resolution process for reconciling discrepancies between district maps and actual field conditions. Steps include a request to WDNR to stake the boundaries of the district and an opportunity for the landowner to pursue a final wetland determination on the property.<sup>25</sup>

**Oneida County and Sauk County** state that areas otherwise determined officially to be wetlands in shoreland areas (i.e., meet the state’s wetland definition) are protected by the Shoreland-Wetland District.<sup>26</sup>

**Ozaukee County** states that their Shoreland-Wetland District protects “all wetlands located in whole or in part within the shoreland area.” The County is required to use the most recent version of the Wisconsin Wetland Inventory, air photo interpretations, and field delineations to identify all shoreland wetlands.<sup>27</sup>

**Waukesha County** clarifies that “*all other wetlands subsequently identified by the Zoning Administrator, Zoning Agency, SEWRPC [Southeast Wisconsin Regional Planning Commission], ACOE [US Army Corps of Engineers] or the WDNR [Wisconsin Department of Natural Resources] within the shoreland boundaries but not noted on the Wisconsin Wetland Inventory Maps, are subject to regulations contained in the C-1 Conservancy District.*”<sup>28</sup>

**Waukesha County** allows use of the “best available information” so that the C-1 Conservancy District best represents the edge of “marsh lands, swamps, floodlands, wetlands or the ordinary high water mark along streams or other watercourses.” This available information includes topographic maps, soil maps, aerial photographs, infield botanical inventories, floodplain studies, and other sources of information available which would lend assistance to such a determination and may be finally determined by actual conditions in each specific situation.<sup>29</sup>

#### ***Use of Best Available Data:***

**Barron County** states that in addition to the Wisconsin Wetland Inventory, the County may use the following additional data when determining the areas to be located in the Wetland Conservancy (C-1) District:

- All lands designated as swamps and marshes on the US Geological survey quadrangle maps for the county within the shoreland jurisdictions;
- All lands held by the State for wildlife, waterfowl, fish and aquatic life habitat purposes which are swamps or marshes;
- All lands designated as “peat and muck” on the County detailed soils survey maps and within the shoreland jurisdiction; and other lands designated as such on the county zoning

<sup>25</sup> 12.25-1(c) Kenosha County General Zoning and Shoreland/Floodplain Zoning Ordinance

<sup>26</sup> Chapter 9.92 (B) and 9.91 (B) (2) Oneida County Zoning and Shoreland Protection Ordinance and Chapter 8.10(1) Sauk County – Shoreland Protection Ordinance

<sup>27</sup> Chapter 7.0602

<sup>28</sup> Section 6 (b) Waukesha County Shoreland & Floodland Protection Ordinance

<sup>29</sup> Section 6 (b) Waukesha County Shoreland & Floodland Protection Ordinance

map because they are swamps or marshes or are immediately adjacent to such swamps or marshes.<sup>30</sup>

**Kenosha County** allows the use of “best available data” for determining which areas are to be included in the C-1 Lowland Resource Conservancy District, as follows:

*The Kenosha County Office of Planning and Zoning Administration shall develop district maps reflecting the best data available. The district delineation process shall make use of the Wisconsin Wetland Inventory Maps for Kenosha County, dated June 20, 1985, and stamped “FINAL”; and other maps used by the Southeastern Wisconsin Regional Planning Commission in delineating primary environmental corridors.*<sup>31</sup>

***Small Wetland Protections:***

**Marinette County** created a Conservancy District and uses a conditional use permit process to protect shoreland wetlands that are two acres or smaller (i.e., unmapped wetlands).<sup>32</sup>

**Oneida County** protects unmapped shoreland wetlands that are less than 2 acres located in whole or in part within 200 feet of a navigable waterway by requiring a shoreland alteration permit for any filling, draining, or dredging.<sup>33</sup>

**Adoption of this recommendation will enable local governments to:**

<input checked="" type="checkbox"/> Improve implementation/effectiveness of shoreland and/or general zoning ordinances	<input checked="" type="checkbox"/> Advance goals already identified in most zoning ordinances
<input checked="" type="checkbox"/> Address wetland mapping deficiencies	<input checked="" type="checkbox"/> Have more flexibility to condition zoning approvals to protect sensitive resources
<input checked="" type="checkbox"/> Reduce wetland regulatory disputes, unauthorized wetland impacts, and/or confusion over which wetlands are protected	<input checked="" type="checkbox"/> Improve integration/collaboration between zoning offices and state and federal wetland regulatory authorities
<input checked="" type="checkbox"/> Improve consistency between local zoning laws and state and federal wetland regulations	<input checked="" type="checkbox"/> Make use of best available technology and/or external expertise
<input checked="" type="checkbox"/> Educate applicants about the benefits of wetlands and/or wetland laws	

<sup>30</sup> Section 17.29 Barron County Land Use Ordinance

<sup>31</sup> Section 12.25-1(b) Kenosha County General Zoning and Shoreland/Floodplain Zoning Ordinance

<sup>32</sup> Chapter 21.09(5) Marinette County Shoreland / Wetland Zoning Ordinance

<sup>33</sup> Chapter 9.92 (B) and 9.91 (B) (2) Oneida County Zoning and Shoreland Protection Ordinance

**Additional comments:**

Implementing aspects of these recommendations will likely increase workload temporarily but the expected reductions in regulatory conflicts and unauthorized fill may result in greater efficiency in the implementation of the program over the long term.

Re: the use of wetland definitions and descriptions – In a review of the zoning and land division ordinances of Wisconsin’s 15 coastal counties, we found some inconsistencies in how local governments define wetlands. We also identified cases where counties use the term “marsh” as a substitute for the word wetland. Because marshes are just one of 12 wetland community types found on Wisconsin’s landscape, we recommend using the more inclusive term “wetland.” When defining wetlands, we recommend using the definition used under various sections of state law and code, which reads:

*Wetlands are defined as those areas where water is at, near or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation and which have soils indicative of wet conditions.*<sup>34</sup>

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<sup>34</sup> NR 115.03(13)

***Recommendation C: Encourage wetland conservation as a shoreland mitigation measure.***

The new shoreland zoning rules require landowners to develop and implement a county-approved mitigation plan to offset new impacts to natural shoreland functions and values. The rules call for measures to help improve water quality, fish and wildlife habitat, and natural scenic beauty, but do not specify the types of mitigation measures required. Because wetlands naturally provide water quality, fish and wildlife habitat, natural scenic beauty, and other functions, wetland conservation activities meet shoreland mitigation objectives. Wetland protection, restoration, and enhancement measures can all be approved as shoreland mitigation practices.

Most counties will employ one of two systems for helping landowners comply with shoreland mitigation requirements:

1. A point system where each mitigation measure is assigned a point value and the landowner must accumulate a specified number of points through the installation of one or more approved practices.
2. A menu system where the ordinance presents a suite of practices landowners may choose from to satisfy shoreland mitigation requirements. Menu systems may be entirely optional (e.g., *choose any 2 of the following 5 measures*), or may call for a combination of required and optional measures.

Under either system, we recommend identifying a set of pre-approved wetland measures that can be incorporated into shoreland mitigation plans. Approved practices can be codified as part of the zoning ordinance, or simply presented as allowable options for landowners to consider in the development of a mitigation plan. If neither system is used, local governments can still look for opportunities to have landowners preserve, restore, or enhance wetlands as part of their shoreland mitigation projects.

In addition to helping landowners meet shoreland mitigation requirements, encouraging shoreland mitigation projects that protect, restore, or enhance wetlands provides local governments with an effective new tool to increase wetland acreage *and* improve wetland functions in the shoreland zone. It also offers an innovative opportunity to simultaneously allow shoreland development and advance wetland conservation objectives.

**What options are available to implement this recommendation?**

Whether through a point system or a list of approved practices, some or all of the following activities can be encouraged or required in shoreland mitigation plans:

1. Establishing wetland structural setbacks or vegetated buffers. See Recommendation F for more details. Consider awarding more mitigation points for science-based buffers (e.g., at least 100 feet).
2. Restoring or enhancing the functions of a former or degraded wetland (e.g., break tiles, fill or plug ditches, control invasive species, plant native vegetation).
3. Recording a conservation easement on a wetland. Placement of a conservation easement ensures that a wetland will remain preserved in perpetuity. Management restrictions or

requirements can be used to protect or enhance the functions and values of the protected wetland.

Consider allowing these wetland conservation measures on a shoreland property or nearby non-shoreland property (i.e., within the watershed), where the wetland will improve water quality, wildlife habitat, and/or natural scenic beauty for the affected lake, river, or stream. The ordinance could specify that on-site mitigation is preferred, but if infeasible, the landowner may consider off-site mitigation in the development of a shoreland mitigation plan.

**Is this recommendation mandatory per recent State law revisions?**

No. Including wetland conservation in shoreland mitigation plans is not required, but shoreland mitigation is required in certain situations (e.g., new construction that exceeds impervious cover limits). WDNR does recommend wetland conservation as a shoreland mitigation measure. Including wetland preservation, restoration, and enhancement measures in the suite of allowable shoreland mitigation practices provides landowners with more options and communities with an opportunity to maximize the water quality, fish and/or wildlife habitat, natural scenic beauty, and other public benefits delivered by a particular shoreland mitigation project.

**Have other local governments already adopted a similar recommendation?**

Unknown. Before NR 115 was revised in 2010, some counties had voluntarily adopted and implemented shoreland mitigation programs. WWA has not identified any counties that *explicitly* codified wetland conservation as a means to meet the objectives of their shoreland mitigation programs; however, we do not know the extent to which these counties encouraged wetland conservation within their programs.

**Adoption of this recommendation will enable local governments to:**

<input checked="" type="checkbox"/> Improve implementation/effectiveness of shoreland and/or general zoning ordinances	<input checked="" type="checkbox"/> Advance goals already identified in most zoning ordinances
<input type="checkbox"/> Address wetland mapping deficiencies	<input type="checkbox"/> Have more flexibility to condition zoning approvals to protect sensitive resources
<input type="checkbox"/> Reduce wetland regulatory disputes, unauthorized wetland impacts, and/or confusion over which wetlands are protected	<input checked="" type="checkbox"/> Improve integration/collaboration between zoning offices and state and federal wetland regulatory authorities
<input checked="" type="checkbox"/> Improve consistency between local zoning laws and state and federal wetland regulations	<input checked="" type="checkbox"/> Make use of best available technology and/or external expertise
<input checked="" type="checkbox"/> Educate applicants about the benefits of wetlands and/or wetland laws	

### **Recommendation D: Adopt “avoid and minimize” standards for wetland impacts.**

Federal and state wetland laws require that landowners design projects to avoid and minimize wetland impacts to the maximum extent practicable. Under both state and federal law, permits may only be granted for *unavoidable* wetland impacts that will not cause significant adverse impacts to wetland functions.<sup>35</sup> Under home rule, local governments can adopt and implement similar or more stringent “avoid and minimize” standards within their local permitting processes (e.g., conditional use or land disturbance permits). Doing so offers counties the opportunity to:

1. Strengthen local control over development in sensitive areas;
2. Address gaps in state and federal wetland protections;
3. Require local compensation (mitigation) for local wetland impacts;
4. Improve integration/collaboration with state and federal agencies;
5. Improve communications/customer relations with permit applicants;
6. Achieve efficiencies in the implementation of zoning and other land use ordinances;
7. Reduce regulatory conflicts.

With a few exceptions, state and federal wetland regulations provide little acknowledgement of the independent and important role that local land use decision-makers can and do play to protect wetlands across Wisconsin. For example, wetland legislation passed in 2012 (Act 118) established new standards for pre-application meetings, but did not require the state to coordinate those meetings with local agencies. That same piece of legislation required the state to consult with local governments on the siting and approval of wetland mitigation banks, but also allowed for mitigation to occur far from the community where the impacts occurred.

There are many gaps in federal and state wetland laws that affect the health of wetlands and local communities (see sidebar). By adopting avoidance, minimization, and mitigation standards, local governments can establish local wetland permitting programs that reflect the needs and priorities of the local community.

***How are wetlands impacted by land disturbing activities?*** Wetlands are impacted by land disturbances occurring both within and outside the wetland boundary. These impacts are commonly referred to as direct and indirect impacts.

**Direct impacts** result from activities such as filling, dredging, and grading that take place immediately within the wetland. Activities that produce direct impacts are largely regulated by federal and state wetland laws; however, some excavation and vegetation removal activities may fall outside the jurisdiction of these laws.

**Indirect impacts** result from alterations to hydrology, topography, and vegetative cover in or on areas hydrologically connected to wetlands. Grading, groundwater pumping, and other activities on areas adjacent to, upstream, or even downstream of a wetland can cause, for example:

- increased ponding, drawdowns, and other changes to the hydroperiod;
- increased deposition of sediment, nutrients, and pollutants;
- decreased diversity due to the invasion by non-native or noxious plants.

Indirect impacts are poorly regulated under federal and state wetland laws.

<sup>35</sup> NR 103.08(3), Wis. Adm. Code and Section 404(b)(1) of the federal Clean Water Act

### **What options are available to implement this recommendation?**

These recommendations correspond with Sections 2.3 (Compliance); 2.5 (Abrogation and Greater Restrictions); 8.0 (Filling, Grading, etc.); and 13.2 (Permits) of the WDNR Minimum Shoreland Wetland Model Ordinance and similar sections of a typical General Zoning Ordinance.

1. Establish permit requirements that clearly state that a landowner must receive local approval before disturbing any portion of a wetland. Include standards that require landowners to avoid and minimize wetland impacts to the greatest extent practicable. These could mirror or be more restrictive than those standards contained in federal and state wetland laws.

We suggest clarifying that these permit requirements are in effect for any wetland regardless of whether it appears on a wetland map (see Recommendation B).

We also recommend that permit requirements apply to most, if not all, land-disturbing activities in or near wetlands to ensure that there is local control over activities that may not be regulated under federal and state wetland laws (e.g., excavation).

Local wetland permit conditions should require permit applicants to first avoid wetland impacts and then minimize any remaining impacts. Conditions should also allow the local government to collect the best available data to make an informed decision. The following examples of local conditions have been adapted from select state and local permit standards:

- *The permit applicant shall submit a proposal that shows the location of the wetland and identifies the wetland type and functions to be altered by the project.*
- *The proposed project cannot avoid wetland impacts.*
- *The proposed project minimizes wetland impacts to the greatest extent practicable.*
- *The project will only impact wetlands that have low functional values to ensure that the project will have minimal adverse environmental effects.*
- *The project will be constructed in a manner that will maintain wetland hydrology in the remaining wetland complex.*
- *The project shall comply with Wisconsin's water quality standards for wetlands found in Chapter NR 103, Wis. Adm. Code.*
- *Construction shall be accomplished in such a manner as to minimize erosion and siltation into surface waters and wetlands. All erosion control measures shall meet or exceed the Department-approved technical standards of ss. NR 151.11 and 151.12, Wis. Adm. Code.<sup>36</sup>*

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<sup>36</sup> The technical standards are found at: <http://dnr.wi.gov/runoff/stormwater/techstds.htm>.

A local ordinance could also include standards on compensatory wetland mitigation. State and federal law requires compensatory wetland mitigation for **unavoidable** impacts equal to or greater than 10,000 square feet but does not consistently require that this compensation take place within the community or watershed of the authorized wetland impact(s). Adapted from Washington County,<sup>37</sup> local wetland mitigation standards could read:

- *Compensatory wetland mitigation shall be required for projects with unavoidable wetland impacts of [e.g., 10,000 square feet] or more.*
- *The permit applicant shall develop at least one proposal that describes the type, amount, and location of compensatory wetland mitigation and which meets the following standards:*
  - a) *The mitigation proposal is located on the property of the proposed wetland alteration unless site limitations prohibit that option;*
  - b) *If the mitigation proposal cannot be located on the subject property, the mitigation proposal shall be located within the same sub-watershed [e.g., 8-digit hydrologic unit (HUC)];*
  - c) *If the mitigation proposal cannot be located within the same sub-watershed, the mitigation proposal shall be located within the County of [\_\_\_\_\_];*
  - d) *The mitigation proposal shall be at a rate of not less than 1.5 to 2.0 acres for every wetland acre that is altered as part of the project;*
  - e) *The mitigation proposal shall aim to replace the wetland type and functions altered as part of the project;*
  - f) *The [\_\_\_\_\_] Committee is authorized to exceed the above standards if the Committee concludes that the mitigation proposal will not sufficiently compensate for impacts to wetland acreage, type, and functions.*

To help permit applicants comply with any local wetland mitigation requirements, you may also consider establishing a process for the development of local wetland mitigation banks. Contact the Wisconsin Wetlands Association for more information on the benefits of and process for establishing a local wetland mitigation bank.

When implementing the above conditions, we suggest participating in or convening pre-application meetings with the permit applicant, WDNR, and USACE. Pre-application meetings can help local zoning staff to:

- Receive and use the information and analyses generated in federal and state permitting processes (e.g., delineation reports, functional assessments, and practicable alternative analyses);

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<sup>37</sup> Chapter 23.03 (3) (c) Washington County Shoreland, Wetland, and Floodplain Zoning Ordinance

- Ensure that the project proposal will meet local, as well as federal and state, permitting requirements;
- Improve landowner relations and interagency coordination.

Controlling indirect impacts can be achieved through adoption of provisions that protect wetlands from activities occurring outside the wetland boundary (i.e., areas that are hydrologically connected). Examples of these types of protections are:

- Vegetated buffers to preserve the hydrologic and soil conditions that support wetland health. Vegetation in and adjacent to wetlands helps maintain hydrologic and soil conditions, and if altered, can leave wetlands vulnerable to increased sediment deposition, invasion of non-native or noxious plants, and other disturbances. Limiting grading and other land-disturbing activities on or in areas that are hydrologically connected to a wetland (i.e., buffer area) helps reduce negative impacts to wetland hydrology, thus allowing the wetland to more effectively deliver its services (e.g., water quality improvement)
- Stormwater performance standards to maintain pre-development wetland hydrology and to prevent untreated stormwater from entering wetlands. Wetland quality and condition assessment tools (e.g., MnRAM) can be used to evaluate wetland functions and susceptibility to indirect impacts.<sup>38</sup>

2. Notify landowners and developers about the responsibility to comply with state and federal laws concerning construction in or near wetlands. See below for the notice that is required to be given by state law.
3. Establish a permit condition in Section 8.0 to indicate that all zoning approvals in areas with wetlands are conditional upon receipt of a federal Section 404 permit and/or state wetland permit.

### **Are these recommendations mandatory per recent State law revisions?**

*Sometimes, as follows:*

***Local Permitting Programs for Projects with Direct or Indirect Wetland Impacts:*** Local governments are required by statewide minimum standards to discourage uses that are not permitted in their respective shoreland-wetland zoning districts. However, Chapter NR 115 does not require a permitting program that includes explicit avoid-and-minimize standards like federal and state wetland regulations. Federal and state wetland laws do, however, strongly discourage landowners from developing *in* wetlands.

***Compensatory Wetland Mitigation:*** State and federal law requires compensatory wetland mitigation for impacts equal to or greater than 10,000 square feet, but does not require this

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<sup>38</sup> Minnesota Routine Assessment Methodology for Evaluating Wetland Functions. See <http://www.bwsr.state.mn.us/wetlands/mnram/index.html>.

compensation to take place within the community or watershed of the authorized wetland impact(s). Local governments are not required to adopt local wetland mitigation requirements, though state law does require consultation with local governments on the siting of mitigation banks.

**Notification:** Effective January 1<sup>st</sup> 2011, all Wisconsin counties, cities, villages, and towns are required to notify permit applicants about state and federal wetland laws and about tools recently developed by WDNR to help landowners determine whether their property contains wetlands.<sup>39</sup> This new statute requires local governments to present the notice provided below and to secure a signature from permit applicants to verify that it has been received.

*You are responsible for complying with state and federal laws concerning construction near or on wetlands, lake, and streams. Wetlands that are not associated with open water can be difficult to identify. Failure to comply may result in removal or modification of construction that violates the law or other penalties or costs. For more information, visit the Department of Natural Resources Wetland Identification Web Page (<http://dnr.wi.gov/topic/wetlands/locating.html>) or contact a Department of Natural Resources Service Center.*

**Conditional Approvals for Projects with Wetland Impacts:** The recommendation to make local zoning approvals for projects with wetland impacts conditional upon receipt of state and federal wetland permits is not required. However, landowners are obligated to obtain federal or state approval before filling any portion of a wetland – regardless of its size or location. Local governments can help landowners comply with this obligation.

**Have other local governments already adopted a similar recommendation?**<sup>40</sup>

*Yes, as follows:*

**Local Permitting Programs for Projects with Wetland Impacts:**

**Barron County** requires a grading permit for most land-disturbing activities of greater than 500 square feet in any wetland zoned in the Wetland Conservancy District or Shoreland Overlay District. Grading permits may only be issued if there are no adverse wetland impacts.<sup>41</sup>

**Bayfield County** requires a Class B special use permit for the filling of any wetland. Requests for Class B permits cannot be approved until the WDNR issues a wetland fill permit.<sup>42</sup>

**Langlade County** requires a grade and fill permit before any fill can be placed in any wetland.<sup>43</sup> In addition, when considering the rezoning of one district to another, the County Water and Land

<sup>39</sup> 2009 WI Act 373 <http://www.legis.state.wi.us/2009/data/acts/09Act373.pdf>.

<sup>40</sup> Results based on a Wisconsin Wetlands Association inventory of ordinances in 15 WI coastal counties and 30 non-coastal counties.

<sup>41</sup> Section 17.29 (2) (d) and 17.41 (8) (a) Barron County Land Use Ordinance

<sup>42</sup> Section 13-2-21 of Chapter 3 of the Bayfield County Shoreland and Wetland Zoning

<sup>43</sup> Section 17.30 (8) (b) (3) Langlade County Zoning Code

Use Planning Committee is obligated by the ordinance to consider how to prevent the location of buildings in hazardous areas such as steep slopes, floodplains, or wetlands.<sup>44</sup>

**Langlade, Lincoln, and Oneida County** require permits for metallic mining–related activities, including exploration and prospecting, and submission of environmental impact statements (or baseline conditions reports) that study and describe potential wetland impacts.<sup>45</sup>

**Oconto County** requires a grading permit for specified projects that involve excavating, filling, recontouring, and construction of ponds. Their ordinance also states: “*all activity under these provisions shall be subject to Ch. NR 102 Water Quality Standards for Wisconsin Surface Waters and Ch. NR 103 Water Quality Standards for Wetlands.*”<sup>46</sup> It is unclear if approvals are withheld pending verification of compliance.

**Oneida County** prohibits any grading or other land-disturbing activities, except the placement of elevated walkways, closer than 5 feet from the edge of any shoreland wetland. If grading or other land-disturbing activities occur within 25 feet of a shoreland wetland, the ordinance also requires that the landowner install silt fencing to prevent sediment and pollutants from entering the wetland. For all other shoreland alteration permits, landowners must comply with the permit condition that no fill materials may be placed in any floodplain or wetland. Mining and prospecting is prohibited in all wetlands larger than 0.1 acres. To receive a special Conditional Use Permit for mining, the applicant must show that their project proposal has minimized wetland impacts to the maximum extent practicable.<sup>47</sup>

**Shawano County** uses a Land Evaluation and Site Assessment (LESA) system for evaluating rezoning requests and other significant development proposals. If a high percentage of the area is comprised of wetlands or hydric soil areas, the LESA system would produce a low score and consequently the County would consider the area unsuitable for development.<sup>48</sup>

**Washburn County** requires a permit for land-disturbing activities greater than 10,000 square feet. To receive a permit, the landowner must prepare a stormwater management and erosion control plan that shows that fill will not be placed in a wetland and floodplain without prior approval. In reviewing a permit, the zoning administrator must consider the functions and values of wetlands, as detailed in Chapter NR 115, before granting or denying a permit request.<sup>49</sup>

**Waukesha County’s** drainage regulations also state that “in no case may a principal building be located in an area zoned Conservancy or in an area considered to be one of the eight (8) types of wetlands (type 1-8) as described in Circular 39 of the Fish and Wildlife Service, U. S. Department of Interior, published in 1956 and which are on record on the 1975 aerial maps of the Southeastern Wisconsin Regional Planning Commission. No principal building shall be erected,

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<sup>44</sup> Section 17.37 (3) (f) (5) Langlade County Zoning Code

<sup>45</sup> Section 17.52 Langlade County Zoning Code; Chapter 17.3.08 (9) Lincoln County Zoning Code; Chapter 9.61 (I) (3) (b) (7) and Chapter 9.61 (E) (3) (b) Oneida County Zoning and Shoreland Protection Ordinance

<sup>46</sup> Chapter 14.413(d) Oconto County Zoning Ordinance

<sup>47</sup> Chapter 9.92 (C), 9.97 (F), 9.61 (C) (2) and 9.61 (F) (2) (c) Oneida County Zoning and Shoreland Protection Ordinance

<sup>48</sup> Appendix A Shawano County Zoning Ordinance

<sup>49</sup> Division 27, Section 38-598 to 38-599 Washburn County Zoning Regulations

structurally altered or relocated on land which is not adequately drained, which has an observed or estimated high ground water table condition or having soils which may have a seasonal-zone of water saturation.”<sup>50</sup>

**Waukesha County** also has a transfer of development rights program that encourages and helps developers to avoid and minimize wetland impacts.<sup>51</sup>

***Local Permitting Programs for Projects with Indirect Wetland Impacts:***  
(See Recommendation F for examples on Structural Setbacks and Vegetated Buffers)

**Brown County** requires a permit for land-disturbing activities of more than 500 square feet within 100 feet of any shoreland wetland.<sup>52</sup>

**Brown, Kenosha, and Sheboygan County** ordinances on stormwater management and erosion control seek to prevent uncontrolled post-construction runoff (i.e., increased pollutant loads) and its adverse impacts on wetland communities (e.g., changes to wetland hydrology).<sup>53</sup>

**Columbia and Sheboygan County** require evaluation of potential impacts on floodplains and wetlands when deciding to approve or deny a conditional use.<sup>54</sup>

**Door County’s** stormwater management policy encourages wetland conservation to be used for water quality improvement purposes. In its performance standards, a standard on water quality promotes compliance with use of a treatment train approach that slowly releases water onto vegetation rather than onto pavement or into pipes. Wetland conservation is identified as an acceptable site control—within the treatment train approach—as long as drainage to the wetland does not threaten the wetland’s surface water or groundwater quality.<sup>55</sup>

**Oconto County** states that grading permits are subject to Chapter NR 103 Water Quality Standards for Wetlands, which can allow protections from indirect wetland impacts.<sup>56</sup> It is unclear if approvals are withheld pending verification of compliance.

**Sheboygan County** requires that erosion control and stormwater management plans identify all wetlands within 200 feet of a construction site to help avoid indirect (stormwater) impacts to wetlands. The stormwater management plan must also include an explanation of how natural

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<sup>50</sup> Section 3.05 Waukesha County Zoning Code

<sup>51</sup> Section 15 and 16 Waukesha County Shoreland & Floodland Protection Ordinance; and Section 6.5 and 8b Waukesha County Zoning Code

<sup>52</sup> Chapter 22.29(1)(b) of the Brown County Shorelands and Wetlands Zoning Ordinance

<sup>53</sup> Chapter 40.02(3) Brown County Control of Construction Site Erosion Resulting from Land Disturbing Activities and the Control of Post Construction Stormwater Management; Chapter 17.05-2(c) Kenosha County Stormwater Management, Erosion Control, and Illicit Discharge Ordinance; and Chapter 75.02(3) Sheboygan Erosion Control and Stormwater Management Ordinance

<sup>54</sup> Section 16-1-18 Columbia County Code of Ordinances and Section 72.12(2)(h) of the Sheboygan County Shorelands and Wetlands Zoning Ordinance

<sup>55</sup> Section V(1)(4) Door County Policy on Urban Storm Water Runoff Control Design Criteria Construction Site Erosion Control and Post Construction Stormwater

<sup>56</sup> Chapter 14.413(d) Oconto County Zoning Ordinance.

topography and land cover will be preserved to minimize changes in peak flow runoff rates and volumes to wetlands.<sup>57</sup>

**Local Wetland Permitting Programs with Compensatory Wetland Mitigation Requirements:** **Langlade County's** provisions on metallic mineral mining require that applicants mitigate wetland impacts associated with mining or reclamation activities within the borders of the County at a minimum of 1:1 ratio. The Board of Adjustment has the authority to increase the mitigation ratio and to determine preferred locations for the mitigated wetlands.<sup>58</sup>

**Washington County** requires a conditional use permit (CUP) for a “*public purpose facility*” within wetlands. The CUP can only be granted if the applicant has avoided and minimized wetland impacts to the greatest extent practicable and develops and presents a wetland mitigation plan that compensates for wetland impacts on-site (preference) or within the same sub-watershed of the proposed wetland impact. Mitigation must be completed at a rate of no less than 1.5 acres for every wetland acre that is altered as part of the public purpose facility project.<sup>59</sup>

**Local Wetland Permitting Programs within a Certain Distance of Wetlands:**

**Brown County** requires a permit for land-disturbing activities of more than 500 square feet within 100 feet of any shoreland wetland.<sup>60</sup>

**Shawano County** requires landowners to comply with the ordinance's erosion control and stormwater management standards if a land-disturbing activity is proposed within 75 feet of an environmental corridor (i.e. mapped wetlands). Wetlands shown on the WWI Maps that are five acres or greater and Federal Emergency Management Association (FEMA)–designated 100-year floodplains are considered part of an environmental corridor.<sup>61</sup>

**Notification:**

**Walworth County** was among the first Wisconsin Counties to implement the wetland notification requirements enacted under 2009 WI Act 373. They superimposed the notification statement with a signature line onto the front of WDNR's *Waking Up to Wetlands* brochure which is designed to help landowners determine whether their property contains wetlands.<sup>62</sup>

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<sup>57</sup> Chapter 75.10 and 75.21 Sheboygan Erosion Control and Stormwater Management Ordinance

<sup>58</sup> Section 17.52 Langlade County Zoning Code

<sup>59</sup> Chapter 23.03 (3) (c) Washington County Shoreland, Wetland, and Floodplain Zoning Ordinance

<sup>60</sup> Chapter 22.29(1)(b) of the Brown County Shorelands and Wetlands Zoning Ordinance.

<sup>61</sup> Section X.5.09 Shawano County Zoning Ordinance and Chapter 4 Shawano County Comprehensive Plan

<sup>62</sup> [http://dnr.wi.gov/wetlands/documents/D8\\_Wetland.pdf](http://dnr.wi.gov/wetlands/documents/D8_Wetland.pdf);

<http://www.co.walworth.wi.us/Government%20Center/Land%20Use%20and%20Resource%20Management/pdfs/Wetlands%20Informational%20Brochure.pdf>

**Adoption of this recommendation will enable local governments to:**

<input checked="" type="checkbox"/> Improve implementation/effectiveness of shoreland and/or general zoning ordinances	<input type="checkbox"/> Advance goals already identified in most zoning ordinances
<input checked="" type="checkbox"/> Address wetland mapping deficiencies	<input type="checkbox"/> Have more flexibility to condition zoning approvals to protect sensitive resources
<input checked="" type="checkbox"/> Reduce wetland regulatory disputes, unauthorized wetland impacts, and/or confusion over which wetlands are protected	<input checked="" type="checkbox"/> Improve integration/collaboration between zoning offices and state and federal wetland regulatory authorities
<input checked="" type="checkbox"/> Improve consistency between local zoning laws and state and federal wetland regulations	<input checked="" type="checkbox"/> Make use of best available technology and/or external expertise
<input checked="" type="checkbox"/> Educate applicants about the benefits of wetlands and/or wetland laws	

**Additional comments:**

Local governments can rely on the information generated through state and federal wetland permit reviews to verify which areas on a project site should be subject to restrictions associated with Wetland Zoning Districts. Doing so enables local governments to restrict development in wetlands without requiring the specialized expertise needed to verify wetland boundaries.

State and Federal permit staff rely on the following information in their review of applications for permits to fill regulated wetlands:

1. A wetland delineation report to confirm the presence and boundaries of wetlands. To be accepted, these reports must be completed by a qualified wetland consultant using procedures specified in state and federal guidelines.
2. An alternatives analysis describing how the developer designed the project to first avoid, and then minimize, wetland impacts. Project proposals must provide a legitimate reason for not being able to locate the project in an upland area with no wetland impacts. Alternate sites, smaller projects, and reconfigured site designs are all considered viable alternatives for minimizing wetland impacts. Self-imposed hardships (e.g., sunk costs, loss of profits, etc.) are not considered when determining which alternatives are practicable. A cost comparison between alternatives is a valid analysis.
3. WDNR staff also complete a wetland functional assessment to evaluate wetland quality, and potential development impacts to wetland functions (e.g., flood attenuation, water quality improvement, shoreland protection).

Agencies evaluate this information and issue permits only for the least environmentally damaging practicable alternative that meets the basic project purpose (e.g., residential housing).

Conditioning local zoning approvals upon receipt of state and federal wetland permits will also provide communities with additional leverage to deny approval of projects with *avoidable* wetland impacts.

***Recommendation E: Define buildable areas and designate wetlands as unsuitable for development.***

State and federal regulations generally consider wetlands unsuitable for development. The standards require avoidance and minimization of wetland impacts when a project is not wetland-dependent. There is a presumption that most construction projects do not meet the wetland-dependent criteria.

In the most general terms, buildable area standards in land use ordinances are used to describe areas deemed suitable, or unsuitable, for construction. Definitions and standards for buildable areas are most commonly used in ordinances related to the subdivision of land. In these cases, minimum buildable areas must be met for approval of newly platted lots, and the calculation of buildable area is based on the lot acreage minus certain features such as road rights-of-way, setbacks, and sensitive landscape features (e.g., wetlands). Buildable area standards can also be incorporated into zoning ordinances to promote consistency between local zoning and land division ordinances.

Identifying wetlands as unsuitable for development is another effective step that local governments can take to discourage development proposals with wetland impacts. Buildable area standards can also be used to provide local decision-makers with the discretion to deny permits for projects with wetland impacts.

**What options are available to implement this recommendation?**

This recommendation corresponds with Sections 5.0 (Minimum Lot Size) and 16.0 (Definitions) of the WDNR Minimum Shoreland Wetland Zoning Model Ordinance and similar sections of a typical General Zoning Ordinance.

1. Include a definition of buildable areas, developable building sites, or some equivalent term in the Definitions section of the ordinance.
2. Incorporate buildable area standards into minimum lot size requirements to ensure that lots have adequate buildable area *after* the avoidance of sensitive resources such as wetlands.
3. Include a statement in the Shoreland-Wetland or Wetland district that the district is seldom suitable for building sites.
4. Adopt buildable area definitions and standards in the zoning ordinance that are consistent with those enacted in local land division laws.

**Is this recommendation mandatory per recent State law revisions?**

Partly. Federal and state wetland laws strongly discourage landowners from developing in wetlands. Local governments are not required to define buildable areas and designate wetlands as unsuitable for development in their ordinances; however, by doing so they can help landowners comply with long-standing federal and state wetland regulations.

**Have other local governments already adopted a similar recommendation?**<sup>63</sup>

*Yes, as follows:*

***Buildable Area and Land Suitability Standards with Wetland Provisions:***

**Ashland County** defines a developable building site as “*an area suitable for construction,*” and one which excludes floodplain and wetland areas.<sup>64</sup>

**Bayfield County** requires that each lot, near all classes of waters per its water classification system, contain at least 3,000 square feet of buildable core. This area may not contain any wetlands and it must facilitate the avoidance of wetland impacts.<sup>65</sup>

**Lincoln County** has a density-based zoning tracking system that encourages small lot sizes. These small lot requirements help ensure that lots are designed to avoid wetlands and include sufficient buildable area.<sup>66</sup>

**Marinette County** requires that each lot have a minimum buildable area of at least 12,500 square feet of contiguous upland. Buildable area is defined as “*that portion of the lot which is suitable for construction of a structure(s). Buildable area does not include the shoreland setback, sideyard setback and road setback areas, easements, wetlands and floodways.*”<sup>67</sup>

**Oneida County** designates that, except for public and private parks, at least 10,000 square feet of every lot in the shoreland zone must: 1) not contain any shoreland wetlands; 2) be located above the regional flood elevation; 3) be located at least 2 feet above the highest known water elevation of any body of water whose regional flood elevation is undefined; and 4) include dryland access to a public or private road.<sup>68</sup> These development standards help ensure that wetland impacts are avoided.

**Rusk County** requires that, in every district in the shoreland zone, each lot must contain enough contiguous square feet of buildable area to accommodate a principal structure, accessory buildings, on-site sewage disposal, a suitable alternate site for sewage disposal, and all required setbacks. Wetlands must be excluded when determining the buildable area for each lot.<sup>69</sup>

**Shawano County** uses a Land Evaluation and Site Assessment (LESA) system for evaluating rezoning requests and other significant development proposals. If a high percentage of the area is comprised of wetlands or hydric soil areas, the LESA system would produce a low score and consequently the County would consider the area unsuitable for development.<sup>70</sup>

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<sup>63</sup> Results based on a Wisconsin Wetlands Association inventory of ordinances in 15 WI coastal counties and 30 non-coastal counties.

<sup>65</sup> Section 13-1-32 Bayfield County Zoning Code

<sup>66</sup> Chapter 17.8.70 Lincoln County Zoning Code

<sup>67</sup> Chapters 21.02(9) and 21.05 Marinette County Shoreland-Wetland Zoning Ordinance

<sup>68</sup> Chapter 9.93 (D) Oneida County Zoning and Shoreland Protection Ordinance

<sup>69</sup> Chapter 4.4 Rusk County Shoreland Zoning Ordinance

<sup>70</sup> Appendix Shawano County Zoning Ordinance

**Washburn County** requires that each lot located within the shoreland zone must contain at least 10,000 contiguous square feet of buildable area, which may not include any floodways, wetlands, easements, or setback areas.<sup>71</sup>

***Statement that the Wetland District is Seldom Suitable for Building Sites:***

**Barron, Florence, Fond du Lac, Langlade, Oconto, and Sheboygan Counties** state that their Conservancy District and Shoreland-Wetland Districts, respectively, are “*seldom suitable as building sites.*”<sup>72</sup>

***Land Division Ordinance Provisions:***

**Door County** states that environmentally sensitive areas, including wetlands, are prohibited from consideration as suitable development sites and for the placement of buildings and structures.<sup>73</sup>

**Adoption of this recommendation(s) will enable local governments to:**

<input checked="" type="checkbox"/> Improve implementation/effectiveness of shoreland and/or general zoning ordinances	<input type="checkbox"/> Advance goals already identified in most zoning ordinances
<input type="checkbox"/> Address wetland mapping deficiencies	<input checked="" type="checkbox"/> Have more flexibility to condition zoning approvals to protect sensitive resources
<input checked="" type="checkbox"/> Reduce wetland regulatory disputes, unauthorized wetland impacts, and/or confusion over which wetlands are protected	<input checked="" type="checkbox"/> Improve integration/collaboration between zoning offices and state and federal wetland regulatory authorities
<input checked="" type="checkbox"/> Improve consistency between local zoning laws and state and federal wetland regulations	<input type="checkbox"/> Make use of best available technology and/or external expertise
<input checked="" type="checkbox"/> Educate applicants about the benefits of wetlands and/or wetland laws	

**Additional comments:**

Many counties reserve the right to deem wetlands or lands with wetland characteristics “unsuitable for development”; however, determinations of suitability are often made by committee(s) on a case-by-case basis. Ashland, Door, Marinette, and Sheboygan County explicitly mention wetlands in the list of unsuitable lands. Brown, Douglas, Iron, Kenosha, Manitowoc, Oconto, Ozaukee, and Racine County describe wetland features (e.g., standing water, poorly drained or muck soils) as indicators for when a site may be unsuitable for development.<sup>74</sup>

<sup>71</sup> Division 27, Section 38-602 Washburn County Zoning Regulations

<sup>72</sup> Section 17.29 Barron County Land Use Ordinance; Chapter 10.03 Florence County Shoreland and Wetland Zoning Ordinance; Chapter 44-82 Fond du Lac County Shoreland Zoning Ordinance; Section 17.38 (2) Langlade County Zoning Code; Section 14.2101(2) Oconto County Zoning Ordinance; and Section 72.09(1)(a) Sheboygan County Shoreland Ordinance

<sup>73</sup> Chapter 1.09 Door County Land Division Ordinance

<sup>74</sup> Results based on a Wisconsin Wetlands Association inventory of land division ordinances in Wisconsin’s 15 coastal counties.

***Recommendation F: Adopt structural wetland setbacks and require vegetated wetland buffers.***

Wetlands sit at low spots on the landscape and exist under fluctuating hydrologic regimes (e.g., water levels change seasonally and in response to precipitation events). Siting buildings and other infrastructure away from the wetland edge helps to protect property from flood damages and maintains the important natural functions of wetlands including flood abatement, water quality improvement, erosion control, and more.

This is particularly true when the land adjacent to the wetland area is maintained as a vegetated buffer. Vegetated buffers improve the health, and functions of wetlands by:

- Enhancing the water quality improvement (i.e., filtration) capacity of the wetland and preventing excessive deposition of sediments, nutrients, and other pollutants to the wetland or adjacent lakes, rivers, and streams;
- Maintaining surface and sub-surface hydrology within and near the wetland;
- Providing food, shelter, and breeding areas for wildlife species;
- Establishing and increasing wildlife corridors between the wetland and other wetlands, terrestrial lands, or aquatic resources;
- Preventing invasion by noxious plant species (e.g., reed canary grass).

Wetland buffers can also enhance the quality of life in a community, especially for nearby residents. For example, they can increase property values, improve aesthetics, and provide areas for passive recreation such as bird watching, hiking, and photography.

Finally, wetland setback and/or buffer requirements can help local governments minimize the occurrence of indirect impacts to wetlands (*see Recommendation D*). For example, protecting the area in *and around* wetlands can maximize the amount of public benefits produced. These protections can also help landowners avoid wetland regulatory disputes by reducing the importance of verifying the exact wetland boundary and discouraging proposals to develop right up to the wetland edge.

**What options are available to implement this recommendation?**

Minimum setbacks and buffer standards can be established in a stand-alone ordinance or incorporated into other ordinances and plans such as shoreland or comprehensive zoning, stormwater management, land division, and area-wide water quality management plans. Setback and buffer standards may be most commonly inserted into stormwater ordinances; however, we have not yet conducted the research to verify this.

Regardless of where the setback and buffer standards are placed, we recommend that:

- a. Local standards be established to help permit applicants comply with already existing state standards (see next section).
- b. Standards should be applied consistently across programs (e.g., zoning permits, land division approvals, stormwater permits, etc.)

If regulatory buffer standards are not desired, wetland buffer standards can be used in the planning process. For example, the local comprehensive plan could establish a buffer around every wetland or certain wetlands to steer future land use and development away from both the wetland and adjacent upland area.

Opportunities for local governments to establish consistency with state standards include:

- a. Apply the same setback and buffer standards to wetlands as NR 115 requires for lakes, rivers, and streams (i.e., a 75-foot structural setback from lakes, rivers, and streams, including a 35' vegetated buffer adjacent to the waters edge).<sup>75</sup>
- b. Require *Protective Areas* for land-disturbing activities less than 1 acre in size or for smaller projects adjacent to sensitive resources (see below).

We recommend the Environmental Law Institute's (ELI) *Planner's Guide to Wetland Buffers for Local Governments*<sup>76</sup> as a reference for communities considering the enactment of wetland setback or buffer standards. ELI identifies the range of current practices local governments have implemented for the protection of wetland buffers and presents detailed information to help local governments think through important issues such as the purpose of a buffers program, which wetlands to protect, approaches to setting one or more buffer distances for varying scenarios (e.g., high quality or urban wetlands), and more.

The ELI Guide also presents a review and summary of scientific literature related to water quality buffers and wetland habitat buffers (*see Additional Comments below*).

### **Is this recommendation mandatory per recent State law revisions?**

No. There is nothing in state law that requires local governments to establish setback or buffer standards for wetlands; however, private landowners and developers are subject to state setback and buffer requirements under the following circumstances:

1. Wisconsin's Runoff Management rules require *Protective Areas* around lakes, rivers, streams, and wetlands for projects disturbing one acre or more of land.<sup>77</sup> Measured from the delineated boundary of the wetland to the edge of the allowable impervious surface, the following wetland Protective Area criteria apply:

- 75 feet for wetlands in Areas of Special Natural Resource Interest as specified in s. NR 103.04.
- 50 feet for "highly susceptible wetlands." These include fens, sedge meadows, bogs, low prairies, conifer swamps, shrub swamps, other forested wetlands, fresh wet meadows, shallow marshes, deep marshes, and seasonally flooded basins.
- 10 to 30 feet (10% of average wetland width) for "less susceptible wetlands," which include degraded wetlands dominated by invasive species such as reed canary grass.

The rule requires that impervious surfaces shall be kept out of the protective area to the maximum extent practicable and "*where land disturbing construction activity occurs within a*

<sup>75</sup> NR 115.05(b)

<sup>76</sup> Environmental Law Institute (2008). Available for free download at: <http://www.eli.org>

<sup>77</sup> NR 151.12(5)(d)

*protective area, and where no impervious surface is present, adequate sod or self-sustaining vegetative cover of 70% or greater shall be established and maintained”* in all protective areas.

2. Wisconsin’s Stormwater Management rules require permit applicants to develop and submit erosion control plans for regulated activities. The erosion control plans must assure compliance with the runoff management standards cited above.

Local governments can improve resource protections and reduce regulatory confusion and tensions by adopting setback and buffer standards that are consistent with the standards that permit applicants must already comply with under state laws.

Permit applicants may also have to comply with shoreland mitigation requirements to offset the impacts of shoreland development. Wetland setbacks and buffers can be encouraged and/or required for landowners that must prepare a shoreland mitigation plan. See Recommendation C for more details.

**Have other local governments already adopted a similar recommendation?**<sup>78</sup>

*Yes, as follows:*

***Structural Setbacks:***

**Bayfield and Langlade County** requires that all buildings and structures (with a few exceptions) be set back at least 25 feet from the boundary of any mapped wetland.<sup>79</sup>

**Burnett County** requires that all buildings and structures (with a few exceptions) be set back at least 40 feet from the boundary of any wetland.<sup>80</sup>

**Dane County** requires a 75-foot setback from mapped shoreland and inland wetlands.<sup>81</sup>

**Dodge and Waukesha County** require that all buildings and structures (with a few exceptions) be set back at least 75 feet from any wetland.<sup>82</sup>

**Door County** requires a 35-foot setback, except in certain residential districts, where the setback is reduced to 10 feet. Door County also has a “Natural Area” zoning district that is intended to protect lands adjacent to wetlands. Low intensity uses and large lot sizes are permitted in this quasi-form of a wetland buffer.<sup>83</sup>

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<sup>78</sup> Results based on a Wisconsin Wetlands Association inventory of ordinances in 15 WI coastal counties and 30 non-coastal counties.

<sup>79</sup> Section 17.30 (5) (c) Langlade County Zoning Code and Section 13-1-22 of Bayfield County General Zoning Code

<sup>80</sup> Section 4.4 (1) Burnett County Land Use / Zoning Ordinance

<sup>81</sup> Chapter 11.06(5) of the Dane County Shoreland, Shoreland-Wetland, and Inland-Wetland Regulations

<sup>82</sup> Chapter 5.1.1 Dodge County Land Use Code; and Section 3(h)(1)(I) Waukesha County Shoreland & Floodland Protection Ordinance; and Section 3.05 (3) Waukesha County Zoning Code

<sup>83</sup> Chapter 5.10 for wetland setbacks and Chapter 2.03(2) for Natural Area zoning district in Door County Zoning Ordinance

**Kenosha County** requires cluster groups (buildings and structures) to be set back at least 35 feet from wetlands and floodplains in the Rural Cluster Development District.<sup>84</sup>

**Outagamie County** requires that all buildings and structures (with a few exceptions) be set back at least 75 feet from the boundary of shoreland wetlands. On-site sewage disposal systems are required to be set back at least 50 feet.<sup>85</sup>

**Polk, Washburn, Washington, and Waupaca County** require that all buildings and structures (with a few exceptions) be set back at least 25 feet from the boundary of mapped shoreland wetlands.<sup>86</sup>

**Shawano County** requires that all buildings and structures be set back at least 25 or 50 feet from the boundary of any wetland, depending on which district the building or structure is being placed in. The 25-foot setback applies in most residential districts. The 50-foot setback applies in three different commercial districts.<sup>87</sup>

**Waushara County** requires that all buildings and structures (with a few exceptions) must be set back a minimum of 50 feet from the edge of mapped shoreland wetlands.<sup>88</sup>

***Vegetated Buffers:***

**Brown County** has a special shoreland agricultural provision that requires a 35-foot vegetated buffer to be maintained, free of row crops and seeded to grass, alfalfa, or other related vegetation, between the edge of navigable streams and the farmed areas.<sup>89</sup>

**Kenosha County** requires appropriate erosion control and stormwater management measures to be utilized in all new development permitted under the zoning ordinance. The County has the discretion to require a stormwater permit and to establish protective areas around wetlands.<sup>90</sup>

**Ozaukee County** codified the protective area requirements of Chapter NR 151 of the Wisconsin Administrative Code in their zoning ordinance. Protective areas are only required when 1 acre or more is disturbed.<sup>91</sup>

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<sup>84</sup> Section 12-26(a) and 12-26(h) of the Kenosha County Zoning Ordinance

<sup>85</sup> Section 44-16 (a) Outagamie County Shoreland Wetland Zoning Ordinance

<sup>86</sup> Article 11(E)(8) of the Polk County Shoreland Protection Zoning Ordinance; and Section 5.3 of the Waupaca County Shoreland Zoning Ordinance; Division 27, Section 38-593 (4) Washburn County Zoning Regulations; Chapter 23.09 (11) Washington County Shoreland, Wetland, and Floodplain Zoning Ordinance.

<sup>87</sup> Table X.2.03A, Table X.3.03A, Table X.4.03A Shawano County Zoning Ordinance

<sup>88</sup> Section 58-396

<sup>89</sup> Chapter 22.21(1)(a) of Brown County Shorelands and Wetlands Zoning Ordinance

<sup>90</sup> Section 12.08-2(a)(9) of the Kenosha County Zoning Ordinance and Chapter 17.06-1 of the Kenosha County Stormwater Management, Erosion Control, and Illicit Discharge Ordinance

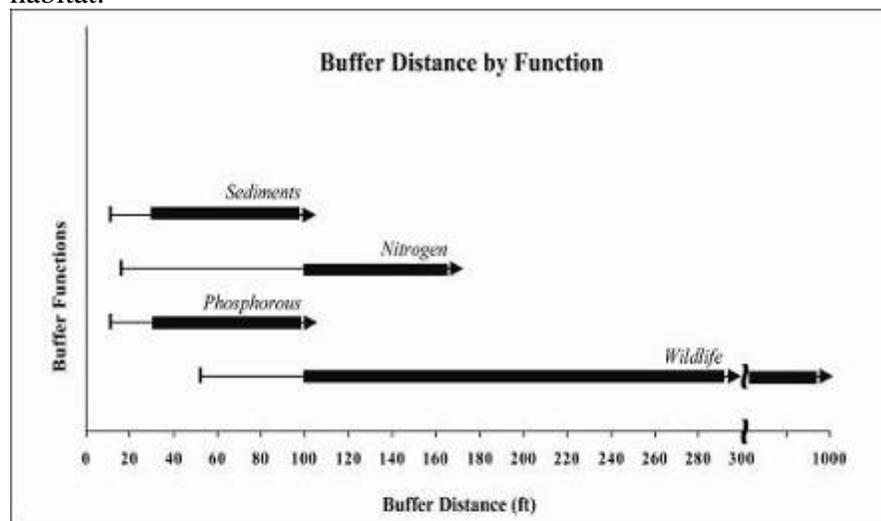
<sup>91</sup> Section 7.0307 of the Ozaukee County Shoreland and Floodplain Zoning Ordinance

**Adoption of this recommendation will enable local governments to:**

<input checked="" type="checkbox"/> Improve implementation/effectiveness of shoreland and/or general zoning ordinances	<input type="checkbox"/> Advance goals already identified in most zoning ordinances
<input checked="" type="checkbox"/> Address wetland mapping deficiencies	<input type="checkbox"/> Have more flexibility to condition zoning approvals to protect sensitive resources
<input checked="" type="checkbox"/> Reduce wetland regulatory disputes, unauthorized wetland impacts, and/or confusion over which wetlands are protected	<input checked="" type="checkbox"/> Improve integration/collaboration between zoning offices and state and federal wetland regulatory authorities
<input checked="" type="checkbox"/> Improve consistency between local zoning laws and state and federal wetland regulations	<input checked="" type="checkbox"/> Make use of best available technology and/or external expertise
<input checked="" type="checkbox"/> Educate applicants about the benefits of wetlands and/or wetland laws	

**Additional comments:**

In a synthesis of scientific research on wetland buffers, the Environmental Law Institute found that effective buffer distances vary depending on whether the purpose is sediment, nitrogen, or phosphorous abatement; or wildlife protection. As shown in the graph below, the science suggests that a 100-foot buffer provides both effective water quality improvement and wildlife habitat.<sup>92</sup>



*Effective buffer distance for water quality and wildlife protection functions. The thin arrow represents the range of potentially effective buffer distances for each function as suggested in the science literature. The thick bar represents the buffer distances that may most effectively accomplish each function (30 - > 100 feet for sediment and phosphorous removal; 100 - > 160 feet for nitrogen removal; and 100 - > 300 feet for wildlife protection. Depending on the species and the habitat characteristics, effective buffer distances for wildlife protection may be either small or large.*

<sup>92</sup> Printed with permission from Environmental Law Institute. Graph and associated content first appeared in *Planner's Guide to Wetland Buffers for Local Governments*, Environmental Law Institute (2008). Available for free download at: [www.eli.org](http://www.eli.org).

### ***Recommendation G: Extend jurisdiction to protect inland wetlands.***

The State of Wisconsin regulates (requires review and approval of) construction activities in all wetlands, regardless of wetland size or location. Though local governments have the authority to exceed state minimum shoreland zoning standards,<sup>93</sup> the minimum standards only require local protection of wetlands that fall within the shoreland zone and appear on the Wisconsin Wetland Inventory (WWI).<sup>94</sup>

Inland wetlands, often referred to as isolated wetlands, are those wetlands not directly adjacent to navigable lakes, rivers, and streams. Approximately 20% of Wisconsin's 5.3 million acres of wetlands are considered inland, or isolated, for regulatory purposes. Many isolated wetlands are ephemeral ponds, seasonally wet depressional areas that, due to the absence of predatory fish, provide critical habitat for amphibians including many endangered species. Isolated wetlands also provide important stopover and foraging habitat for waterfowl, migratory song birds and shorebirds, and other wildlife; reduce floods by storing and slowly releasing rain and snowmelt; and protect community drinking water supplies.

Inland wetlands can be grassy/herbaceous, shrubby, or wooded, and are the least likely wetlands to appear on wetland inventory maps. They are also among the more difficult wetland types for private landowners to recognize. As a result, isolated wetlands are severely threatened and frequently damaged by unauthorized fill.

Counties and towns with comprehensive zoning authority can protect these sensitive wetland areas by extending jurisdiction to protect inland wetlands.<sup>95</sup> Many of the same provisions identified in Recommendation B (*Protect all wetlands in the shoreland zone*) can be applied to inland wetlands. As with Recommendation B, several provisions can be adopted with little to no extra investment or program requirements other than the initial effort required to make more extensive use of state tools, resources, and expertise to support local decision-making.

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<sup>93</sup> NR 115.01 states "Nothing in this rule shall be construed to limit the authority of a county to enact more restrictive shoreland zoning standards under s. 59.69 or 59.692, Stats., to effect the purposes of s. 281.31, Stats."

Article XI(1) of the Wisconsin State Constitution grants cities and villages home rule, by stating "cities and villages organized pursuant to state law may determine their local affairs and government, subject only to this constitution and to such enactments of the legislature of statewide concern as with uniformity shall affect every city or every village. Section 59.03, Wis.Stats, establishes administrative home rule for counties, stating that "every county may exercise any organizational or administrative power, subject only to this constitution and to any enactment of the legislature which is of statewide concern and which uniformly affects every county. Section 60.01(c), Wis. Stats, allows towns to enter into contracts to exercise similar corporate (home rule) powers as cities and villages. Section 60.61, Wis. Stats, also grants general zoning authority to towns.

<sup>94</sup> NR 115.04(2)(b)

<sup>95</sup> State and federal courts have strongly upheld the authority to control land use activities in or around wetlands. Wetland conservation is a legitimate tool to facilitate the protection of the public safety, health, and welfare of communities.

### **What options are available to implement this recommendation?**

These recommendations correspond to Sections 2.2 (Shoreland-Wetland Maps); 2.3 (Compliance); 2.52 (Abrogation and Greater Restrictions); 3.1 (Designation); 3.11 (Locating Shoreland-Wetland Boundaries); 8.13 (General Standards); and 8.4 (Permit Conditions) of the WDNR Minimum Shoreland Wetland Zoning Model Ordinance and/or the similar sections of a typical General Zoning Ordinance.

1. Create a Wetland District that includes all (both inland and shoreland) wetlands located within the County, City, Village, or Town. State minimum standards can be incorporated into this Wetland District but applied to both inland and shoreland wetlands. As proposed in Recommendation B, the ordinance would need to clearly indicate that:
  - a. All wetlands, not just those depicted on maps, are protected;
  - b. Inclusion in the district is based upon field conditions;
  - c. Multiple mapping tools are available to help landowners identify wetlands and potential wetlands, but maps cannot provide a definitive determination of the presence or absence of wetlands;
  - d. A dispute resolution process will be established to resolve discrepancies between mapped wetland boundaries and actual field conditions.

In addition, we recommend specifying that all wetlands partially located in the shoreland zone are protected and included in the Wetland District.

2. Establish protective standards for both inland and shoreland wetlands, such as local approval requirements for projects with any wetland impacts (*See Recommendation D*) or setback or buffer provisions for any wetland (*See Recommendation F*). These provisions could be inserted in Section 8.13 or 8.4 of the WDNR's model ordinance.
3. Create or expand conservancy or natural area districts to protect select inland wetlands. This may be a more attractive policy option if the establishment of a Wetland District that encompasses all shoreland and inland wetlands is not politically feasible in your jurisdiction. Wetlands associated with Areas of Special Natural Resource Interest (ASNRI), as defined by NR 103.04, can help provide guidance on which wetlands to include in conservancy or natural area districts. ASNRI include:
  - Cold water communities, including all trout streams and their tributaries and trout lakes;
  - Lakes Michigan, Lake Superior and the Mississippi river;
  - State- and federally designated wild and scenic rivers, designated state riverways, and state-designated scenic urban waterways;
  - Calcareous fens;
  - Habitat used by state or federally designated threatened or endangered species,
  - Wild rice waters;
  - Any other surface waters identified as outstanding or exceptional resource waters in ch. NR 102.

Other sensitive wetland types that warrant special protection are bogs and coastal ridge and swale complexes.<sup>96</sup>

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<sup>96</sup> Ridge and swale complexes are a type of community associated with Great Lakes coastlines characterized by a series of narrow sandy ridges that alternate with low swales, parallel to the lakeshore.

**Is this recommendation mandatory per recent State law revisions?**

No; however, page 4 of the DNR Minimum Shoreland Wetland Zoning Model Ordinance encourages counties to promote wetland protection in wetlands outside of the shoreland jurisdictional area. See Recommendation B for other examples of how these recommendations are consistent with the WDNR Model Ordinance.

**Have other local governments already adopted a similar recommendation?<sup>97</sup>**

*Yes, as follows:*

***Protective Standards for Inland Wetlands:***

**Burnett County** requires a land use permit for any filling or grading of more than 500 square feet in any wetland that is not zoned in the Shoreland-Wetland District (SW-1) or the Resource Conservation District (W-1). Inland wetlands can be zoned in the W-1 district. In addition, all buildings and structures (with a few exceptions) must be set back at least 40 feet from the boundary of any wetland.<sup>98</sup>

**Langlade County** states that no permits may be issued for mapped wetlands 5 acres or more located outside the shoreland zone until the landowner has provided written documentation from the Wisconsin Department of Natural Resources and the U.S. Army Corps of Engineers that it has been determined that the land for the project is not a wetland, or does not require approvals, or that the project has been approved and permits have been issued.<sup>99</sup>

**Waukesha County** implements drainage regulations that state “in no case may a principal building be located in an area zoned in the Conservancy District (see below) or in an area considered to be one of the eight (8) types of wetlands as described in Circular 39 of the Fish and Wildlife Service, U. S. Department of Interior, published in 1956 and which are on record on the 1975 aerial maps of the Southeastern Wisconsin Regional Planning Commission. No principal building shall be erected, structurally altered or relocated on land which is not adequately drained, which has an observed or estimated high ground water table condition or having soils which may have a seasonal-zone of water saturation.”<sup>100</sup>

**Bayfield, Dane, Dodge, Door, Shawano, and Waukesha County** have wetland setback requirements that protect inland wetlands (*See Recommendation F*).

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<sup>97</sup> Results based on a Wisconsin Wetlands Association inventory of ordinances in 15 WI coastal counties and 30 non-coastal counties.

<sup>98</sup> Section 4.4 (1) Burnett County Land Use / Zoning Ordinance

<sup>99</sup> Section 17.38 (7) Langlade County Zoning Code

<sup>100</sup> Section 5 and Section 3.05 Waukesha County Zoning Code

***Zoning Districts that Include Inland Wetlands:***

**Door County** has a Wetland (W) District that protects all mapped shoreland and inland wetlands. Lot sizes of at least 10 acres are required for new lots.<sup>101</sup> Special protections also exist for ridge and swale complexes.

**Florence County** has a Natural Resource Preservation District that “provides for the conservation and protection of natural resources, the safe discharge of floodwaters and the preservation of the floodplain storage capacity.” The ordinance does not specify that all inland wetlands are protected by this district, but does indicate that it generally includes swamps, marshlands, and wetland areas.<sup>102</sup>

**Kenosha County** has a Lowland Resource Conservancy (C-1) district that protects shoreland wetlands, and allows inland wetlands to be protected. The district identifies conditional use and lot size requirements, prohibits the placement of sanitary sewage systems, holding tanks, and private wells, and requires that every effort be made, when platting subdivisions, to contain Lowland Resource Conservancy zoned lands in outlots that are owned and controlled by a community association.<sup>103</sup>

**Oconto County** has a Conservancy District to protect all mapped shoreland and inland wetlands. The ordinance specifies that this district is seldom suitable as a building site, and if a portion of a wetland extends across the shoreland limits it is included in the shoreland jurisdiction when the wetland as a whole is 2 acres or larger.<sup>104</sup>

**Price County** has a Conservancy District (C-1) that is intended to “conserve the wetlands, swamps, and low lands where the groundwater is at or near the surface much of the year and is unsuitable for building purposes over most of the area.” The ordinance states that this district must retain its natural state and must not be filled for buildable sites.<sup>105</sup>

**Washburn County** has a Resource Conservation (RC) District designed “to preserve and protect those areas within Washburn County that are important to the propagation and survival of wildlife, flora, and fauna.” The ordinance indicates that wetlands may be zoned in this district because they provide water quality improvement and habitat functions that are “essential to the functioning of the overall environment” and which also “provide securities for human survival.” Activities that are compatible with conservation are the only uses permitted (e.g., wildlife refuges, natural areas, etc.).<sup>106</sup>

**Waukesha County** has a Conservancy (C-1) District that protects inland wetlands by specifically prohibiting wetland filling and drainage.<sup>107</sup>

***Zoning Districts that Allow Selective Inclusion of Inland Wetlands:***

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<sup>101</sup> Chapter 2.03(1) and Chapter 5.08 of Door County Zoning Ordinance

<sup>102</sup> Chapter 3.10 Florence County Comprehensive Zoning Ordinance

<sup>103</sup> Section 12.25-1 of the Kenosha County Zoning Ordinance; and D. Treloar, personal communication, June 2009

<sup>104</sup> Chapter 14.2100 of the Oconto County General Zoning Ordinance

<sup>105</sup> Chapter 7.6 Price County Zoning Ordinance

<sup>106</sup> Division 11, Section 38-410 Washburn County Zoning Regulations

<sup>107</sup> Section 5 and Section 3.05 Waukesha County Zoning Code

**Douglas, Iron, Manitowoc, and Racine County** use “conservancy,” “natural area,” or some equivalent district to selectively protect inland wetlands. Each of these districts identifies a series of low-impact permitted and conditional uses.<sup>108</sup>

**Adoption of this recommendation will enable local governments to:**

<input checked="" type="checkbox"/> Improve implementation/effectiveness of shoreland and/or general zoning ordinances	<input type="checkbox"/> Advance goals already identified in most zoning ordinances
<input type="checkbox"/> Address wetland mapping deficiencies	<input checked="" type="checkbox"/> Have more flexibility to condition zoning approvals to protect sensitive resources
<input checked="" type="checkbox"/> Reduce wetland regulatory disputes, unauthorized wetland impacts, and/or confusion over which wetlands are protected	<input checked="" type="checkbox"/> Improve integration/collaboration between zoning offices and state and federal wetland regulatory authorities
<input checked="" type="checkbox"/> Improve consistency between local zoning laws and state and federal wetland regulations	<input checked="" type="checkbox"/> Make use of best available technology and/or external expertise
<input type="checkbox"/> Educate applicants about the benefits of wetlands and/or wetland laws	

<sup>108</sup> Section 3.10, Chapter 8.0 of the Douglas County General Zoning Ordinance; Section 9-1-207 of Iron County Land Use Ordinance; Chapter 9.02(4) of Manitowoc Shoreland / Floodplain Zoning Ordinance; and Section 20-496 of Racine County Zoning Ordinance

***Recommendation H: Adopt planned unit development and/or conservation subdivision provisions.***

Conservation subdivisions are housing developments in rural settings that are characterized by compact lots and common open space, where the natural features of land are maintained to the greatest extent possible.<sup>109</sup> Planned unit developments (PUD) are a type of development permitted to meet overall community density and land use goals without being bound by existing zoning requirements.<sup>110</sup> Both types of provisions are commonly used by local governments and provide opportunities to protect and restore wetlands.

While federal and state laws require avoidance and minimization of wetland impacts to the maximum extent practicable, what is practicable may be inadvertently limited by local design standards. Minimum parking space requirements, driveway and road widths, and building size requirements are a few examples where strict adherence to a local standard may limit a developer's ability to design a project to avoid and minimize wetland impacts. *The flexibility built into PUD and conservation subdivision provisions can be used to reconcile such conflicts.*

Alternatively, in cases where public safety is not an issue, local governments can improve wetland protection by allowing flexibility in design standards for projects with wetland impacts. Doing so may also reduce regulatory tensions among local and state officials and landowners.

**What options are available to implement this recommendation?**

These recommendations correspond with Section 4.2 (Planned Residential Unit Development) of the WDNR Minimum Shoreland Wetland Zoning Model Ordinance, and the Conservation Subdivision, Planned Unit Development, or Planned Residential Development sections of a typical General Zoning Ordinance.

1. Adopt conservation subdivision provisions that specify applicable districts, maximum lot sizes, and minimum open space and natural preservation requirements. We recommend explicitly stating that all wetlands shall be included in areas designated as open space, and establishing open space design standards specifying how wetlands and other natural features will be preserved, restored, and managed. To encourage wetland preservation, other requirements can be relaxed if a landowner or developer voluntarily protects wetlands. Expedited permitting processes and density bonuses may be attractive options to leverage development of conservation subdivisions.

The University of Wisconsin – Extension publication, *An Ordinance for a Conservation Subdivision*, is a helpful resource that can be referenced when developing conservation subdivision provisions in a zoning ordinance.<sup>111</sup>

<sup>109</sup> [http://www.doa.state.wi.us/dir/documents/conserv\\_subdiv\\_Model\\_ordinance\\_Feb2001.pdf](http://www.doa.state.wi.us/dir/documents/conserv_subdiv_Model_ordinance_Feb2001.pdf)

<sup>110</sup> Center for Land Use Education (2005) Planned Unit Development. Retrieved from <http://www.uwsp.edu/cnr-ap/clue/Pages/publications-resources/PlanImplementation.aspx>

<sup>111</sup> <http://urpl.wisc.edu/people/ohm/consub.pdf>

2. Modify existing planned unit development, planned residential development, or other pertinent provisions to specify that conservation-oriented development is allowed and encouraged. Again, we recommend explicitly stating that wetlands shall be included in areas designated as open space.
3. Allow flexibility in zoning, land division, or other development standards that work at cross purposes to wetland protection. For example, parking lot standards (i.e., minimum spaces and stall size) and driveway standards (i.e., minimum widths) are two instances where local standards may limit the ability of a landowner or developer to avoid or minimize wetland impacts.

**Is this recommendation mandatory per recent State law revisions?**

No.

**Have other local governments already adopted a similar recommendation?**

**Bayfield County** has adopted zoning provisions specifying applicable districts, minimum lot sizes, shoreline access, preserved open space, and other provisions to be consistent with the conservation subdivision standards adopted as part of the county land division ordinance.<sup>112</sup>

**Door County** has a Conservation Subdivision chapter in its ordinance that gives landowners greater flexibility in developing tracts of land on a project basis by relaxing the various lot area, lot width, setback, yard, and other regulations. The chapter includes minimum requirements for open space preservation, and states that wetlands “*shall not be included in determining the maximum residential density.*”<sup>113</sup>

**Kenosha County** has a Rural Cluster Development overlay zoning district that is intended to “*preserve rural landscape character, sensitive natural areas, farmland and other large areas of open land, while permitting residential development at low, rural densities, in an open space setting, located and designed to reduce the perceived intensity of development and provide privacy for dwellings.*” Cluster groups (buildings and structures) are required to be set back at least 35 feet from wetlands and floodplains in the RCD district. Detailed open space standards are also included that, for example, require all wetlands to be included in common open space and that all open space areas form part of a larger contiguous and integrated open space system.<sup>114</sup>

**Burnett, Columbia, Florence, Langlade, Price, Washburn, and Waupaca County** have Planned Residential Development standards that facilitate the development of conservation subdivisions. These standards require that roadways, lots, buildings, and other structures be located in areas where they will have the least effect on the natural, scenic, and cultural resources

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<sup>112</sup> Section 13-1-29A Bayfield County Zoning Ordinance and Section 14-1-21(a) Land Division Ordinance

<sup>113</sup> Chapter 6 Door County Zoning Ordinance

<sup>114</sup> Section 12-26(a) and 12-26(h) Kenosha County Zoning Ordinance

of the site. In some cases, remaining open space (e.g., wetlands) is required to be dedicated and preserved in perpetuity.<sup>115</sup>

**Lincoln and Shawano County** have Planned Development Districts that are intended to promote improved design and innovative land uses in accordance with the County Comprehensive Plan. The districts allow variation in the relationship of uses, structures, and open spaces in developments that are conceived and implemented as cohesive, unified projects. In exchange for this detailed planning, this district offers flexibility from standards required in other zoning districts.

Additionally, both ordinances include provisions that facilitate conservation neighborhood development. Natural resources, including wetlands, are required to be integrated into the subdivision design as aesthetic and landscape elements, and permanently protected by conservation easements, restrictive covenants, deed restrictions, dedications to the public or appropriate nonprofit organization, and/or by establishment of buildable or “no build” areas on the plat.<sup>116</sup>

**Waukesha County** has Planned Unit Development standards that facilitate the development of conservation subdivisions. At least 30% of each development is required to be in open space. To the greatest extent possible, there must be an integrated system of open spaces that consists of large blocks or wide corridors greater than 1 acre and smaller linkages (greater than 50 feet in width) between those larger areas of open space. Wetlands may not be used when determining the density of the project.<sup>117</sup>

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<sup>115</sup> Section 3.5 (7) (8) (9) Burnett County Land Use / Zoning Ordinance; Section 16-1-12 Columbia County Code of Ordinances; Chapter 3.02 (B) Florence County Shoreland and Wetland Zoning Ordinance; Section 17.58 Langlade County Zoning Code; Chapter 3.22 Price County Shoreland Zoning Ordinance; Division 14-A, Section 38-461 Washburn County Zoning Regulations; Chapter 3.22 Waupaca County Shoreland Zoning Ordinance

<sup>116</sup> Chapter 17.2.70 and 17.3.03 Lincoln County Zoning Code; and Section X.4.01 and Section X.9.03 (81) Shawano County Zoning Ordinance

<sup>117</sup> Section 4 (g) (22) Waukesha County Shoreland & Floodland Protection Ordinance; and Section 3.07 (7) (P) Waukesha County Zoning Code

**Adoption of this recommendation will enable local governments to:**

<input checked="" type="checkbox"/> Improve implementation/effectiveness of shoreland and/or general zoning ordinances	<input checked="" type="checkbox"/> Advance goals already identified in most zoning ordinances
<input type="checkbox"/> Address wetland mapping deficiencies	<input checked="" type="checkbox"/> Have more flexibility to condition zoning approvals to protect sensitive resources
<input type="checkbox"/> Reduce wetland regulatory disputes, unauthorized wetland impacts, and/or confusion over which wetlands are protected	<input checked="" type="checkbox"/> Improve integration/collaboration between zoning offices and state and federal wetland regulatory authorities
<input checked="" type="checkbox"/> Improve consistency between local zoning laws and state and federal wetland regulations	<input type="checkbox"/> Make use of best available technology and/or external expertise
<input checked="" type="checkbox"/> Educate applicants about the benefits of wetlands and/or wetland laws	

***Recommendation I: Adopt provisions that encourage wetland restoration and expedite restoration permit approvals.***

Wetland restoration is the act of returning a degraded or former wetland to a close approximation of its condition prior to disturbance. The benefits of wetland restoration are so widely acknowledged that state and federal agencies and private non-profit organizations invest millions of dollars every year to restore wetlands on Wisconsin's public and private lands.

Promoting wetland restoration on public and private lands can help your community restore the public benefits of wetlands including flood abatement, water quality improvement, increased hunting and fishing opportunities (and associated expenditures), and more.<sup>118</sup>

Despite the public benefits of wetland restoration and an abundance of private landowners who wish to restore wetlands on their property, securing the necessary federal, state, and local approvals can be difficult, expensive, and time-consuming. Such barriers reduce the number of projects that get built each year.

Local governments can promote wetland restoration and maximize public and private conservation investments in their communities by removing barriers in zoning ordinances that prevent or delay federal- and state-sponsored wetland restoration projects.

**What options are available to implement this recommendation?**

1. Create permit exemptions (exemption criteria) or an expedited approval process for federal- and state-sponsored wetland restoration projects. Criteria could outline the types of projects that are most likely to be authorized under general, shoreland, and floodplain zoning ordinances. Another option would be to offer automatic approval for restoration projects that have already been approved under state and federal laws.
2. Waive permit fees for federal- and state-sponsored wetland restoration projects.

Adoption of permit exemptions and waiving permit fees would encourage federal and state agencies to sponsor more wetland and floodplain restoration projects in your county or community.

**Is this recommendation mandatory per recent State law revisions?**

No. However, this recommendation is consistent with steps the state of Wisconsin has taken to encourage a greater federal investment in wetland restoration in Wisconsin. The 2009 Wisconsin Act 391 requires the Wisconsin Department of Natural Resources to implement an expedited permitting process for federally sponsored wetland restoration projects. The bill received unanimous support in both houses of the legislature and was signed into law by Governor Doyle on May 18<sup>th</sup>, 2010. Eligible projects include those sponsored by the U.S. Fish and Wildlife Service, the Natural Resources Conservation Service, and their designated project partners (often Ducks Unlimited and the Wisconsin Waterfowl Association).

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<sup>118</sup> More information on the public benefits of wetlands can be found in *Land Use and Wetlands: A Local Decision Makers' Guide to Wetland Conservation*. Available on-line at: [www.wisconsinwetlands.org/localgovs.htm](http://www.wisconsinwetlands.org/localgovs.htm)

**Have other local governments already adopted a similar recommendation?**

A comprehensive review of local ordinances related to wetland restoration permit review was outside the scope of our research; however, we are aware of the following examples:

**Dane County** established exemptions and waivers for federal, state, and county wetland restoration projects. Shoreland erosion control permits are not required for wetland protection and restoration practices such as installation of water control structures, dikes, and ditch plugs, or breaking drainage tiles, when construction is overseen by and implemented according to plans and designs approved by the Natural Resources Conservation Service or U.S. Fish & Wildlife Service of the U.S. Department of the Interior, the Wisconsin Department of Natural Resources, or the Dane County Land and Water Resources Department.<sup>119</sup>

**Jefferson County** waives permit fees for federal wetland restoration projects.<sup>120</sup>

**Adoption of this recommendation will enable local governments to:**

<input checked="" type="checkbox"/> Improve implementation/effectiveness of shoreland and/or general zoning ordinances	<input checked="" type="checkbox"/> Advance goals already identified in most zoning ordinances
<input type="checkbox"/> Address wetland mapping deficiencies	<input type="checkbox"/> Have more flexibility to condition zoning approvals to protect sensitive resources
<input type="checkbox"/> Reduce wetland regulatory disputes, unauthorized wetland impacts, and/or confusion over which wetlands are protected	<input checked="" type="checkbox"/> Improve integration/collaboration between zoning offices and state and federal wetland regulatory authorities
<input checked="" type="checkbox"/> Improve consistency between local zoning laws and state and federal wetland regulations	<input checked="" type="checkbox"/> Make use of best available technology and/or external expertise
<input checked="" type="checkbox"/> Educate applicants about the benefits of wetlands and/or wetland laws	

<sup>119</sup> Chapter 11.05(2)(a) of the Shoreland, Shoreland-Wetland, and Inland-Wetland Regulations

<sup>120</sup> A. Kitchen, U.S. Fish and Wildlife Service, personal communication, October 2010

## Appendices:

### I. Additional Resources Available From Wisconsin Wetlands Association

#### Basic Wetland Education Information:

##### *Land Use and Wetlands: A Local Decision Makers' Guide to Wetland Conservation*

An 8-page primer that shows how wetlands benefit Wisconsin's communities, explains state and federal wetland laws, and suggests practical steps to identify, protect, and restore local wetlands.

Available upon request or for free download at:

[www.wisconsinwetlands.org/localgovs.htm#ldmg](http://www.wisconsinwetlands.org/localgovs.htm#ldmg)

##### *Overview of Wisconsin Wetland Community Types*

Describes the 12 types of wetlands found in Wisconsin. Available upon request or for free download at:

[www.wisconsinwetlands.org/Gems/WetlandTypes.pdf](http://www.wisconsinwetlands.org/Gems/WetlandTypes.pdf)

##### *Wisconsin's Wetland Gems™ Fact Sheets and Book*

In 2009, Wisconsin Wetlands Association designated 100 Wisconsin wetlands as *Wetland Gems™*. The *Gems* comprise 93 high-quality examples of the diverse wetlands that historically made up nearly a quarter of Wisconsin's landscape, and 7 examples of "workhorse wetlands" that represent the important services such as flood attenuation and water quality protection that wetlands provide. Fact sheets for *Wetland Gems™* sites and info on our *Wetland Gems™* book can be found at: [www.wisconsinwetlands.org/gemsbook.htm](http://www.wisconsinwetlands.org/gemsbook.htm).

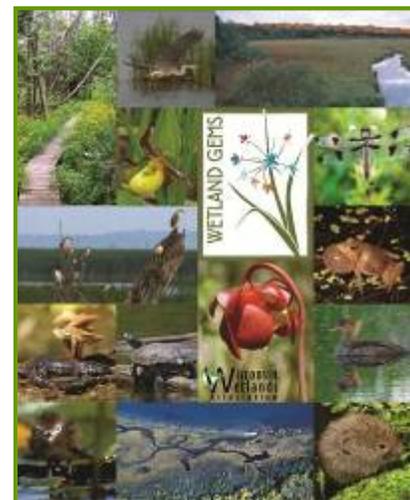
#### Wetland Technical Support and Training:

##### *Panel Presentation on Federal and State Wetland Statutes & Case Law, and a Legal overview of Local Wetland Protection Authorities.*

This presentation was facilitated by Wisconsin Wetlands Association at the October 2012 meeting of the Wisconsin County Code Administrators with assistance from WDNR, USACOE, a land use attorney, and staff from Door and Waukesha Counties. Proceedings available upon request.

##### *Basic Wetland Identification and Assessment Workshop*

Wisconsin Wetlands Association piloted this field-based workshop in Summer 2012 in Ashland and Manitowoc Counties with attendance from zoning and planning staff from more than a dozen counties. As our funding and capacity allows, WWA can help organize workshops for specific communities or for a regional audience. Workshops can also be tailored to meet the training needs of various audiences (e.g., board members, plan commissions, building inspectors, etc.).



*UW-Extension Center for Land Use Education (CLUE) Plan Commission and Board of Adjustment Workshops.* Wisconsin Wetlands Association created training materials that will be used by CLUE to help workshop participants evaluate wetland development scenarios in the context of their Plan Commission or Board of Adjustment responsibilities. Contact CLUE or WWA to request that a workshop with a wetlands emphasis be offered in your region, or at your organization's event. <http://www.uwsp.edu/cnr-ap/clue/Pages/default.aspx>

### **Resources for Local Wetland Policy Development:**

*Land Use and Wetlands: An Inventory of Wisconsin Coastal Counties' Zoning and Land Division Ordinances*

This publication documents and summarizes how Wisconsin's 15 Great Lakes coastal counties protect wetlands through their zoning and land division ordinances. WWA also completed research on 30 non-coastal county zoning ordinances. You can find the publication, as well as the 45 completed reports (see image) on county wetland policies online at:

<http://wisconsinwetlands.org/localgovs.htm#inventory>

Local officials can read through these reports to see how counties have (or have not) implemented solution-oriented land use regulations for the purposes of wetland conservation.



To receive the latest (and free) information on wetland issues, tools, trainings, and events subscribe to *Wetland News and Alerts*, “like” WWA’s Facebook page, or follow WWA’s Twitter feed [wisconsinwetlands.org/alerts.htm](http://wisconsinwetlands.org/alerts.htm) | <https://www.facebook.com/WisconsinWetlands> | <https://twitter.com/WIWetlandsAssoc>

*If you would like to discuss your community’s wetland education and training needs, to request assistance with local wetland policy development, or to receive more information on WWA’s educational resources, please contact Policy Specialist Kyle Magyera, at 608-250-9971 / [kyle.magyera@wisconsinwetlands.org](mailto:kyle.magyera@wisconsinwetlands.org).*

## II. Additional Wetland Resources for Local Governments

### Wisconsin Department of Natural Resources Wetland Identification and Outreach Tools

#### *Wetland Indicator Map*

This interactive, online mapping tool illustrates wetlands that have been identified through the WDNR's Wetland Inventory, and areas that are not mapped as wetlands but may be wetlands based on the presence of wetland (hydric) soils. On this map you can also activate a layer to see areas that contain former or degraded wetlands that could be restored. Click "Potentially Restorable Wetlands" under the "Plants and Habitat" tab in the Map Layers section. The Wetland Indicator Map is available on the WDNR's Surface Water Data Viewer:

[dnr.wi.gov/topic/wetlands/mapping.html](http://dnr.wi.gov/topic/wetlands/mapping.html)

#### *Locating Wetlands Webpages*

WDNR offers a series of online informational tools to help Wisconsin property owners learn whether and where they have wetlands on their property. The webpages include the Wetland Indicator Map along with other tools such as the "Waking up to Wetlands" brochure and videos and Wetland Physical Clues Checklist that can be a helpful guide when walking a property to see if wetlands are present. The webpages can be accessed at:

[dnr.wi.gov/topic/Wetlands/locating.html](http://dnr.wi.gov/topic/Wetlands/locating.html)

#### *Wetland Media Kit*

WDNR prepared a clearing-house of "fast facts" that can be used when talking to landowners and the general public about why it is important to protect, restore, and manage wetlands. Find the media kit at: [dnr.wi.gov/news/mediakits/mk\\_wetlands.asp](http://dnr.wi.gov/news/mediakits/mk_wetlands.asp)

### Federal Agency Wetland Identification and Outreach Tools

*National Wetlands Inventory* administered by the US Fish and Wildlife Service is an interactive, online mapping tool that shows the location of wetlands identified through the USFWS' wetland mapping program. The inventory is illustrated by a seamless digital layer stored in an ArcSDE geodatabase format. The mapping tool is available at:

<http://www.fws.gov/wetlands/Data/Mapper.html>

*Web Soil Survey* administered by the USDA Natural Resource Conservation Service (NRCS) is an interactive, online mapping tool that shows the location of different types of soils. The tool can be used to identify soils that are wet or hydric – a strong indicator that wetlands are likely present. The mapping tool is available at:

<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>

*Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils* is an informative resource, prepared by NRCS, that provides guidance on

characteristics to look for when identifying wetland (hydric) soils in the field. Download the guide for free at:

[ftp://ftp-fc.sc.egov.usda.gov/NSSC/Hydric\\_Soils/FieldIndicators\\_v7.pdf](ftp://ftp-fc.sc.egov.usda.gov/NSSC/Hydric_Soils/FieldIndicators_v7.pdf)

*Slides from Farm Service Agency (FSA)* can be used to look for wetland signatures or wetland hydrology on a particular site. Contact your local FSA field office to request the appropriate slides.

### **Information on Wetland Assessment**

#### *WDNR Wetland Assessment Tools and Resources*

WDNR developed a suite of tools and resources that can be used to monitor and assess the quality and quantity of wetlands and their functions. The tools are intended to help planners and other decision-makers think about and analyze wetlands in the context of watersheds and landscapes. Additionally, they can help improve understanding of how specific wetland functions benefit our local communities. These tools and resources are available at:

<http://dnr.wi.gov/topic/wetlands/assessment.html>

*Minnesota Routine Assessment Methodology for Evaluating Wetland Functions* is a wetland assessment tool used by the US Army Corps of Engineers for regulatory purposes. It is available at: <http://www.bwsr.state.mn.us/wetlands/mnram/index.html>.

*NWIPlus* developed by the US Fish and Wildlife Service is a wetland assessment tool based on the National Wetlands Inventory that helps users predict the functions of wetlands, including but not limited to: surface water detention, streamflow maintenance, shoreline stabilization, and conservation of biodiversity. Users of the NWIPlus can generate reports containing wetland types and functions and maps showing wetlands of significance for each of the 11 functions that NWIPlus evaluates.

*The Duck-Pensaukee Watershed Approach: Mapping Wetland Services, Meeting Watershed Needs.* This online mapping tool and report prepared by The Nature Conservancy shows how wetlands and wetland services can be mapped as part of a watershed planning process. The watershed-based mapping tool is a model that can be duplicated elsewhere to help communities identify wetland conservation priorities and opportunities, assess wetland functions in a watershed context, and prioritize the distribution of limited conservation dollars. View the mapping tool and report at: <http://www.conservationgateway.org/news/duck-pensaukee-watershed-approach-mapping-wetland-services-meeting-watershed-needs>

### **Information on Wetland Restoration Funding and Partners**

*Farm Bill Biologist Program* administered by Pheasants Forever has placed regional staff throughout the state to serve as specialized conservation program and habitat planning consultants. These Farm Bill Biologists can be contacted to assist landowners with designing, developing, and funding habitat improvements on private lands. They can also refer landowners to the appropriate staff who administer wetland restoration programs such as USFWS' Partners

for Fish and Wildlife Program and NRCS' Wetland Reserve Program. Find your regional Farm Bill Biologist at: <http://www.pheasantsforever.org/page/1/fieldstaff.jsp#farmbill>

*Wetland Restoration Handbook for Wisconsin Landowners* is a publication prepared by the Wisconsin Wetlands Association and WDNR that provides guidance on how to plan and implement a responsible and effective wetland restoration project. Information on restoration funding, programs, and partners are all available in the handbook. Download the handbook for free at: <http://dnr.wi.gov/topic/Wetlands/handbook.html>

### III. Recommended Reading

1) Association of State Wetland Managers (ASWM) Local Wetland Program Publications:

<http://aswm.org/watersheds/local-wetland-programs>

2) Center for Watershed Protection (CWP) Wetlands and Watersheds Article Series:

[http://www.cwp.org/documents/cat\\_view/73-wetlands-and-watersheds-article-series.html](http://www.cwp.org/documents/cat_view/73-wetlands-and-watersheds-article-series.html)

3) Center for Watershed Protection (1998). Better Site Design: A Handbook for Changing Development Rules in Your Community. [http://www.cwp.org/documents/cat\\_view/77-better-site-design-publications.html](http://www.cwp.org/documents/cat_view/77-better-site-design-publications.html)

4) Environmental Law Institute (2008). Planner's Guide to Wetland Buffers for Local Governments. [http://www.elistore.org/reports\\_detail.asp?ID=11272](http://www.elistore.org/reports_detail.asp?ID=11272)

5) Southeastern Wisconsin Regional Planning Commission (2010). Managing the Water's Edge – Making Natural Connections.

<http://www.sewrpc.org/SEWRPCFiles/Environment/RecentPublications/ManagingtheWatersEdge-brochure.pdf>

6) University of Wisconsin – Extension Center for Land Use Education (CLUE) Publications and Resources: <http://www.uwsp.edu/cnr-ap/clue/Pages/publications-resources/default.aspx>

7) University of Wisconsin – Extension. (2001). An Ordinance for a Conservation Subdivision. <http://urpl.wisc.edu/people/ohm/consub.pdf>

*Wisconsin Wetlands Association (WWA) is dedicated to the protection, restoration, and enjoyment of wetlands and associated ecosystems through science-based programs, education, and advocacy. WWA is a non-profit 501(c)(3) organization.*



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