Pursuant to ch. 227, Wis. Stats., the Wisconsin Department of Natural Resources has finalized and hereby certifies the following guidance document.

<table>
<thead>
<tr>
<th>DOCUMENT ID</th>
<th>WT-19-0004</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOCUMENT TITLE</td>
<td>ZIP LINE CROSSINGS OVER NAVIGABLE WATERS</td>
</tr>
<tr>
<td>PROGRAM/BUREAU</td>
<td>WATERWAYS PROGRAM</td>
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<tr>
<td>STATUTORY AUTHORITY OR LEGAL CITATION</td>
<td>WIS STAT CH 30</td>
</tr>
<tr>
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<td>8/26/19</td>
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<tr>
<td>DATE FINALIZED</td>
<td>10/21/19</td>
</tr>
</tbody>
</table>

**DNR CERTIFICATION**

I have reviewed this guidance document or proposed guidance document and I certify that it complies with sections 227.10 and 227.11 of the Wisconsin Statutes. I further certify that the guidance document or proposed guidance document contains no standard, requirement, or threshold that is not explicitly required or explicitly permitted by a statute or a rule that has been lawfully promulgated. I further certify that the guidance document or proposed guidance document contains no standard, requirement, or threshold that is more restrictive than a standard, requirement, or threshold contained in the Wisconsin Statutes.

10/11/19

Signature  Date
BUREAU OF WATERSHED MANAGEMENT
PROGRAM GUIDANCE

Waterway Wetland Protection

Zip Line Crossings Over Navigable Waters

Effective Date: February 14, 2018
Guidance #: 3500-2017-06

Notice: This document is intended solely as guidance, and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. This guidance does not establish or affect legal rights or obligations, and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

APPROVED:

Pam Biersach, Director
Bureau of Watershed Management

2-14-18
A. Statement of Problem Being Addressed

Projects that may require overhead line crossings over navigable waterways in Wisconsin include powerlines, zip lines, utility lines, and other projects that place cables over navigable waterways. Environmental Assessment (EA) staff review proposals associated with energy or transportation projects, and Water Management Specialist (WMS) staff review all other overhead line crossing proposals. This guidance provides WMS staff with background on potential issues associated with zip lines over navigable waterways and guidance on reviewing these proposals. This guidance may also be useful for other types of overhead line crossing projects.

B. Background

Zip lines usually do not obstruct navigation if placed high enough over navigable waterways to maintain a safe distance between the ground and the line after accounting for high winds that may jostle the line and any weight that may be placed on the line. For example, the minimum recommended cable clearance for private zip lines is 7 feet between the line sag and ground.

For guidance on cables/lines that will obstruct navigation see “Approval process for pipes and other similar structures over streams, sloughs, bayous, or marsh outlets” (3500-2017-01).

How have overhead line crossings been regulated?

Since Wisconsin was a territory (1841 Act 9 at http://docs.legis.wisconsin.gov/1841/related/territoryActs/9.pdf), its statutes have provided that “no ... obstruction may be made in or over ... [navigable rivers and streams] without the permission of the legislature.” The prohibition against obstruction initially applied only to meandered navigable streams, but later was broadened to apply to “all streams, sloughs, bayous, and marsh outlets ... navigable in fact.” Ropes, lines, cables, etc., may cross over navigable rivers and streams if: (1) they do not obstruct navigation or (2) they obtain legislative permission.

The Department may regulate overhead line crossings that do not convey people, animals, and vehicles in or over navigable waterways under s. 30.10(2), Wis. Stats. Zip lines that convey people, animals, and vehicles in or over navigable waterways also may be regulated as “bridges” under 30.123, Wis. Stats., based on the following history:

Effective July 1, 1941, 1941 Act 331 authorized the Wis. Public Service Commission to issue permits for private bridges under s. 31.23, Wis. Stats., but the statutes did not define “bridge” in ch. 30 or 31.

Effective Jan. 1, 1977, in Wis. Adm. Register No. 252 (Dec. 1976) the Department defined “bridge” by rule (http://docs.legis.wisconsin.gov/code/register/1976/252b/remove/nr320.pdf) - likely to aid in administering ss. 31.23 and 30.10. The rule created s. NR 320.03(3), Wis. Adm. Code [now amended and renumbered as s. NR 320.03(3)], which defined “bridge” as “any private or public structure except municipal highway bridges constructed in or over a navigable waterway to provide a walkway or roadway for pedestrians, animals or vehicles.” Overhead line crossings do not provide a walkway or roadway, so are not “bridges” under the 1977 rule definition.

Effective May 3, 1988, 1987 Act 374 enacted ss. 30.123 (the first ch. 30 statute to permit non-municipal bridges) and 30.01(1g), Wis. Stats. (the first ch. 30 or 31 statute to define “bridge”). S. 30.01(1g) defined “bridge” as “a structure used to convey people, animals and vehicles over navigable waters and includes pipe arches and culverts.” Neither the 1988 nor current statutory definition requires a bridge to provide a
walkway or roadway, so zip lines used to convey people, animals, and vehicles over navigable waterways are “bridges” under the statutory definition. It is noted that zip lines rarely meet this definition as they are only used for people’s enjoyment so zip lines are not likely to meet the definition of a “bridge” nor are other types of overhead lines like overhead utility lines, power lines, etc.

Currently s. NR 320.03(3) reads the same as s. NR 320.03(5) in the 1977 rule except the phrase “and includes pipe arches and culverts” was added in 2005 Wis. Adm. Register No. 592 (April 2005) eff. May 1, 2005, making the 1977 rule more congruent with the 1988 statutory definition. The 1977 rule change did not replace the phrase “to provide a walkway or roadway” with the 1988 statutory phrase “to convey.” The rule was amended in 2005 to reflect statutory amendments creating exemptions, general permits, and individual permits.

The varied definitions in rule and statute mean that since 1988 a zip line may be considered a “bridge” by statute if it conveys people, animals, and vehicles over navigable waters, but not by rule as it is not a walkway or roadway. Statutes trump rules, and the broad statutory language in ss. 30.123 and 30.01(1g) authorizes the Department to regulate any zip lines that convey people, animals, and vehicles over navigable waters as bridges. But although the statutory change authorizes the Department to exercise s. 30.123 jurisdiction over every type of structure that meets the statutory definition of “bridge” it does not require it to do so. In many cases, this is a minor discrepancy because zip lines cannot meet the statutory definition of a “bridge”.

The Department will review most zip lines under s. 30.10(2) because:

- Overhead line crossings (including zip lines) that obstruct navigation remain subject to s. 30.10(2);
- Overhead line crossings are not bridges per ss. 30.123 and 30.01(1g) unless they convey people, animals, and vehicles over navigable waters;
- Overhead line crossings are not bridges per s. NR 320.03(3) as they are not walkways or roadways;
- Zip lines that convey people, animals, and vehicles (if any exist) have been “bridges” as defined by statute since 1988, but have not been regulated as “bridges” under s. 30.123 and 30.01(1g);
- Issues to evaluate for overhead zip line crossings are more similar to issues for other overhead line crossings than they are to issues for bridges, so it makes sense to analyze and regulate most overhead line crossings (including zip lines) in the same manner under s. 30.10(2).

The zip line crossings listed below need waterway or wetland permits (see Waterway and Wetland Handbook Chapter 15 for more information about the permitting process):

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1 It is unclear why the legislature used the conjunction “and” in “people, animals and vehicles” when enacting s. 30.01(1g) in 1988; the rule (s. NR 320.02(3)) has used the conjunction “or” in “peDESTrians, animals or vehicles” since promulgated in 1977. But the rule also has always required that a bridge “provide a walkway or roadway...” Neither “roadway” nor “walkway” is defined in ch. NR 320, but the closest (s. 30.40(22)) or most common (s. 340.01(54) definitions seem to anticipate some sort of surface that can be walked or driven upon, so zip lines are not “bridges” under s. NR 320.02(3) either. The current DNR bridge permits web page (http://dnr.wi.gov/topic/Waterways/water_levels_crossings/bridges.html) uses rule, not statutory, language:

For the purposes of protecting the public trust when starting a waterway crossing project, a bridge, as defined by law, is considered to be "any structure constructed in or over a navigable waterway to provide a walkway or roadway for pedestrians, animals or vehicles, and includes pipe arches and culverts."
• Line crossings with one or more pylons/structures to anchor or support the line crossing need a s. 30.12, Wis. Stat., permit if the structures will be placed below the OHWM of a navigable waterway;
• Line crossings using fill material or one or more pylons or other structures to anchor or support the line crossing need a s. 281.36, Wis. Stat., permit if the fill will be placed in a wetland or the anchoring/supporting structure constitutes the placement of fill in a wetland;
• Line crossings constructed in or over a navigable waterway to convey people, animals and vehicles over navigable waters need a s. 30.123, Wis. Stat., permit; or
• Line crossings that obstruct navigation under s. 30.10(2), Wis. Stat. or infringes on public rights relating to navigable waters under 30.03(4), Wis. Stat., require an informal approval.

The Department does not regulate cable or line crossings in or over non-navigable waterways or farm drainage ditches without navigable stream histories.

C. Guidance

This guidance provides a process DNR staff may use to review zip lines over navigable waterways or are supported by structures anchored in wetlands, or both, to determine if the project needs a ch. 30 or s. 281.36 permit, obstructs navigation under s. 30.10(2), or infringes on public rights relating to navigable waters under s. 30.03(4). Project costs and logistical difficulties increase as crossing distance increases, so most proposals to place overhead line crossings like zip lines will likely be to cross streams, tributaries, connected enlargements, and similar waterways.

Responding to inquiries or complaints about line crossing structures

Staff often hear of a line crossing when a project proponent asks if DNR approval is needed or members of the public inquire or complain about a proposed or existing line crossing over a navigable waterway, supported by structures anchored in a wetland, or both. Keep in mind the following:

• S. 30.14(2), Wis. Stat., ("Upon complaint, ... [DNR] shall investigate") only applies if the structure complained of may require a permit under s. 30.12, 30.13, or 30.207, so unless the support structures of a line crossing are below the OHWM or need a general permit s. 30.14(2) does not apply.

• To legally place a zip line crossing, a project proponent must either (a) own the riparian land on both sides of the waterway and the waterway bed at the location of the crossing, (b) have consent of the owners of the riparian land and bed to cross, or (c) have another legal right (e.g., an easement) to place lines across a waterway and riparian land and to place support structures for the lines on land and bed owned by someone else. If a WMS receives a complaint about a zip line, they may wish to verify ownership/permission/right to place if the WMS feels like the structure is causing harm to the public interest for that waterway.

• In reviewing zip line crossing navigable waterways, WMSs should consider whether:
  o The crossing(s) may obstruct navigation (s. 30.10(2));
  o The crossing(s) may infringe on public rights in the waterway (s. 30.03(4)), including the right to enjoy natural scenic beauty, recognized as a public right in navigable waters in Muench v. Public Service Comm., 261 Wis. 492, 521 ("... we have a further public right in

2 Small supporting anchors that are installed using a pile driver will not constitute the placement of fill in most cases.
navigable streams recognized by legislative enactment...") and *Claslin v. Dept. of Natural Res.*, 58 Wis. 2d 182, 206 N.W.2d 392 (1973) (potential damage to natural scenic beauty is proper basis to deny permit).

- The structure may have cumulative impacts on public rights or interests in the navigable waterway.

Projects that will not obstruct navigation, infringe on public rights or interests in the navigable waterway individually or cumulatively, or need a Department permit under s. 30.12, 30.123, or 281.36, Wis. Stats., do not need Department permission under s. 30.10(2), Wis. Stat.

**Evaluating potential impacts of zip line crossings**

Staff should consider current navigation and scenic value of the waterway when assessing whether line crossing(s) will obstruct navigation, infringe on existing public interest and public rights (e.g., natural scenic beauty), or potentially cause cumulative impacts to the navigable waterway.

- **Obstructing navigation:** WMSs should contact local wardens and other support staff to help determine current uses of the waterway (boat size/height, sailboat use, development patterns, whether there is public access to the waterway). Line crossings may affect sailboat recreation if ropes or cables hang too low over the waterway for sailboats to pass beneath (at least 7 feet of clearance should be available) or if support structures on the bed are so close together or numerous as to interfere with navigation of boats using the waterway. If sailboats navigate the waterway in the area of the line crossing(s), the Department may assert jurisdiction under s. 30.10(2), Wis. Stat. to require that the structure be placed in a manner that does not obstruct navigation.

- **Infringing public rights or interest:** WMSs should evaluate whether a zip line crossing and its support structures will significantly infringe on public rights or interest in the waterway.
  
  - A zip line proposed to cross a wild and scenic river, scenic urban waterway, or state riverway may infringe on the public right to enjoy natural scenic beauty since such waterways receive special protections to help maintain their natural scenic beauty.
  
  - An overhead line may infringe on the public right to natural scenic beauty if it crosses a river, lake, impoundment or navigational channel between lakes, if anchor pylons will be visible from the waterway, if the waterway has a high recreational value, or if the natural scenic beauty at the proposed crossing is currently relatively undisturbed. The WMS should consider impacts from the specific project in question as well as the potential for cumulative impacts. For example, if a significant section of shoreline is undeveloped and owned by the same riparian, the potential for cumulative impacts related to natural scenic beauty may be lower than if the waterway is within a more urbanized or subdivided setting where nearby riparians also may wish to place a zip line or other overhead line crossing.

**D. Procedures**

If a complaint or inquiry about line crossing structures is received, the WMS should inspect the site to determine if the line is obstructing navigation or infringing on public rights or interest in the waterway.

*Projects that do obstruct navigation or infringe on public rights or interests*
The WMS may suggest an alternative to the zip line crossing to avoid the obstruction or infringement. A swing or tire swing secured above the OHWM to an existing tree or appropriately placed structure may be a reasonable alternative for recreational use rather than a zip line. For other line crossings, the property owner could consider an alternative location or relocating support structures above the OHWM.

WMS staff should use “cable crossing” activities in the permit database to record information and decisions about zip lines. Stepped enforcement may be taken against existing zip line crossings in appropriate cases, or the Department may require the project proponent to apply for (a) a s. 30.123, Wis. Stat., bridge permit in the rare case where a zip line conveys people, animals, and vehicles and thus is a “bridge,” or (b) a s. 30.12 or 281.36 permit where needed.

Projects that do not obstruct navigation or infringe on public rights or interests

Project proponents for such zip line crossings should receive an informal approval stating what we understand the project to be, how it will be built, why we conclude it won’t obstruct navigation or infringe on public rights or interest. It is not required to issue informal approvals to these projects unless the WMS staff feels compelled to do so given public interest for a specific project.

Persons complaining about zip line crossings that a WMS has concluded will not obstruct navigation or affect public rights or interest in the waterway should be advised by letter or email what we understand the project to be, how it will be built, why we conclude it won’t obstruct navigation or infringe on public rights or interest, and that they can consult their attorney to discuss whether they have a private remedy or other course of action. They may be advised they can also contact local zoning officials to ensure the structure complies with local zoning, since overhead line crossings placed in shorelands of unincorporated areas - i.e., not cities or villages - are regulated under county shoreland zoning. Zip lines are not exempt structures and need a variance if placed within 75 feet of the OHWM. Counties also may regulate land uses - e.g., campground, amusement park, or recreational park - under general zoning and allow zip lines in some districts - e.g., recreational commercial district - but not others - e.g., single family residential district.

CREATED:

Amanda Minks 9/28/17
Creator, Title Date

APPROVED:

________________________   ___________________
Section Chief                Date

Policy Management Team approved on ______________ (date).