

 **07hr_SC-ENR_CRule_06-126_pt01**



(FORM UPDATED: 08/11/2010)

WISCONSIN STATE LEGISLATURE ...
PUBLIC HEARING - COMMITTEE RECORDS

2007-08

(session year)

Senate

(Assembly, Senate, or Joint)

**Committee on ...
Environment and Natural Resources
(SC-ENR)**

INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL

- Appointments ... **Appt** (w/Record of Comm. Proceedings)
- Clearinghouse Rules ... **CRule** (w/Record of Comm. Proceedings)
- Hearing Records ... **HR** ... **bills and resolutions** (w/Record of Comm. Proceedings)
 - (**ab** = Assembly Bill) (**ar** = Assembly Resolution) (**ajr** = Assembly Joint Resolution)
 - (**sb** = Senate Bill) (**sr** = Senate Resolution) (**sjr** = Senate Joint Resolution)
- Miscellaneous ... **Misc**

* Contents organized for archiving by: Mike Barman (LRB) (July/2014)

Senate

Record of Committee Proceedings

Committee on Environment and Natural Resources

Clearinghouse Rule 06-126

Relating to bank erosion control on rivers and streams.

Submitted by Department of Natural Resources.

April 23, 2007 Referred to Committee on Environment and Natural Resources.

May 23, 2007 **PUBLIC HEARING HELD**

Present: (5) Senators Miller, Jauch, Wirch, Kedzie and Schultz.

Absent: (0) None.

Appearances For

- Mary Ellen Vollbrecht, Madison — DNR
- Lori Grant, Madison — River Alliance of Wisconsin

Appearances Against

- Paul Kent, Madison — Riparian Owners & Marine Contractors Association

Appearances for Information Only

- None.

Registrations For

- None.

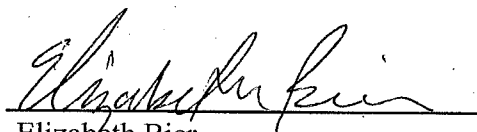
Registrations Against

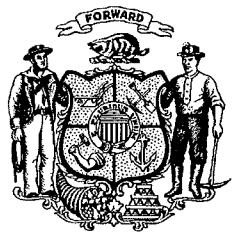
- None.

Registrations for Information Only

- None.

June 21, 2007 No action taken.


Elizabeth Bier
Committee Clerk



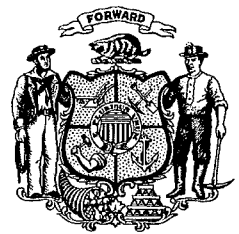
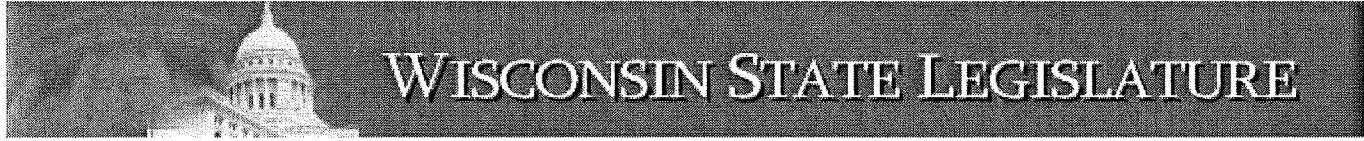
Bier, Beth

From: Johnson, Dan
Sent: Tuesday, April 24, 2007 1:26 PM
To: Bier, Beth
Subject: CR 06-126

Beth,

Senator Kedzie would like to make request for a public hearing on Clearinghouse Rule 06-126, relating to bank erosion control on rivers and streams. Thank you.

Dan Johnson
Chief of Staff
State Senator Neal Kedzie
11th Senate District
608-266-2635





Great Lakes Commission des Grands Lacs

Eisenhower Corporate Park • 2805 South Industrial Hwy., Suite 100
Ann Arbor, Michigan 48104-6791
Office (734) 971-9135 • Fax (734) 971-9150 • glc@glc.org

EXECUTIVE DIRECTOR
Tim A. Eder

BOARD OF DIRECTORS

CHAIR

Lt. Governor John D. Cherry, Jr.
Lansing, Michigan

VICE CHAIR

Lt. Governor Patrick Quinn
Governor's Appointee
Chicago, Illinois

IMMEDIATE PAST CHAIR

Thomas E. Huntley
Minnesota State Representative
Duluth, Minnesota

Kari Evans

Policy Director
Environmental Affairs
Office of the Governor
Indianapolis, IN 46204

Ken DeBeaussaert

Director
Office of the Great Lakes
Mich. Dept. of Environ. Quality
Lansing, Michigan

Alexander B. Grannis

Commissioner,
New York Dept. of Environmental
Conservation
Albany, NY

Sean Logan

Director
Ohio Dept. of Natural Resources
Columbus, Ohio

William Carr

Team Leader
Ministry of Intergovernmental Affairs
Toronto, Ontario

Cathleen Curran Myers

Deputy Director for
Water Management
PA Dept. of Envir. Protection
Harrisburg, Pennsylvania

Michel LaFleur

Chargé d'affaires
Government of Québec
Chicago, Illinois

Todd Ambs

Administrator
Division of Water
Wisconsin Dept. of Natural Resources
Madison, Wisconsin

May 4, 2007

Honorable Mark Miller, Chair
Environment and Natural Resources Committee
Wisconsin Senate
Room 409 South State Capitol
Madison, WI 53707

Dear Senator Miller:

I am pleased to provide this 2006 Annual Report of the Great Lakes Basin Program for Soil Erosion and Sediment Control. This federally funded program, initiated in 1991 and authorized in the 2002 Farm Bill, is a unique and important state-federal partnership administered by the Great Lakes Commission in cooperation with the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS).

The Basin Program is managed by the Great Lakes Commission with oversight from a regional Soil Erosion and Sedimentation Task Force that is comprised of members from the eight Great Lakes States, NRCS, the U.S. Environmental Protection Agency the U.S. Army Corps of Engineers, the International Joint Commission and the National Association of Conservation Districts - Great Lakes Committee.

The Basin Program provides financial support for soil erosion and sediment control projects throughout the eight-state Great Lakes region. These grants to local governments and organizations directly support the restoration of the Great Lakes. Grant funding decisions are made by the Soil Erosion and Sedimentation Task Force. To date, 389 projects have been supported in the Great Lakes Basin.

Thanks to the continuing support of Congress and the NRCS, the Basin Program is measurably improving Great Lakes environmental quality and contributing to Great Lakes restoration.

For more information about the Great Lakes Basin Program, please contact the project manager, Gary Overmier, at 734-971-9135 or garyo@glc.org.

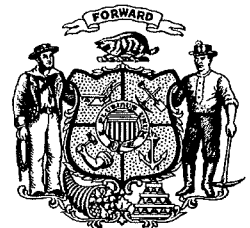
Cordially,

Tim A. Eder,
Executive Director

Enclosure



WISCONSIN STATE LEGISLATURE



**Testimony Before
The Senate Committee on Environment and Natural Resources
Re: Proposed NR 328 Clearinghouse Rule 06-126**

**Submitted by Paul G. Kent on behalf of
The Riparian Owners and Marine Contractors Association**

May 23, 2007

Good morning. My name is Paul Kent. I am an attorney whose practice focuses on water law issues and today I am here on behalf of the Riparian Owners and Marine Contractors Association. As the name implies, ROMCA is a group of contractors that performs work in navigable waters for property owners who own riparian property.

We have appreciated the opportunity to participate in the development of many of the Chapter 30 rules with the Department of Natural Resources including NR 328. The Department's efforts to implement a successful general permit (GP) program along with other efforts to improve the administration of the Chapter 30 program are appreciated.

We also have appreciated the efforts the Department has made to address the concerns that we have raised during the rulemaking process. The rule before you today has benefited from the advisory committee process and public input, and reflects a number of positive changes. Nevertheless, we have several remaining concerns, two of which I would like to focus on this morning.

1. RIPRAP REPAIR FOR UNPERMITTED SITES.

In many parts of the state, riprap was installed before riprap permitting became commonplace. In lakes, repair of unpermitted riprap is either exempt or subject to a GP within specified limits. The proposed rule for rivers allows repair but only if the property is within the lower "ecoregions" and then only within City and Village boundaries.

Outside of those areas, a person who wants to move a few rocks back into place or add a few rocks due to ice or wave erosion will require an individual permit. The only other option is to replace the entire area with "integrated toe protection" under a GP. Where this issue is likely to be a problem is where you have ex-urban residences along major river corridors like the Wolf, Fox or Rock Rivers.

Attached as Exhibit #1 is a photograph taken of riverfront property on the Wolf River outside of New London. It is a typical riprap installation that has been on the property for years and predates current permitting standards. The field stone boulders have slumped in some areas. If this landowner wants to move some of the boulders back into place or into one of the eroded pockets, he cannot do so unless he applies for an individual permit or seeks to replace the entire shoreline with integrated toe protection.

We do not believe that the limitation of the GP to cities and villages is reasonable and should be deleted from the rule. Providing a simple way to comply with the law through a GP would encourage property owners who do not have permits to get into the system. The alternative is to encourage repair of riprap outside of the system. Moreover, the impacts of such a GP are negligible. The GP would only allow *repair* of existing riprap subject to height and length limits. This would not result in expanding areas or promoting conversion of undeveloped areas.

Therefore we would request deletion of the "city and village" limitation in proposed NR 328.35(8)(a).

2. INTEGRATED TOE GP/ BEPI CONCERNS.

Unlike the rule for lakes, the proposed rule for rivers does not have a GP for traditional riprap. Instead there is a GP for "integrated toe protection" and then only if there is a score above twenty under the "Bank Erosion Potential Index" (BEPI). We have a number of concerns about the accuracy of this newly developed index and the determination of "twenty points" as the appropriate threshold.

One concern is that the index does not account for boat wake-induced erosion that occurs in developed areas on major river systems. In addition, if biostabilization proves ineffective, the landowner still has no option other than apply for an individual permit.

For these same reasons, the Department provided an alternative means to measure erosion in lakes. In so doing, there was in effect a safety valve for areas that were experiencing actual erosion or failure of biostabilization measures but did not reach the necessary score under the DNR's index. In the proposed rule for rivers, the Department allows for an actual measure of erosion, but again limits that tool to properties in cities and villages (or parts of an "urban corridor") in the lower ecoregions. The restriction of this remedy does not address the ex-urban

residences along major river corridors experiencing erosion problems and should be deleted.

The pictures in Exhibits #2, 3 and 4 show another stretch of the Wolf River near New London. It is an area where biostabilization was utilized and installed according to standard protocol. See Exhibit #2. Yet within a one year period, because of boat wakes and other causes, the banks experienced significant undercutting, slumping and erosion. See, Exhibits #3 and 4. If this site would score less than 20 on the BEPI index, it would not be eligible for a GP even when the biostabilization has failed. The safety valve of an actual erosion measurement should be applied throughout the lower ecoregion and not just in cities and villages and urban areas.

Therefore we would request that the "city and village" limitation in NR 328.35 (5)(b)2 be deleted. Alternatively, we would request replacement of that limitation with the phrase "or is located on a reach of river where housing density exceeds 12 per 1/2 mile."

CONCLUSION

It is our opinion that the limitations on the use of GPs in the proposed rule for riprap repair and where there is actual erosion should be reconsidered. Doing so would improve implementation and acceptance of the rule and would be more consistent with the lake riprap rule. I appreciate the opportunity to present these comments and would welcome any questions.

My contact information is: Paul G. Kent, Anderson & Kent SC., 1 North Pinckney St. #200, Madison, WI, 53711; 608/246-8500; pkent@andersonkent.com.

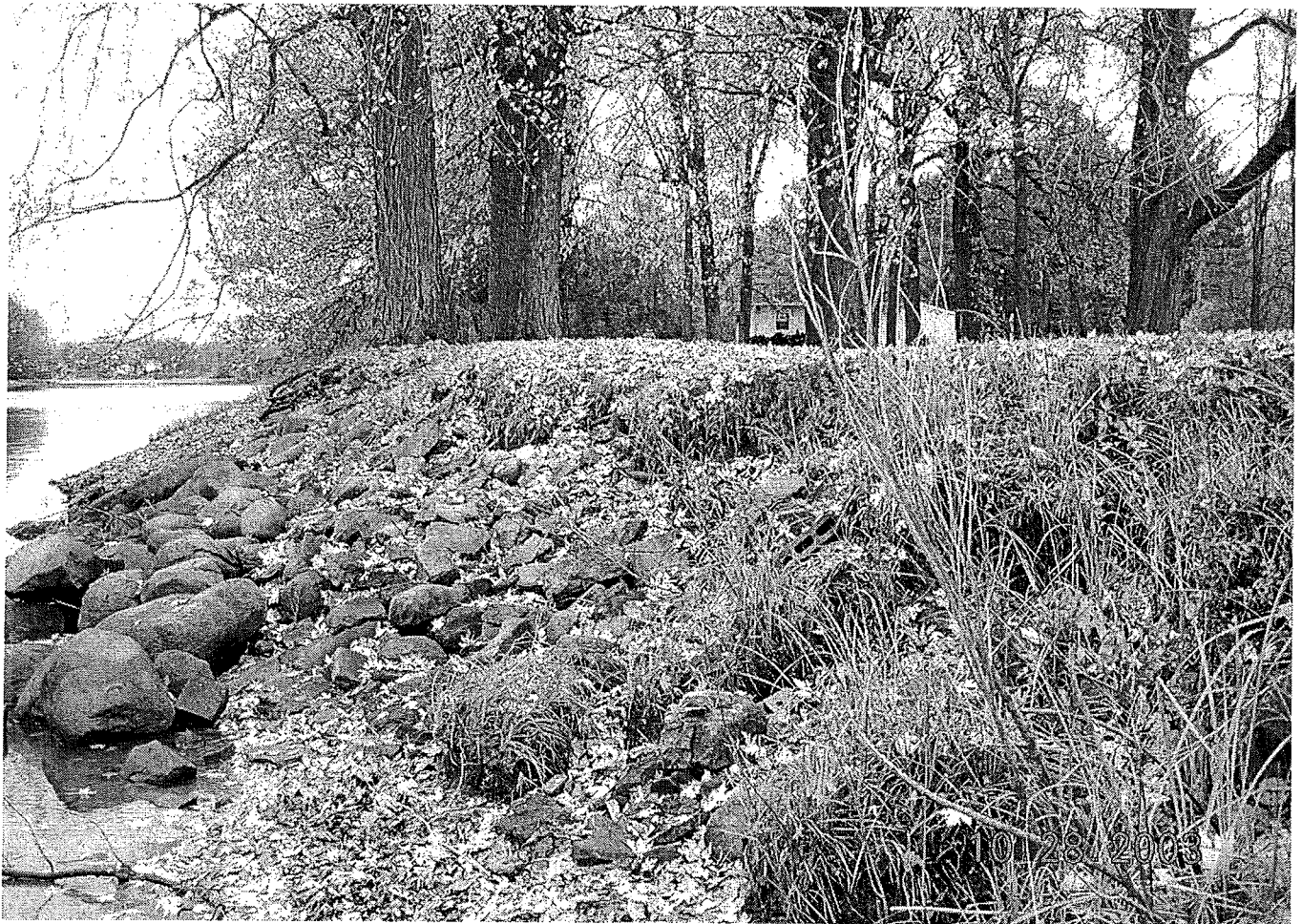


EXHIBIT 1



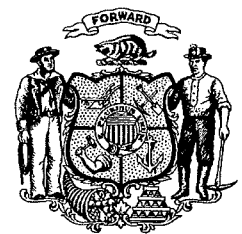
EXHIBIT 2



EXHIBIT 3



EXHIBIT 4





RIVER ALLIANCE of Wisconsin

May 23, 2007

Senator Mark Miller, Chair
Committee on the Environment and Natural Resources
Room 409 South, State Capitol
P.O. Box 7882
Madison, WI 53707-7882

Subject: CR 06-126

Dear Senator Miller and Members of the Committee:

Thank you for the opportunity to provide comments on the proposed revisions to NR 328. The River Alliance of Wisconsin is a non-profit, non-partisan organization representing over 3000 members and 160 local watershed groups from throughout the state, and our purpose is to restore and protect Wisconsin's rivers for all. The overall health, water quality and habitat value of our state's rivers and streams are directly dependent on the protection of natural shorelines. The rule revisions strike an appropriate balance between protection of property and maintenance of natural systems, and the River Alliance urges your approval.

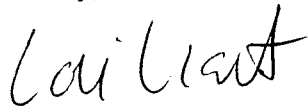
We strongly support the proposed hierarchy of permits based on ecoregions and a scientifically-derived assessment of streambank erosion potential which ensures the level of review and oversight matches conditions. Specifically, requiring an individual permit for all non-urban areas in the Northern Lakes and Forests and North Central Hardwood Forests Ecoregions is critical to preventing impacts to the healthy, natural ecosystem by tailoring erosion control methods to the site. We also support the overall preference for biostabilization, with allowance for hardscape when it can be demonstrated that natural materials will not suffice or when it can aid in restoration of a substantially degraded site.

While hardscape such as riprap may be necessary in specific circumstances, we are concerned about the proliferation of riprap along rivers and streams – some authorized, and some not - over the past several years. Riprap does not mimic natural conditions, and results in permanent loss of fish and wildlife habitat. The rule revisions permit limited repair of existing, unauthorized, riprap in urban areas. We would prefer enforcement against unauthorized riprap, requiring removal of any riprap that was not properly permitted and where streambank erosion potential would not warrant hardscape, and replacement with appropriate materials in accordance, but at the very least, the rule revisions' limited allowance for repair of unauthorized riprap should not be expanded.

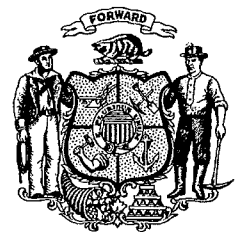
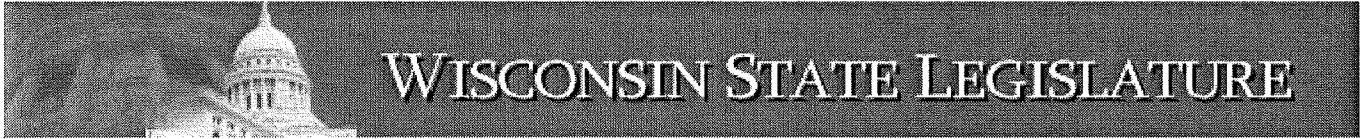
Everyone deserves healthy rivers

We appreciate DNR's efforts to create a balanced rule, and support the rule as written.

Sincerely,

A handwritten signature in black ink that reads "Lori Grant". The signature is written in a cursive style with a large initial "L" and a long horizontal stroke at the end.

Lori Grant
Policy Program Manager



REPORT TO LEGISLATURE

NR 328, Wis. Adm. Code
Bank erosion control on rivers and streams

Board Order No. WT-36-06
Clearinghouse Rule No. 06-126

Basis and Purpose of the Proposed Rule

The purpose of the proposed subch. III to ch. NR 328 is to create additional general permits to streamline the review of applications for erosion control structures. Subch. III to ch. NR 328 establishes general permit standards for the following activities: 1) biostabilization and integrated bank treatment; 2) replacement of unvegetated riprap or seawalls with biostabilization or integrated bank protection; and 3) repair of existing unvegetated riprap in some locations.

The biostabilization general permit allows placement of structures such as fiber rolls, fiber mats, live stakes, brush mattresses, fascines, branch packing, encapsulated soil lifts and natural vegetation. The biostabilization general permit is available for all sites in the Driftless -- Prairie Pothole and Southeast Till -- Cornbelt Plains ecoregions of Wisconsin. The design specifications reference the Natural Resources Conservation Service (NRCS) Engineering Field Handbook.

The integrated bank treatment general permit allows placement of rock or other inert toe protection such as riprap, in combination with bank treatments such as brush layering, brush mattresses, fiber rolls, live stakes, bank reshaping and seeding. The integrated bank treatment general permit is available for sites above a threshold level of erosion potential in the Driftless -- Prairie Pothole and Southeast Till -- Cornbelt Plains ecoregions and incorporated urban areas of Wisconsin. The design specifications reference the Natural Resources Conservation Service (NRCS) Engineering Field Handbook.

The rule includes a map of Wisconsin's ecoregions and an easy to apply scientific method for determining bank erosion potential.

Bank erosion control structures on streams in the Northern forested ecoregions are reviewed on a site-specific basis through the individual permit process. Northern rivers generally have forested or wetlands dominated watersheds and so are not as subject to bank erosion -- and in fact have not generally been subject to applications for bank erosion control structures. Northern rivers have fish and wildlife habitat and natural scenic beauty that would potentially be harmed by improper installation of bank erosion control structures and merit the more specialized designs, site specific consideration and public review provided by the individual permit process.

Replacement of a seawall or unvegetated riprap with biostabilization or integrated bank treatment is allowed throughout the state with few limitations.

Repair of unvegetated riprap placed prior to the date of the rule (rearranging or adding rock) may be done within the horizontal footprint of the existing structure to a maximum length of 300 feet, within the same height limits as the other general permits, and within city and village boundaries.

Summary of Public Comments

The general tenor of the hearings was supportive of the establishment of general permits, with industry representatives seeking expansion of the general permits and local governments seeking clarifying changes to rule language.

Modifications Made

Modifications were made to several definitions in the rule for clarification in response to comments. Other wording changes were also made for clarification purposes. The general permit for replacement of seawalls was expanded to include replacement of riprap. A provision was added to require consideration to the degree to which erosion control projects rehabilitate or protect native vegetation. A complete response to comments received is attached.

Appearances at the Public Hearing

December 11, 2006 – Eau Claire – no appearances

December 12, 2006 – Oshkosh

In support – none

In opposition:

Jeff Christensen, Radtke Contractors, Inc., P.O. Box 6000, Winneconne, WI 54986

As interest may appear:

Brady Johnston, Johnston Pile Driving, N2591 37th Avenue, Omro, WI 54963
Debbie Johnston, Johnston Pile Driving, N2591 37th Avenue, Omro, WI 54963
Keith Marquardt, 625 E County Y, Oshkosh, WI 54901

Changes to Rule Analysis and Fiscal Estimate

No changes were required.

Response to Legislative Council Rules Clearinghouse Report

All the recommendations were accepted.

Final Regulatory Flexibility Analysis

The proposed rule does not regulate small business. Therefore, a final regulatory flexibility analysis is not required.

RESPONSE TO COMMENTS

NR328, Subchapter III – Erosion Control Structures on Rivers & Streams

Legislative Council drafting items – All changes made as recommended.

Comments Regarding Rule definitions

COMMENT 1 - "Biological materials biological/organic and plastic components; the LWCD assumes that if the majority (>50%) of the product" Please note that many erosion control products are a combination of is biological, then the product meets this definition, is this true? Are plastic/metal staples and anchors acceptable to secure biological products?

RESPONSE 1 – The definition was clarified to ensure that biological means fully 100% biodegradable materials. Erosion control products have fully biodegradable alternatives for products like Erosion Control Blankets, Turf-Reinforcement Mats, Stakes and anchors.

COMMENT 2 - "Biostabilization" This definition is unclear to the LWCD; does this definition mean that the structure designed to protect the toe of the bank is entirely comprised of biological materials (see also above – can this include plastic/metal components such as staples/anchors?) and the bank reshaping can NOT include any non-biological materials such as erosion control netting containing plastic or turf reinforcement mats (TRMs) to protect and stabilize the streambank?

RESPONSE 2 – The rule definition was clarified to make clear that biostabilization projects may include structural treatments for toe protection. These structural treatments are limited to biological materials (e.g. Rootwads, coir logs, tree revetments etc.), versus inert materials, which are not allowed (plastics, rock, etc.)

COMMENT 3 - Definitions (2), (3), (8), and (16) are difficult to follow. Definition (2) Biological materials includes, as examples "live stakes and posts; non-treated wood"; however, definition (16) Structural treatments include "tree revetments, rootwads, dormant posts". Aren't tree revetments, rootwads, and dormant posts also non-treated wood and biodegradable? All four of these definitions include terms contained in the other definitions (specifically the term structural - - at times, the term structural is inert items and at other times biological) and/or are difficult to discern between definition meanings.

RESPONSE 3- Definition of structural treatment was revised and now reads: "Structural treatment" means a system of non-living materials with a specific configuration installed as a means of bank stabilization including, but not limited to, riprap, tree revetments, logs, rootwads, dormant post, jacks, coir logs, bulkheads, and stream barbs. This was revised to be similar with SOC 580 Standard. Structural treatments may include either inert or biological materials.

COMMENT 4 - The Note following the seawall definition indicates that "Biostabilization structures steeper than 1.5 feet vertical to one foot horizontal, such as encapsulated soil-lifts are not considered seawalls." yet, NR328.35(4)(c) states "Structural stabilization practices shall be sloped to 1.5 horizontal to one foot vertical or flatter." These two statements appear to be conflicting statements. If the intent of these two conflicting statements is to allow flexibility into the design and implementation of streambank protection to account for the many different site conditions (there are many steep streambanks/slopes that can be protected via means of biological approaches) that can be encountered at streambanks, then the LWCD is appreciative. In cases in which only a fiber roll (ie. round cross section) will be installed along the streambank (which from a cross sectional view is greater than 1.5 horizontal to 1 foot vertical), then the Note following the seawall definition is appreciated. However, some clarification is necessary.

RESPONSE 4 – The intent with this definition is to describe seawalls as being nearly vertical in nature and comprised on largely inert materials. The clarity clause regarding encapsulated soil lifts aims to preclude steeper bioengineering only designs from being called seawalls. No changes were made to the wording.

COMMENT 5 - "Toe" means the most waterward edge of a shore erosion control structure. The LWCD objects to this definition. The above definition, which is contained within the Proposal, is not a definition for a "toe" of a streambank (the definition above is also subjective -- based on the placement "of a shore erosion control structure"). Please use the definition contained within Chapter 16 of the United States Department of Agriculture Natural Resources Conservation Service Field Engineering Handbook (Streambed & Shoreline Protection) or a variation of the Chapter 16 definition so the general public can understand also.

RESPONSE 5 - Wording change made as suggested.

COMMENT 6 - A definition for native vegetation should be included. Also, the proposal should promote the usage of Wisconsin native species along our streambanks.

RESPONSE 6 - A GP condition requires the use of native vegetation and reads as follows: Except as provided in sub. (3)(i), revegetation shall follow Wisconsin NRCS Field Office Technical Guide (FOTG), Section IV, Practice Standard 643A Shoreland Habitat, found at <http://efotg.nrcs.usda.gov/references/public/WI/643a.pdf>.

Comments about Bank Erosion Potential Index

COMMENT 7 - Bank erosion potential index does not adequately consider water level fluctuations downstream of dams.

RESPONSE 7 - The BEPI does reflect the hydraulic influence of upstream structures (e.g., dams, culverts, bridges). No change has been made to the rule because evaluation shows that no increased demand for erosion control structures occurs downstream of dams.

Using GIS, Department staff evaluated adjacency and density of permits downstream of the following dam locations: Rhinelander Flowage; Boom Lake; Lake Nokomis; Spirit River Flowage; Lake Mohawksin; Duroy Lake; Long Lake; Apple River Flowage; Lake Neshonoc; Lake Pepin; Wisconsin River Flowage; Biron Flowage; Lake Wausau; Lake Dubay; Mosinee Flowage; Lake Koshkonong; Rock River at Watertown; Yahara River at Stoughton, Stebbinsville, and Fulton; Milwaukee River at Mequon, and Grafton. Among the 21 sites there was no evidence of increased frequency of permits downstream of the dams. Increased frequency of permits downstream would indicate a greater activity of erosion control practices downstream of dams due to their hydraulic influence. When differences did exist in terms of density of permits adjacent to dams they tended to greater numbers of permits upstream. Greater number of upstream permits may be explained by increased development patterns on the flowages or increased erosion problems. Nonetheless, regulation of erosion control structures upstream of dams on their flowages are not subject to the proposed rule, but are subject to the existing NR 328, subchapter I (Inland Lakes and Flowages).

COMMENT 8 - The Bank Erosion Potential Index fails to account for the effects of boating.

RESPONSE 8 - The BEPI does not distinguish between sources or causes of erosion but is a relative index of that aims to predict soil loss from the bank based on physical features of the bank itself. To respond to concerns about bank recession in areas of intense boating where the ability to reshape banks may be limited by infrastructure close to the bank edge, a new provision allows the use of bank recession measurement as an alternative to BEPI within city and village boundaries of urban watersheds. The recession amount is quite low (1.5 inches over three months) to account for the likely presence of infrastructure that would limit the ability to reshape stream banks.

COMMENT 9 - The BEPI scoring formula and thresholds prohibit the use of effective erosion control measures.

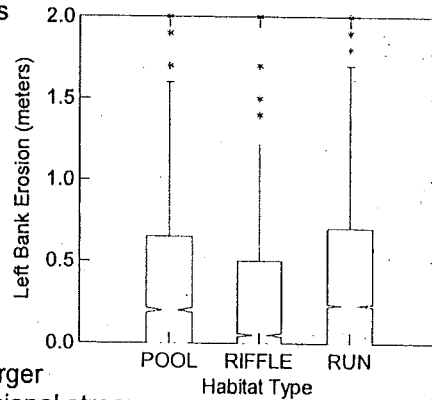
RESPONSE 9 – The rule contains no prohibitions. An application may be made and permit granted for any bank erosion control measure in any location.

COMMENT 10 – The BEPI threshold for integrated bank treatment is too high and should be reduced from 20 to 12.

RESPONSE 10 – DNR and NRCS staff evaluated 63 sites with varying stream characteristic statewide. BEPI scores ranged from -1 to 55. DNR and NRCS staff reviewed the scores on all sites and selected a threshold of 20 as the condition where rock is typically recommended as a structural treatment.

COMMENT 11 - Thalweg location not a good indicator of bank erosion. The driftless area experiences more event related erosion not base flow influenced; the exception sand banks.

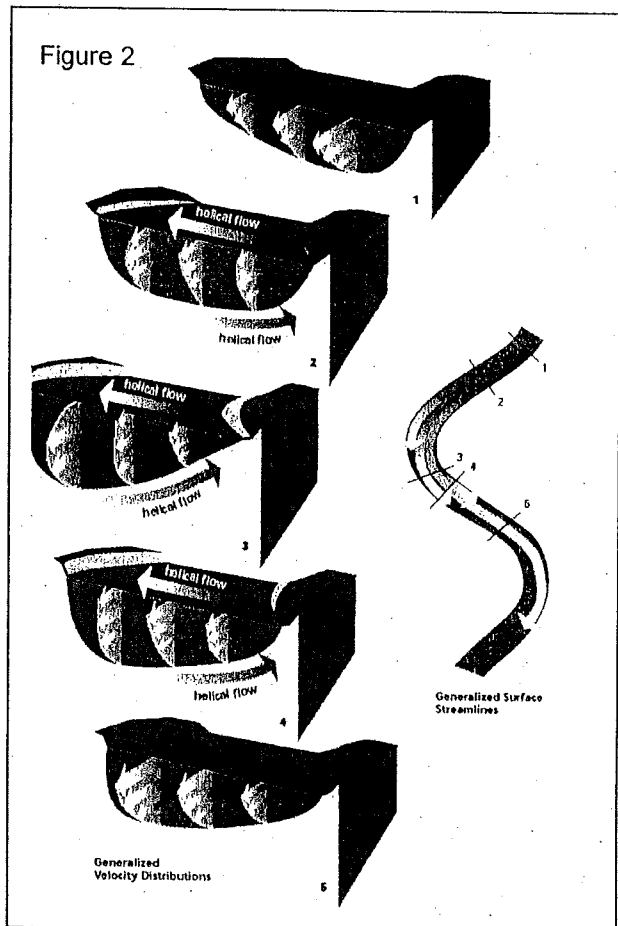
RESPONSE 11 – Analysis of 2500 baseline monitoring sites indicates otherwise. The adjacent figure indirectly demonstrates the affect of thalweg position. Riffle sites typically have a thalweg position as center of the stream, because the riffle occurs between the apices of two sequential meanders. Riffle sites show much lower erosion than pool or run sites, in part due to the affect of thalweg position. Erosion assessments also show the cross-sectional profile changes much more rapidly and frequently in the meander bends (versus the straight stream segments) where the thalweg is adjacent to one of the banks. Figure 2 (taken from Stream Corridor Restoration, 1998) demonstrates this geomorphic effect (larger arrows indicate higher stream velocities and increased erosional stream power).



COMMENT 12 - The upstream structural points have no bearing on bank erosion in the driftless area. The structure location identifies streambed scouring at the outlet, which has minimal effect on bank erosion. The minimal points doesn't influence ranking, eliminate this category.

COMMENT 13 - Channel grade would better serve as an indicator of erosiveness of the stream, headwaters vs the mouth. The steeper the slope the more prevalent or aggressive the stream bank erosion. There is more variation to note in stream sections (headwater, mid section, & mouth).

RESPONSE 12 & 13 - The BEPI method was adapted from Rosgen, David L. "A Practical Method of Computing Streambank Erosion Rate", Wildland Hydrology Inc., Pagosa Springs, CO, 10 pp. The method was validated using field measured annual, lateral erosion rate. At some point further deviations from the original method will more likely require further validation work, hence Department staff are reluctant to make further refinements without data collection and analysis.



COMMENT 14 - The BEPI Score Worksheet is not "user friendly". The general public will not be able to use/follow the Worksheet.

RESPONSE 14 - Since direct measurements of streambank erosion (ie. bank recession) are very time consuming, BEPI remains the most practical quantifiable field assessment approach available at this time.

COMMENT 15 - The BEPI evaluations should be in sink with the 580 standard cross-section requirements. Example: 1 review/single site or 2 reviews/1,000' of continuous project site. I have some projects 800' in length so I would need 5 BEPI's to justify a general permit. I think an average is needed.

RESPONSE 15 - The SOC 580 standard deploys more detailed assessment requirements for single sites over 300 feet in length, or multiple sites in a ¼ mile reach totaling over 500 feet. This matches up with the GP requirements in the rule for integrated bank treatments which states: "The total project length may not exceed 500 linear feet of stream bank per ¼ mile of stream reach". A treatment site of over 300' in length would also require more detailed assessment requirements.

COMMENT 16 - I would like to see a couple questions to enter the tier II evaluation process: If the project is cost-shared and designed by LCD/NRCS which follow the 580 standards and specifications, is there a reasonable method of eliminating duplication of effort? Void BEPI or utilize the evaluation tool for the design of the stream project (standard 580) if: the project is cost -shared project with Financial/Technical assistance provided by: NRCS/LCD/DNR/DATCP/Other

RESPONSE 16: SOC 580 Standards contain a series of factors or considerations that design engineers are required to conduct, however the 580 standards do not result in determinant outcomes. Permit decisions must be determinant and consistent. Use Stream bank erosion assessment protocols in NR 328 will not only result in consistent regulatory decisions but will also aid decisions in cost share programs and engineers in their design work. These front-end evaluations represent minimal insignificant proportion of the total project costs.

Comments on General Permits

COMMENT 17 – The rule does not allow for general permits in the North.

COMMENT 18 – Individual permits should be required for all non-urban areas in Northern Wisconsin.

RESPONSE 17 & 18 - No change to the rule was made. General permits are available in cities and villages as well as two urban watersheds, Superior and Wausau metro areas. Cumulatively, the placement of riprap can harm stream habitat and overall stream health. Associated impacts are loss of woody cover, loss of habitat diversity, loss of riparian and bank vegetation, potential for channel alteration and downstream impacts, and increased sediment delivery to the stream during project construction.

Both the Northern Lakes and Forests and North Central Hardwood Forests Ecoregions of Northern Wisconsin are a reservoir of outstanding resources. A Recent 2005 paper by Ed Baker and numerous other authors published in the Transactions of the American Fisheries Society found that most streams in the Northern Lakes and Forests ecoregion are relatively un-impacted by agricultural and urban land uses, and exist in good health.

The demand for this bank rehabilitation work is primarily in the southern ecoregions. Permits have long been required for streambank erosion control. Permit applications for a five year period on rivers and streams show that 70% of the permit applications are found in ecoregions where general permits are available. We project that more than 75% of applications are in areas where general permits are available.

COMMENT 19 – The rule does not provide a GP for new riprap on streams.

RESPONSE 19 – Both the biostabilization and integrated bank treatment GPs allow structural treatment of the bank. Integrated bank treatment is a combination of riprap and revegetation.

COMMENT 20 – The Department should base its general permit designs on proven test sites.

RESPONSE 20 – The general permit design criteria are broad and allow for various designs that fall within the Natural Resources Conservation Service (NRCS) Engineering Field Handbook specifications and Wisconsin Standards Oversight Council standard 580 specifications. The designs are developed by engineers and practitioners and evaluated nationwide by the U.S. Army Corps of Engineers Waterways Experiment Station.

COMMENT 21 - NR 328.35 (i) Please include plant plugs as a example, so as to read "Vegetation, such as seeding, plant plugs, and dormant plantings, shall be" .

RESPONSE 21 – Wording change made as suggested.

COMMENT 22 - Are the use of cover crops (vegetation that establishes quickly to provide soil stability and cover) permitted in non-agricultural areas? If not, please reconsider.

RESPONSE 22 – After consideration quick seeding non-native cover crops remain limited to adjacent to agricultural fields. This aims to limit the unintended introduction of exotic plants into other areas of the state. Any native vegetation used as a cover crops is allowed.

COMMENT 23 - Eliminate (4)(d); in general, the LWCD strongly suggest that no topsoil be added below the OHWM. The LWCD concerns would be filling of wetlands, and soil being delivered to our water resources. In addition, the depth of soil considered to be "topdressing" may be subjective to the general public. If (4)(d) is not eliminated, then the LWCD suggest that the sentence read as follows: "The placement of soil below the ordinary high water mark is allowed only for the establishment of biological materials."

RESPONSE 23 – Wording change made as suggested.

COMMENT 24 - Please clarify that 2 feet is 2 feet vertical.

RESPONSE 24 – Wording change made as suggested.

COMMENT 25 - Eliminate "predominantly urban watershed" and replace with "urban watershed as identified in s. NR328.38, or is within village or city limits." This would make consistent with NR328.35(4)(b).

RESPONSE 25 – Wording change made as suggested.

COMMENT 26 - NR328.35(5)(g) Please clarify that the total project length in the Proposal treats both sides of the river/stream independently; the LWCD suggest using a diagram to illustrate the total project length.

RESPONSE 26 - For clarity, the phrase now reads "....stream bank.....", rather than "....stream....".

COMMENT 27 - Suggest that the use of the term "shall" be changed to "may be top dressed with topsoil"; so that the sentence reads "All stone above the ordinary high water mark may be top dressed with topsoil." The use of topsoil and the depth of topsoil should be discretionary, dependent upon site and vegetative needs.

RESPONSE 27. No change. Addition of topsoil and re-vegetation above the OHWM is a principal element of the integrated bank treatment GP.

Comments Related to Existing Riprap

COMMENT 28 – The rule should grandfather existing riprap without permits.

COMMENT 29 – Any riprap that was not permitted should be replaced with appropriate materials in accordance with the new rule.

RESPONSE 28 & 29 – We expanded the GP for replacement of seawalls to include replacement of riprap (authorized or unauthorized) with integrated bank treatment or biostabilization regardless of ecoregion or erosion potential (BEPI). This expansion allows the easier permit process for reducing the impacts of previously placed structures. An additional general permit was created to allow movement and addition of rock on existing unauthorized structures within city and village boundaries, with size and height limitations. This general permit is limited in geographic scope because it may not result in lessening of the impact of the structure.

Comments About Criteria for Individual Permit Review

COMMENT 30 – Criteria fail to ensure restoration of vegetation native to forested ecoregions.

RESPONSE 30 – We added a provision requiring consideration of the degree to which erosion control projects rehabilitate or protect native plant community classes endemic to the site along with Notes citing standard technical references describing the vegetation of Wisconsin forest communities.

Comments About Implementation

COMMENT 31- Utilize the address input to locate stream site vs point and click. We give landowners copies of a section map they live in and they struggle finding their house let alone a stream bank.

RESPONSE 31 – No Change. Applicants using DNR Webview will be able to find locations by entering in any of the following values; city or village, Township/range/section, county, civil town, lat/long coordinates, waterway name, or county. Unfortunately the Department's current Website design does not allow for a full address find location.