MISC_pt05 42

NR 140
&
NR 811

→ Jennifer Halbur
266-0484
123 South

Oct. Board mtg Oct. 22 & 23
Campus Holiday Inn, Eau Claire

Nov 1, 2002 - Notice for public hearings

Dec. 11, 2002 - earliest date for hearings

Dec. 26, 2002 - Green sheet for Jan. 2003 Board mtg.

Jan. 21 & 22, 2003 - Board mtg.

Community Water Systems (6)

Form 1100-1
(R 2/01)

NATURAL RESOURCES BOARD AGENDA ITEM

Item No. _____

SUBJECT: Authorization for hearing on revision of Chapters NR 140 and NR 811, Wis. Adm. Code, pertaining to requirements for the operation and design of community water systems.

FOR: OCTOBER 2002 **BOARD MEETING**

TO BE PRESENTED BY: Michael D. Lemcke - DG/2

SUMMARY:

Amendments are being proposed to ch. NR 140, Wis. Adm. Code, Groundwater Quality and to ch. NR 811, Wis. Adm. Code, Requirements for the Operation and Design of Community Water Systems. Chapter NR 140 establishes Wisconsin state groundwater quality standards and points of compliance for those standards. Chapter NR 811 includes design and management criteria for aquifer storage and recovery (ASR) systems, adopted by the Natural Resources Board in August, 2002.

Chapter NR 140 was adopted by the Natural Resources Board in 1985 to comply with Wisconsin Statute Chapter 160. Recently, ch. 160, Stats., was revised to establish points of standards application around ASR wells for: chloroform, bromodichloromethane, dibromochloromethane and bromoform groundwater quality standards at 1,200 feet from an ASR well, and at any other well that is located within 1,200 feet of an ASR well.

Amendments are proposed to ch. NR 140 to incorporate the chloroform, bromodichloromethane, dibromochloromethane and bromoform points of standards application for ASR wells established under s. 160.257, Stats., and to establish an ASR system design management zone at the same distance from an ASR well as the system displacement zone (aquifer storage zone) allowed under ch. NR 811. Design management zones are established around facilities, practices and activities regulated by the department, for facility design, and as a boundary for compliance with state groundwater quality standards.

Amendments are proposed to ch. NR 811 to allow an ASR system displacement zone to extend to a maximum distance of 1,200 feet from an ASR well. Allowing an ASR system displacement zone to extend to 1,200 feet conforms with the provisions of s. 160.257, Stats., and also limits any adverse groundwater impacts from the operation of an ASR system to this distance.

RECOMMENDATION: Authorize the Department to hold hearings on proposed amendments to ch. NR 140 and NR 811, Wis. Adm. Code.

LIST OF ATTACHED MATERIALS:

No	☐	Fiscal Estimate Required	Yes ☑	Attached
No	☑	Environmental Assessment or Impact Statement Required	Yes ☐	Attached
No	☐	Background Memo	Yes ☑	Attached

APPROVED:

Bureau Director, _____ Date 9/26/02

Administrator, _____ Date 9/26/02

Secretary, Darrell Bazzell _____ Date 10/2/02

cc: Linda Jahns - AD/5
Bill Phelps - DG/2
Rich Roth - DG/2

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: **September 23, 2002** FILE REF: NR 140

TO: **Natural Resources Board Members**

FROM: **Darrell Bazzell - Secretary, Department of Natural Resources**

SUBJECT: **Background Memo - Proposed amendments to Wisconsin Administrative Codes Chapter NR 140 (Groundwater quality) and Chapter NR 811 (Requirements for the operation and design of community water systems)**

1. Why the rule is being proposed

Amendments are being proposed to ch. NR 140 (Groundwater quality) and NR 811, (Requirements for the operation and design of community water systems), Wis. Adm. Code. Chapter NR 140 establishes Wisconsin state groundwater quality standards and points of compliance for those standards. Chapter NR 811 establishes criteria for the design, construction and operation of municipal water systems. In August, 2002 the Board adopted revisions to ch. NR 811 to establish design and management criteria for aquifer storage and recovery (ASR) systems. Revisions were also recently made to ch. 160, Stats., to establish points of standards application around ASR wells for chloroform, bromodichloromethane, dibromochloromethane and bromoform groundwater quality standards.

ASR is a water supply management technique that allows surface water, treated to meet state and federal drinking water standards, to be injected into an underground aquifer for storage and later recovery and use. That part of an aquifer into which treated surface water is injected for storage is designated an ASR displacement zone. Because the surface water injected during an ASR cycle is disinfected with chlorine, disinfection byproducts, such as chloroform, bromodichloromethane, dibromochloromethane and bromoform, are present in the injected ASR water and may form in the ASR displacement zone during storage. Federal and state drinking water standards group these disinfection byproducts together as trihalomethanes and set a total trihalomethane drinking water standard of 80 ppm. Wisconsin state groundwater quality standards have been established for each of the individual disinfection byproducts at much lower levels.

As state groundwater quality standards are applied at regulated facility property boundaries, and as property boundaries at potential ASR system well sites are often relatively close to the well, the application of state groundwater quality standards for trihalomethane disinfection byproducts could significantly limit the usefulness of ASR technology at many potential sites. For this reason ch. 160, Stats., was revised to address the application of groundwater quality standards for trihalomethane disinfection byproducts at ASR well site property boundaries.

Revisions were recently made to ch. 160, Stats. to create s. 160.257, Stats. Section 160.257, Stats., establishes points of standards application around ASR wells for chloroform, bromodichloromethane, dibromochloromethane and bromoform groundwater quality standards at 1,200 feet from an ASR well, and at any other well that is located within 1,200 feet of an ASR well.

Chapter NR 140 was adopted by the Natural Resources Board in 1985 to comply with Wisconsin Statute Chapter 160. Amendments are proposed to ch. NR 140 to incorporate the chloroform, bromodichloromethane, dibromochloromethane and bromoform points of standards application for ASR wells established under s. 160.257, Stats. In accordance with s. 160.257, Stats., points of standard application are proposed to be added to s. NR 140.22 for chloroform, bromodichloromethane, dibromochloromethane and bromoform, at ASR well sites, at 1,200 feet from the ASR well and at any other well that is not part of the ASR system, that is within 1,200 feet of the ASR well.

The Department regulates impacts on groundwater from regulated facilities, practices and activities by approving their design, including application, disposal, and storage area boundaries, and by establishing facility, practice or activity design management zones. The design management zone for a regulated facility, practice or activity is a defined distance around an approved application, disposal, and storage area. A regulated facility, practice or activity must be designed to comply, to the extent technically and economically feasible, with groundwater quality preventive action limits at the closer of its design management zone or property boundary, and at any point of present groundwater use. A facility, practice or activity design management zone boundary, along with its property boundary (or any point of present groundwater use) is also used as a point of standards application for compliance with groundwater quality enforcement standards.

With the adoption of s. 160.257, Stats., the point of standards application around an ASR well for compliance with ch. NR 140 groundwater quality standards for chloroform, bromodichloromethane, dibromochloromethane and bromoform is set at 1,200 feet from the ASR well and at any other well that is within 1,200 feet of the ASR well. The point of standards application around an ASR well for compliance with ch. NR 140 groundwater quality enforcement standards for other substances is the closer of the ASR well design management zone or well site property boundary, and at any point of present groundwater use.

Potential impacts on groundwater from ASR systems include both substances which may be present in the treated surface water injected for storage and substances which may be released into an aquifer due to geochemical reactions between the treated surface water stored during an ASR cycle and natural aquifer matrix materials. Substances of public health concern, such as arsenic, and substances of public welfare concern, such as manganese, may be released into the natural groundwater system within an ASR aquifer storage zone. Because of the potential for the operation of an ASR system to adversely impact groundwater quality, the Department is limiting the extent of groundwater impacts from operation of an ASR system to 1,200 feet from an ASR well. To accomplish this the Department is allowing an ASR system aquifer storage zone (displacement zone) at extend to no more than 1,200 feet from an ASR well and is creating an ASR system design management zone that coincides with the boundary of the system displacement zone.

Amendments are proposed to ch. NR 811 to allow an ASR system displacement zone (aquifer storage zone) to extend to a maximum distance of 1,200 feet from an ASR well. Amendments are proposed to ch. NR 140 to establish an ASR system design management zone at 0 feet from this system storage area boundary. Setting the maximum extent of an ASR system displacement zone at 1,200 feet and revising ch. NR 140 to establish an ASR system design management zone at the same distance as the system displacement zone limits any adverse groundwater impacts from the operation of an ASR system to 1,200 feet and conforms with the ASR system point of standards application for chloroform, bromodichloromethane, dibromochloromethane and bromoform established in s. 160.257, Stats.

There is no known controversy associated with these rule revisions.

2. Summary of the rule

a) The definition of an ASR displacement zone is proposed to be added to s. NR 140.05.

b) Sections NR 140.22(1) and NR 140.22(2) are proposed to be revised, in accordance with s. 160.257, Stats., to establish a point of standards application for design and compliance around ASR wells for chloroform, bromodichloromethane, dibromochloromethane and bromoform groundwater quality standards at 1,200 feet from an ASR well, and at any other well that is not part of the ASR system located within 1,200 feet of the ASR well.

c) Section NR 140.22(3) is proposed to be revised to include language allowing a design management zone to be established around an ASR well and a design management zone of 0 feet from an ASR system displacement zone is proposed to be added to s. NR 140.22(3) Table 4.

d) The definition of ASR system in s. NR 811.02(5) is proposed to be revised to add ASR monitoring wells to the definition of an ASR system.

e) Section NR 811.87(5) is proposed to be added to ch. NR 811 to allow an ASR displacement zone (aquifer storage area) to be established up to a maximum distance of 1,200 feet from an ASR well.

3. How proposal affects existing policy

Chapter NR 140 currently contains points of standard application for both design and compliance use. Facilities, practices and activities regulated by the Department are required to be designed to minimize the level of substances in groundwater and to comply with state groundwater quality preventive action limits, to the extent technically and economically feasible, at facility or site points of standards application. Chapter NR 140 points of standard application are also used as points of compliance to determine whether groundwater quality preventive action limits or enforcement standards have been attained or exceeded at a facility or site. Existing groundwater protection policy under ch. NR 140 sets an activity point of standards application for design, and compliance with enforcement standards, at the closer of an activity property or design management zone boundary, and at any point of present groundwater use.

Revisions to ch. 160, Stats., allow groundwater quality standards for chloroform, bromodichloromethane, dibromochloromethane and bromoform, at ASR well sites, to be exceeded beyond the ASR well site property boundary up to a distance of 1,200 feet from the ASR well, unless another well is present within that 1,200 foot zone. Any well that is located within 1,200 feet of an ASR well is a point of standards application for compliance with chloroform, bromodichloromethane, dibromochloromethane and bromoform groundwater quality standards. To maintain compliance with the provisions of ch. 160, Stats., revisions are proposed to ch. NR 140 to adopt these ASR well points of standards application.

Existing state groundwater protection policy is to place limitations on potential groundwater impacts from a regulated practice or activity. The boundaries for application, disposal, and storage areas of a facility are proposed and approved by the Department during the design phase of a project. The Department then establishes design management zones, relative to these boundaries, around regulated facilities, practices and activities. Facility design management zones are used for design and compliance purposes.

These proposed rule revisions establish an ASR system design management zone at the boundary of the approved system displacement zone (aquifer storage zone). Establishing a design management zone around a department regulated activity is consistent with past department policy to limit potential groundwater impacts at regulated facilities, activities and practices. These proposed rule revisions allow an ASR system displacement zone, and design management zone, to extend to a maximum distance of 1,200 feet from an ASR well. Limiting the potential groundwater impacts from operation of an ASR system to 1,200 feet is consistent with the provisions of s. 160.257, Stats., establishing a point of standards application for trihalomethane disinfection byproducts at 1,200 feet from an ASR well.

4. Previous Board action

The Board has approved amendments to ch. NR 140 in 1988, 1990, 1991, 1993, 1995, 1996, 1998 and 1999. These amendments were made to add or revise groundwater quality standards and to clarify rule language. Amendments to ch. NR 811 establishing design and management criteria for ASR systems were adopted by the Board in August, 2002.

5. Who is affected by the rule

Groups likely to be affected by these proposed amendments include municipal water utilities and their customers. An ASR system point of standards application for chloroform, bromodichloromethane, dibromochloromethane and bromoform established at 1,200 feet from the ASR well, and at any other well that is not part of the ASR system, that is within 1,200 feet of the aquifer storage recovery well, should allow additional sites, that may have been limited by relatively close proximity of property boundaries to a potential ASR well, to be used as ASR sites. Environmental groups may be interested in these rule revisions as they establish groundwater quality points of standards application and design management zone boundaries for a new and previously unregulated activity.

6. Environmental Analysis

Section NR 150.03, Wis. Adm. Code, (Environmental Analysis and Review Procedures for Department Actions) describes the appropriate categories for various proposed Departmental actions. The Department has determined that this rule proposal is a Type III action. Type III actions normally do not have the potential to cause significant environmental effects, normally do not significantly affect energy usage and normally do not involve unresolved conflicts in the use of available resources. This rule proposal is not expected to cause any of these effects. In accordance with s. NR 150.20, Wis. Adm. Code, Type III actions do not require an environmental assessment (EA) or environmental impact statement (EIS).

7.Small Business Regulatory Flexibility Analysis

Small business should not be affected by the proposed amendments to ch. NR 140 and ch. NR 811. There are no compliance or reporting requirements, or any performance requirements proposed that would be imposed on small business.

Wisconsin Department of Administration
Division of Executive Budget and Finance
DOA-2048 (R10/2000)

Fiscal Estimate — 2001 Session

☒ Original	☐ Updated	LRB Number	Amendment Number if Applicable
☐ Corrected	☐ Supplemental	Bill Number	Administrative Rule Number NR 140 and NR 811

Subject

Amendments to ch. NR 140 (Groundwater quality) and NR 811 (Requirements for the operation and design of community water systems), Wis. Adm. Code

Fiscal Effect

State: ☒ No State Fiscal Effect

Check columns below only if bill makes a direct appropriation or affects a sum sufficient appropriation.

☐ Increase Existing Appropriation ☐ Increase Existing Revenues
☐ Decrease Existing Appropriation ☐ Decrease Existing Revenues
☐ Create New Appropriation

☐ Increase Costs — May be possible to absorb within agency's budget.
☐ Yes ☐ No

☐ Decrease Costs

Local: ☒ No Local Government Costs

1. ☐ Increase Costs ☐ Permissive ☐ Mandatory
2. ☐ Decrease Costs ☐ Permissive ☐ Mandatory
3. ☐ Increase Revenues ☐ Permissive ☐ Mandatory
4. ☐ Decrease Revenues ☐ Permissive ☐ Mandatory
5. Types of Local Governmental Units Affected:
   ☐ Towns ☐ Villages ☐ Cities
   ☐ Counties ☐ Others _____
   ☐ School Districts ☐ WTCS Districts

Fund Sources Affected

☐ GPR ☐ FED ☐ PRO ☐ PRS ☐ SEG ☐ SEG-S

Affected Chapter 20 Appropriations

Assumptions Used in Arriving at Fiscal Estimate

SUMMARY OF RULE - The Department of Natural Resources Board recently adopted revisions to ch. NR 811, Wis. Adm. Code, that establish design and management criteria for aquifer storage and recovery (ASR) systems. Chapter 160, Stats., has been revised to add s. 160.257, Stats., which establishes a point of standards application around ASR wells for: chloroform, bromodichloromethane, dibromochloromethane and bromoform groundwater quality standards. This point of standards application is 1,200 feet from an ASR well, and at any other well located within 1,200 feet of an ASR well.

Amendments are being proposed to ch. NR 140, Wis. Adm. Code, to incorporate the provisions of s. 160.257, Stats. and to establish an ASR system design management zone at the same distance from an ASR well as the system displacement zone (aquifer storage zone) allowed under ch. NR 811. Amendments are proposed to ch. NR 811 to allow an ASR system displacement zone to extend to a maximum distance of 1,200 feet from an ASR well.

FISCAL IMPACT - ASR systems must be designed and operated to comply with state groundwater quality standards at applicable points of standards application and monitoring may be required to confirm compliance. The Department does not anticipate significant additional costs to the regulated community associated with these rule revisions. Any additional monitoring costs to the regulated community should be minimal and the workload of state regulatory agencies should also not change substantially. The Department believes that it is unlikely that there will be significant additional costs to state and local governments resulting from adoption of these rule revisions.

Long-Range Fiscal Implications

None

Prepared By:	Telephone No.	Agency
Joe Polasek	266-2794	DNR
Authorized Signature	Telephone No.	Date (mm/dd/ccyy)
[signature]	266-2794	9-26-02

Wisconsin Department of Administration
Division of Executive Budget and Finance
DOA-2047 (R10/2000)

Fiscal Estimate Worksheet — 2001 Session

Detailed Estimate of Annual Fiscal Effect

☒ Original	☐ Updated	LRB Number	Amendment Number if Applicable
☐ Corrected	☐ Supplemental	Bill Number	Administrative Rule Number: NR 140 and NR 811

Subject

Amendments to ch. NR 140 (Groundwater quality) and NR 811 (Requirements for the operation and design of community water systems), Wis. Adm. Code

One-time Costs or Revenue Impacts for State and/or Local Government (do not include in annualized fiscal effect):

None

Annualized Costs:	Annualized Fiscal Impact on State Funds from: Increased Costs	Decreased Costs
A. State Costs by Category		
State Operations — Salaries and Fringes	$	$ -
(FTE Position Changes)	(FTE)	(- FTE)
State Operations — Other Costs		-
Local Assistance		-
Aids to Individuals or Organizations		-
Total State Costs by Category	$ 0	$ - 0
B. State Costs by Source of Funds	Increased Costs	Decreased Costs
GPR	$	$ -
FED		-
PRO/PRS		-
SEG/SEG-S		-
State Revenues — Complete this only when proposal will increase or decrease state revenues (e.g., tax increase, decrease in license fee, etc.)	Increased Revenue	Decreased Revenue
GPR Taxes	$	$ -
GPR Earned		-
FED		-
PRO/PRS		-
SEG/SEG-S		-
Total State Revenues	$ 0	$ - 0

Net Annualized Fiscal Impact

	State	Local
Net Change in Costs	$ 0	$ 0
Net Change in Revenues	$ 0	$ 0

Prepared By:	Telephone No.	Agency
Joe Polasek	266-2794	DNR
Authorized Signature	Telephone No.	Date (mm/dd/ccyy)
	266-2794	9-26-02

ORDER OF THE STATE OF WISCONSIN
NATURAL RESOURCES BOARD
AMENDING AND CREATING RULES

.....

The Wisconsin Natural Resources Board proposes an order to amend NR 140.22(1)(intro.), (2)(a) and (b)(intro.), (3)(a) and Table 4 and NR 811.02(5); and to create NR 140.05(1u), (1w), (1y) and (20s), 140.22(1m) and (2)(d) and 811.87(5) relating to groundwater quality standards and the development of an aquifer storage recovery well or the operation of an ASR system by a municipal water utility.

DG-44-02

.....

Analysis Prepared by the Department of Natural Resources

Statutory authority: ss. 160.21, 160.257, 280.11(1), 281.11, 281.12(1) and 281.17(8), Stats.

Statutes interpreted: ss. 160.257, Stats.

The Natural Resources Board recently adopted revisions to ch. NR 811 that establish design and management criteria for aquifer storage and recovery (ASR) systems. Chapter 160, Stats., has been revised to add s. 160.257, Stats., which establishes a point of standards application around ASR wells for chloroform, bromodichloromethane, dibromochloromethane and bromoform groundwater quality standards. This point of standards application is 1,200 feet from an ASR well and at any other well located within 1,200 feet of an ASR well.

Amendments are proposed to ch. NR 140 to incorporate the chloroform, bromodichloromethane, dibromochloromethane and bromoform points of standards application for ASR wells established under s. 160.257, Stats., and to establish an ASR system design management zone at the same distance from an ASR well as the system displacement zone (aquifer storage zone) allowed under ch. NR 811. Amendments are proposed to ch. NR 811 to allow an ASR system displacement zone to extend to a maximum distance of 1,200 feet from an ASR well.

SECTION 1. NR 140.05(1u) is created to read:

NR 140.05(1u) "Aquifer storage recovery" or "ASR" means placement of treated drinking water underground through a well for the purpose of storing and later recovering the water through the same well for potable use.

Note: Underground placement of water for the purpose of restoring an aquifer is not included in the definition of "aquifer storage recovery" or "ASR".

SECTION 2. NR 140.05(1w) is created to read:

NR 140.05(1w) "ASR displacement zone" means the 3-dimensional subsurface region surrounding an aquifer storage recovery well into which treated drinking water is placed for storage and later recovery.

SECTION 3. NR 140.05(1y) is created to read:

NR 140.05(1y) "ASR system" means all of the ASR wells, ASR monitoring wells and related appurtenances within a municipal well system and any interconnected public water system served by the municipal water system.

SECTION 4. NR 140.05(20s) is created to read:

NR 140.05(20s) "Specified substance" means one of the following: chloroform, bromodichloromethane, dibromochloromethane or bromoform.

SECTION 5. NR 140.22(1)(intro.) is amended to read:

NR 140.22(1) DESIGN. (intro.) ~~Facilities~~ Except as specified in sub. (1m), facilities, practices or activities regulated by the department, including remedial actions, shall be designed to minimize the level of substances in groundwater and to comply with the preventive action limits to the extent technically and economically feasible at all the following locations:

SECTION 6. NR 140.22(1m) is created to read:

NR 140.22(1m) DESIGN OF ASR SYSTEMS; SPECIFIED SUBSTANCES. The point of standards application to determine if the design of an aquifer storage recovery system, regulated under ch. 280 or 281, Stats., complies with the preventive action limits for a specified substance is 1,200 feet from an aquifer storage and recovery well and at any other well that is not part of the ASR system and that is within 1,200 feet of an aquifer storage recovery well.

SECTION 7. NR 140.22(2)(a) and (b)(intro.) are amended to read:

NR 140.22(2)(a) ~~The~~ Except as specified in par. (d), the point of standards application to determine if a preventive action limit has been attained or exceeded is any point at which groundwater is monitored.

(b)(intro.) ~~The~~ Except as specified in par. (d), the point of standards application to determine whether an enforcement standard has been attained or exceeded shall be the following locations:

SECTION 8. NR 140.22(2)(d) is created to read:

NR 140.22(2)(d) The point of standards application to determine if a preventive action limit or enforcement standard for a specified substance has been attained or exceeded at an aquifer storage recovery well, regulated under ch. 280 or 281, Stats., is 1,200 feet from the aquifer storage and recovery well and at any other well that is not part of the ASR system and that is within 1,200 feet of the aquifer storage recovery well.

SECTION 9. NR 140.22(3)(a) is amended to read:

NR 140.22(3)(a) The design management zone for facilities, practices or activities subject to regulation by the department shall be an area enclosed by vertical boundaries which extend from the land surface downward through all saturated geological formations. The design management zone shall extend horizontally beyond the waste boundary or ASR displacement zone to the distance indicated in Table 4 for the specified type of facility, practice or activity. The waste boundary shall be the outermost limit at which waste from a facility, practice or activity has been stored, applied or disposed of, or permitted or approved for storage, application or disposal. For hazardous waste facilities regulated under ch. 291, Stats., the waste boundary shall include the horizontal space taken up by any liner, dike or other barrier to contain waste.

SECTION 10. NR 140.22(3) Table 4 is amended to read:

Table 4

Type of Facility Practice or Activity	*Horizontal Distances for the Design Management Zone*
Land disposal systems regulated under ch. 283, Stats.	250 feet
Wastewater and sludge storage or treatment lagoons regulated under ch. 281 or 283, Stats.	100 feet
Solid waste disposal facilities regulated under ch. 289, Stats., which have feasibility reports approved after October 1, 1985.	150 feet
All other solid waste disposal facilities regulated under ch. 289, Stats.	300 feet
Hazardous waste disposal facilities, waste piles, landfills and surface impoundments subject to regulation under s. NR 635.16	300 feet
Hazardous waste disposal facilities, waste piles, landfills and surface impoundments subject to regulation under ss. NR 635.05 to 635.15.	0 feet
Aquifer storage recovery systems regulated under ch. 280 or 281, Stats.	0 feet

SECTION 11. NR 811.02(5), as created by Clearinghouse Rule No. 02-013, is amended to read:

NR 811.02(5) "ASR system" means all of the ASR wells, ASR monitoring wells and related appurtenances within a municipal well system and any interconnected public water system served by the municipal water system.

SECTION 12. NR 811.87(5) is created to read:

NR 811.87(5) The displacement zone around an ASR well may extend no further than 1,200 feet from that ASR well.

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on _____.

The rules shall take effect on the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22(2)(intro.), Stats.

Dated at Madison, Wisconsin _____

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By _____
Darrell Bazzell, Secretary

(SEAL)

Original to Jim,

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott McCallum, Governor
Darrell Bazzell, Secretary

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August 28, 2002

SEP 6 2002

The Honorable James Baumgart
Wisconsin Senate
State Capitol
Room 306 South
Madison, WI 53702

Dear Senator Baumgart: Jim

You missed a good discussion on July 25 at the Innovation Stakeholders Meeting. I am starting to see some real opportunities to work together to make performance based environmental management happen. As a result of the discussions we will go back and consider not just how we measure these innovation projects but how we can effectively engage the group in "doing good things together" to advance performance based approaches. This follow-up letter has been delayed a bit while we worked back through the discussion notes so that I could effectively communicate what will be coming out at the next meeting.

I have asked Mark McDermid to coordinate the follow-up work on measurement so that it is ready for consideration at the next meeting. I would like to thank Brian Borofka and Sonya Newenhouse for stepping forward to volunteer to help out with the next iteration of measurement. Brian will help to provide a focus for a new version of the measurement report and Sonya will work on a template that might be used for multiple projects.

Below is a summary of the key points raised during the discussion. We intend to follow through on these points and use your suggestions as the foundation for discussions at the next meeting.

- Measurement – There is interest in having baseline information as a part of the measurement but this should not be done to such a finite level that progress on measurement is impeded. Baseline information needs to help us understand whether we are better off than we would be with the present system. Tactically, there may be an advantage to having a template (working with Sonya Newenhouse) that is used for each initiative, providing a one page snapshot. The goals for these initiatives need to be stated at a strategic level and the information on those goals should help the group decide where collective action may be possible as well as where there is an opportunity to provide direction to the Department. The Department needs to revisit the innovation initiatives identified and provide another draft of the information that would be reported through the measurement device (working with Brian Borofka). We need to have clear, stretch goals for the initiative(s) and have 1 to 2 key measures for those goals that have a defined methodology that can be tracked over time.
- Culture Change – DNR is working with Engineering Professional Development at the University of Wisconsin to develop the skill sets that would be needed to use new, "innovative" tools. We are also working with the programs to identify where there are opportunities for innovative approaches and/or approaches that will yield better environmental results. More specific information may be available for reporting in October. Measurements for Innovation Projects are the major item on the agenda for the next meeting. I would encourage you to provide comments.

- Environmental Results Act (Green Tier) – This will a major part of our October discussion. The Department is working on the administration and demand side issues. We could use some help and some advice about how we might best prepare to make this a reality in the next legislative session.

Please let me know if we have missed a fundamental point from the discussion.

A question emerged at the end of our discussion. What is the framework for selecting/adding innovations? Innovation initiatives have been added based on interest and activity without a formal selection process. The focus of the initiatives is innovations that work across media and are designed to accomplish results outside the traditional command and control structure. If you have suggestions, I would encourage you to send them to me.

I would like to have our next meeting on October 29 in room 027 in GEF2 from 1:00 to 3:00. Comments on the items above and suggestions for agenda items are welcome. I would ask that you send them to Mark McDermid (mcderm@dnr.state.wi.us) who will be getting them to me. Based on our meeting discussion, we will see how we might begin using the measurement tool as a catalyst for our discussions. I would like to spend some time talking about Green Tier both related to working on legislation for the next session and understanding/building demand for the program. I would encourage you to provide comments, suggestions and insights to Mark before the next meeting so that we can be sure that they are included in the materials that we are developing for the meeting.

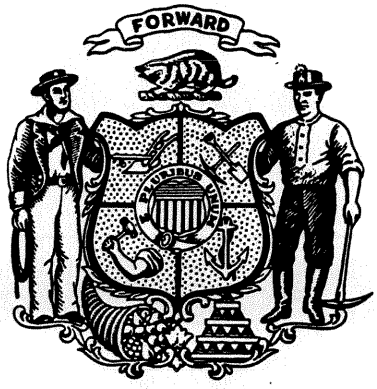
The July meeting was especially gratifying. I felt that the 2 hours of discussion was quite productive, providing shared perspectives and some good debate. I am confident that we can enjoy similar results the next time that we meet. I am looking forward to our discussions in October and hope to see you there.

Sincerely,

Darrell

Darrell Bazzell,
Secretary

END



END

SEP 24 2002

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott McCallum, Governor
Darrell Bazzell, Secretary

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September, 2002

TO: Sanitary Landfills & Public Sewage Treatment Operations

SUBJECT: Disposal and Landfilling of Deer Carcasses

As you are all well aware, Chronic Wasting Disease is having a major impact on our state. We are doing everything we can to answer the many questions that people have on this disease and it's impacts on the deer herd, meat safety, and carcass disposal.

This past week, we extended the contract of the vendor currently processing deer carcasses from the Eradication Zone (infected area). This contract uses combustion at a crematorium. Although this decision meets our immediate needs, we must still pursue a long-term method for disposal of large quantities of deer carcasses.

We believe that landfilling in modern, engineered sites is a low-risk and cost-effective strategy for deer carcass disposal whether the deer come from the CWD Eradication Zone or any other part of Wisconsin. However, we recognize many of you have questions, particularly regarding the contamination of the leachate with the CWD agent. Our departments have prepared the enclosed interim risk analysis that represents our assessment of what is currently known about the potential risk to humans and deer if deer from the Eradication Zone were landfilled in a normal fashion, and sludge from that landfill were subsequently spread on the landscape.

This interim risk assessment involved input from sanitary landfill engineers, wastewater and air management experts, veterinarians and epidemiologists from several agencies. Our staff also solicited input from CWD and prion-disease experts from Britain and other states, and we will continue to examine pertinent new research on this issue as results become available. We conclude that animals infected with CWD can be safely disposed of in modern sanitary landfills within the state. Please take time to read the risk assessment and, if you have questions, feel free to contact our departments.

The fall hunt is coming quickly and your cooperation is essential. Deer carcass waste generated from fall hunting seasons, CWD testing operations, car-killed deer and meat processing sites has been safely put in landfills for many years. We hope the citizens of Wisconsin can count on you to continue to provide this vital service. Thank you for your understanding in this difficult time.

Darrell

Darrell Bazzell, Secretary
Wisconsin Department of Natural Resources

Phyllis J. Dubé

Phyllis Dubé, Secretary
Department of Health and Family Services.

An Analysis of Risks Associated with the Disposal of Deer from Wisconsin in Municipal Solid Waste Landfills

1. Background

The purpose of this document is to evaluate risks associated with the landfilling of CWD-infected deer carcasses. It uses the current scientific information available on this subject and, as such, should be considered an interim document that will be updated as new information is available.

1.1 The Challenge

In February 2002 the first cases of chronic wasting disease (CWD) in free-ranging white-tailed deer east of the Mississippi River were reported in southwest Wisconsin. Further surveillance revealed a 3% rate of infection in an 11-mile radius around the initial cases. Based on these findings and the input of wildlife disease control and CWD experts, a disease eradication program was developed. This program calls for the harvest of all of the deer within a 360 square mile area and for population reductions in the surrounding areas.

The zone targeted for complete depopulation has been designated the *eradication zone* (EZ) and the surrounding area has been termed the *management zone*. It is estimated that, as of fall of 2002, there are approximately 25,000 deer in the EZ alone. Citizen-hunters are expected to be the primary means of removing deer from the EZ. It is expected that the majority of these deer will not be used as a source of venison. Therefore, the carcasses will need to be disposed of in a manner that does not jeopardize animal or human health or environmental quality.

Any disposal method must also have the following attributes: the capacity to handle a large number of carcasses; the ability to conform to local, state and national laws and regulations; and to be in place by October 2002. A final consideration is the cost of disposal. Although the latter is not the primary consideration, it is likely that disposal costs will be one of the largest expenses of Wisconsin's CWD control program. The four primary options currently under consideration for the disposal of deer are landfilling, rendering, incineration and chemical digestion.

Deer carcasses and tissues are often sent to municipal solid waste landfills. This material is incorporated in with other waste at the landfill. Landfills generate a certain amount of liquid, termed *leachate*, which is collected and processed. This leachate results primarily from precipitation falling on the landfill surface. Composite landfill liners prevent leachate from entering groundwater. The leachate is collected at the base of the waste just above the liner. In most instances the leachate is transferred to a wastewater treatment plant (WWTP) for treatment. Less commonly, some landfills may recirculate a portion of the leachate. At the WWTP, the leachate is processed along other wastewater. Solids are separated from the water portion. This material, termed "sludge" or biosolids, is commonly applied on farm fields or landfilled.

Based on the above, the primary pathway of potential risk identified for the CWD prion following landfill disposal of infected deer can be described as:

carcass→landfill→ leachate→wastewater treatment plant→sludge →

farm field→ingestion by humans or deer.

1.2 The Disease

CWD is a member of the transmissible spongiform encephalopathies (TSEs) a group of diseases that includes scrapie of sheep, bovine spongiform encephalopathy (BSE) of cattle and Creutzfeldt-Jakob Disease of humans. BSE is the only animal TSE for which there is experimental and epidemiological evidence of transmission to humans (Bruce *et al.* 1997, Hill *et al.* 1997 and Scott *et al.* 1999). All of the diseases in this group are characterized by a prolonged incubation, insidious onset of neurological signs, typically slow progression and eventual death. As a group, the TSEs are infectious, but not highly contagious. The specific transmission routes (i.e. portal(s) of agent exit and entry) of CWD between infected and susceptible animals have not been established. There is evidence that CWD can be transmitted by direct and indirect means; that is by animal-to-animal contact or by animal contact with contaminated items or the environment.

1.3 Biochemical and Physical Properties of the TSEs

Biochemically, the TSEs are characterized by a resistant form of a normal protein that is found in all mammalian and avian species examined to date. This protein is termed *prion protein* (PrP). The abnormal form, termed *PrP-res*, is associated with TSE infectivity and pathogenicity. The "res" refers to the fact that the abnormal prion protein is partially resistant to proteinase K digestion. Unlike the normal host prion protein, PrP-res forms ordered oligomeric structures; which are units composed of more than one protein chain. PrP-res has both hydrophilic and hydrophobic regions (Meyer *et al.* 1986). The hydrophobic region will be an important determinant of the behavior of the CWD agent in the landfill environment. Other distinctive properties of PrP-res include resistance to many of the commonly used disinfectants and inactivation procedures that are typically used to destroy infectious agents. Finally, there are multiple strains of TSE agents that have been identified, even within a particular disease group. Research has shown that some strains are more resistant to inactivation than others. With respect to CWD, it is unknown whether there are multiple strains and what relative degree of resistance to inactivation CWD has with respect to some of the better characterized TSE agents such as scrapie and BSE.

2. Behavior of the Prion Protein (PrP-res) in the Environment

2.1 Soil and Solid Waste

Due to the hydrophobic regions of the CWD PrP-res molecule, infectious prions in the environment can be expected to adsorb to organic material and soil. Initially the infectious agent is likely to adhere to the protein and carbohydrate components of the animal carcass. As the carcass decomposes, the undegraded PrP-res will adhere to adjacent soil or waste material in a landfill. The ability of scrapie prions to bind to metals and plastics has been reported (Flechsig et al, 2001; Weissman et al., 2002). All municipal solid waste landfills in Wisconsin employ a thick plastic membrane (generally polyethylene) as a component of the liner. This liner acts as a protective barrier and should prevent the movement of 'free' prions to subsurface soils or to groundwater.

In the only experiment to examine the fate of PrP-res in an outdoor environment, Brown and Gajdusek (1991) buried perforated petri dishes containing hamster scrapie in a residential garden for three years. They found that approximately 1% of the original infectivity in the original location

survived this term. Examining surrounding soil layers, no infectivity was found above the original location, a small amount of infectivity was found in the 4 cm soil layer that was directly beneath the perforated dish containing the original inoculum and no infectivity was found at 4-8 cm below the dish. The authors conclude that the hamster scrapie agent used in this experiment can persist in contaminated soil for three years under natural environmental conditions, but that there is little leaching to surrounding soil layers. To date there has been no further work that specifically examines the fate of TSE agents in the soil/solid waste environment.

Land application of municipal sludge that potentially contains CWD PrP-res may result in the presence of CWD PrP-res in surface soils. The application rates of municipal sludge are dependent on the chemical characteristics of the sludge and therefore will vary. The mechanism and time course of PrP-res degradation in soil/solid waste environment is unknown. Normal biodegredation processes are expected to inactivate the CWD prion over time.

2.2 Water

The hydrophobic nature of PrP-res (Bennett 1992) indicates that leaching of the CWD agent into an aqueous environment is unlikely to occur in the landfill or in soil. This assumption is echoed in a 2000 BSE risk assessment produced for the British Ministry of Agriculture, Fisheries and Food (now Department for Environment, Food & Rural Affairs [DEFRA]). In section 3.1 titled "Fundamental Assumptions" it states that "BSE agent is stuck to particulate matter and, hence, is removed with the particulate matter from the effluent." Gale *et al.* (1998) in examining the risk from BSE in the aquatic environment state, "With the possible exception of flows in the vicinity of extraction wells, the rate of flow through landfilled wastes is generally slow and non-turbulent, with the result that particulate material is unlikely to be taken up in suspension."

Should any PrP-res exit the landfill as part of the leachate, it will, due to its hydrophobic nature, be attached to particulates (colloids) suspended in the leachate. Once that leachate reaches the wastewater treatment plant the suspended solids will be separated from the effluent. Those suspended solids will then be termed "sludge" or biosolids. Again, due to its hydrophobic nature, the PrP-res is expected to selectively partition with the solids into the sludge portion, and is not expected to be present in wastewater discharged to surface water. Gale and Stanfield (2001) discuss this expectation in their risk assessment for BSE in sewage sludge.

2.3 Air

Air transport is not considered in this document because there is currently no evidence that PrP-res can be released into the air or volatilized in any way under natural conditions. In addition, there is no evidence of airborne transmission between animals or people.

3. Human vs. Animal Exposure to the CWD Agent

To date, no human illness has been associated with exposure to the CWD agent. However, systematic surveillance has only recently begun. Given that humans have likely been exposed to the CWD agent for decades from animals, in laboratories and from the environment, this is a significant observation. Surveillance of prion-related diseases in humans is in its infancy. The primary routes of exposure in the future are likely to be through hunting and the consumption of CWD-contaminated venison and elk. To date, test-tube experiments in which normal human prion protein is exposed to

PrP-res from white-tailed deer have shown a limited degree of infectivity, but at a less efficient rate than that for BSE or scrapie (Raymond et al., 2000).

In contrast to interspecies transmission of CWD from deer to humans, there is good evidence that deer and elk can contract CWD by animal-to-animal contact as well as by contact of a susceptible animal with a contaminated environment.

Domestic cattle have failed to develop disease when housed with CWD-infected deer (Williams & Miller 2002). Under experimental conditions, however, 3 of 13 cattle inoculated (~ 5 years ago) intracerebrally with CWD did succumb to a TSE illness (Hamir et al., 2001). The remaining cattle are still alive and will remain under observation for another 5 years. Animals orally inoculated have, to date, not succumbed to the disease (Williams, 2002). Based on the above observations, the following pathway is not considered further in this document:

deer→landfill→leachate→ wastewater treatment plant→sludge→ farm field→ animal fodder (surface contamination)→domestic livestock→commercial meat.

4. Impact Assessment

4.1 Minimum Level of Exposure Known to Cause Disease

As described above, it is likely that over the past several decades, thousands of hunters, taxidermists, meat processors, and research staff have ingested the CWD prion, as well as been exposed via eye splashes and through cuts and wounds. Exposure from these routes is likely to have been significantly greater than any that would be expected to result from contact with leachate from a well-managed landfill.

The issue of how much infected material an individual (human or animal) must consume or be exposed to in order to become infected with CWD or any other TSE is not known. Neither is it known if repeated small doses can result in infection. In an experimental setting, low-dose inoculation studies have revealed a decreased probability of infection and prolonged incubation periods. In some animal experiments, the incubation period extended beyond the natural life span of the animal; that is, at the time of death due to "natural causes", the animal was infected with the TSE agent, but was not symptomatic (Dickinson, 1977; Thackray et al., 2002).

4.2 Transmission of TSEs to Humans and Among Animals of the Same Species

As stated in section 2., the only animal TSE that is known to have been transmitted to humans is BSE. Transmission of TSEs from one animal to another is likely to depend on a number of factors. These include the specific TSE, the strain of the TSE, the dose, the route of exposure, the human PrP genotype, and likely other unidentified factors.

The dose for any TSE is typically expressed as a "infectious/lethal dose 50" or an "I/LD_{50}" per gram of tissue. It represents the dose of material at which 50% of the recipients become infected and will die. An I/LD_{50} is always species and route specific. The I/LD_{50} is determined by serial dilutions of the original material and subsequent inoculations into groups of animals to determine the endpoint at which 50% of the animals succumb or are diagnosed as infected (The term "LD_{50}" is often replaced by "ID_{50}" or "infectious dose 50" to indicate that experimental animals are not allowed to progress

fully through clinical disease to death). For the TSEs, a lower dose can decrease the likelihood that an exposed animal will become infected.

The route of exposure is also an important factor. The intracerebral route of inoculation is the most efficient. However, it is not a natural route of exposure. The following additional routes of infection are listed in descending order of efficiency (generally): intravenous, intraperitoneal and oral. The oral infectious dose of CWD has not been determined for deer or elk (E. Williams, personal communication, 2002).

4.3 Movement of Prions to Landfill Leachate

While the assumptions in this analysis are based on limited data, they serve to provide an approximation of the range of conditions likely to be encountered in the environment under the scenario described in this document.

4.3.1 Permeability

Permeability is defined as the time needed for liquids to percolate through the waste mass at a landfill. There are limited data available regarding the saturated hydraulic conductivity of municipal waste. The EPA Hydrologic Evaluation of Landfill Performance (HELP) model for predicting the movement of liquids through landfill caps and liners uses a default value of 1×10^{-3} cm/sec for the saturated hydraulic conductivity of municipal waste. This value is based on work by Oweis et al (1990). More recent data (Shaw and Carey, 1996, Bleiker et al,1993;Townsend et al,1995) indicates a broader range of permeabilities from 10^{-3} to 10^{-6} cm/sec. Permeability, however, can vary based on waste composition, age (degree of decomposition) and depth of fill.

4.3.2 Distance to the Leachate Collection System

Typical municipal waste landfills in Wisconsin range in final height from 100 to 300 feet above the leachate collection system. The landfills are typically constructed in a series of phases over time, so that there are disposal areas available in the upper portions of the previous phase, while filling is occurring at the base of a new phase. DNR recommended in a June 6, 2002 letter to landfill operators that the deer carcass burial area should be "strategically sited high in the landfill such that any liquids will have to pass through many feet of waste material before reaching the leachate collection system"(WDNR, 2002).

4.3.3 Summary

Considering these factors in tandem with the observations in section 2.1 about the hydrophobicity of prions and their tendency to degrade in soil, it is expected that if prions were to move into landfill leachate, their movement would be slow enough that their concentration would be significantly reduced by degradation and retention in the remaining waste mass.

4.4 Ingestion of potentially CWD-contaminated soil by humans and deer after sludge application

As described in section 2 of this document, it is expected that any prions present in leachate will adhere to sludge during the wastewater treatment process. Furthermore, the incorporation of sludge

into the 9-inch plow layer, which is standard for land application practices, would provide significant dilution within the soil. This combination of concentration reduction factors at the landfill, the sewerage treatment plant, and in the soil as well as the natural degradation processes is expected to greatly reduce the potential for infectious CWD prions to be present in sludge-amended soil.

5. Discussion

A quantitative or semi-quantitative assessment of the risk is not possible because the amount of infectivity present in a carcass is unknown. In addition, the dose needed to infect a human or deer is also unknown. Nonetheless, existing information suggests that landfilling large numbers of deer from an area with a low incidence of CWD is unlikely to pose a significant risk to humans or to wildlife.

This document provides support for the following conclusions:

1. The disease specific agent is hydrophobic and is expected to adhere to organic materials present in a landfill.
2. It is likely to take the CWD agent several months to move through a landfill. During that time the agent will be subject to biodegredation and is likely to lose a significant amount of its infectivity. Based on the findings of Brown and Gajdusek (1991), up to 98% loss of infectivity can be anticipated within a 3-yr period.
3. Any infectivity that exits the landfill will be captured in the effluent and transferred to a wastewater treatment plant or recirculated in the landfill.
4. CWD prions present in wastewater are expected to partition with the sludge fraction.
5. Land-applied sludge will be greatly diluted by surface soils and incorporated with soil at a depth of 9 inches.

5.1 Likelihood of Human Exposure

Two factors strongly influence human risk:

1. The presence of a species barrier
2. The route and dose of the exposure

The precise nature of any species barrier for CWD transmission between white-tailed deer and humans has, as yet, not been described. Given the fact that controlled experiments cannot be conducted in human beings, the existence of a species barrier cannot be directly tested. However, there is limited experimental evidence of a species barrier (Raymond et al. 2000). Further supporting the notion that such a species barrier exists is the observation that humans have been handling and consuming tissues from infected deer for decades with no evidence to date of any correlation with any human illness. The U. S. Centers for Disease Control (CDC) has investigated Creutzfeldt-Jakob disease (CJD) among three individuals thirty years of age or younger who had some association with hunting or consumption of venison (not related to the ongoing CDC investigation in Wisconsin) and has concluded that there was no evidence for a causal link with the consumption of venison (Belay et al., 2001).

The route of exposure to TSEs is also an important determinant of the efficiency of transmission. Oral (i.e. ingestion) exposure is among the least efficient means of transmitting any TSEs. In many

circumstances, TSEs that can be transmitted by the artificial route of intracranial (IC) inoculation directly into the brain cannot be transmitted by the oral route. Under experimental conditions when the dose can be controlled, it generally requires a far greater dose (typically 1,000- to 100,000-fold more) to transmit a given TSE at the same rate by the oral route than by the IC route.

The collection of leachate from a large landfill, the co-mingling of the solids from the leachate with other solids from the sewerage system and its mixing with 9 inches of topsoil provides an extremely large dilution factor. In addition, any prions that enter the environment will degrade with time.

In summary, it is reasonable to conclude that while absolute numbers relating to human health risk cannot be generated, the available knowledge about CWD and other TSEs suggests that landfilling of CWD-infected deer does not pose a significant risk to human health.

5.2 Likelihood of Transmission to Deer

The major factors that influence the risk to deer from the landfilling of a population of deer some of which are infected with CWD are:

1. The absence of a species barrier
2. The route of exposure
3. The concentration reduction factors inherent in sludge production and application
4. The consumption of soil by deer.

For any TSE that is transmitted within the same species there is assumed to be no species barrier. The consequence of this is that deer are the most susceptible species to any exposure to viable CWD agent that enters the environment. For deer there may, however, be genetic influences on susceptibility and incubation period. For CWD this information is not known. Therefore, the approach in this document has been to assume that all white-tailed deer are equally susceptible to CWD infection.

The primary route of exposure to the CWD prion for deer from sludge amended soil is by ingestion. Typically for the TSEs the oral route is among the least efficient means of transmission. However, the oral infectious dose of CWD for deer has not been determined.

The collection of leachate from a large landfill, the co-mingling of the solids from the leachate with all the other solids from the sewerage system and then its mixing with 9 inches of topsoil provides an extremely large concentration reduction factor. Should any viable CWD prions make it out into the environment it is likely that they will degrade with time and will be diluted due to the mixing to a depth of 9 inches.

In conclusion, it is deemed likely that the risk of spreading CWD among Wisconsin's deer population by landfill disposal of infected carcasses is quite small.

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September 16, 2002

TO: Natural Resources Board
Wisconsin Legislators
Wisconsin Congressional Delegation
County Board Chairs

SUBJECT: Disposal and Landfilling of Deer Carcasses - Risk Assessment Document Now Available

As you are aware, the subject of carcass disposal has generated a lot of discussion during the past few months. The Wisconsin Department of Natural Resources and the Wisconsin Department of Health and Family Services have recently prepared the attached risk analysis for the landfilling of deer carcasses. This document represents our assessment of what is currently known about the potential risk to humans and deer, if deer from the Eradication Zone were landfilled in a normal fashion, and sludge from that landfill were subsequently spread on the landscape.

This risk assessment involved input from sanitary landfill engineers, wastewater and air management experts, veterinarians and epidemiologists from several agencies. Our staff also solicited input from CWD and prion-disease experts from Britain and other states, and we will continue to examine pertinent new research on this issue, as results become available. We conclude that animals infected with CWD can be safely disposed of in modern sanitary landfills.

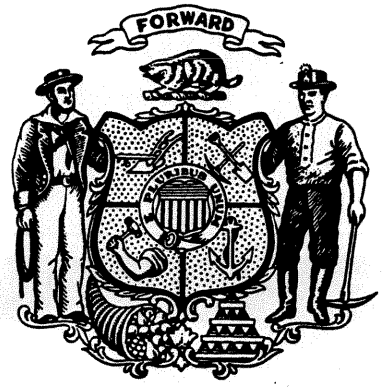
The attached cover letter and analysis has been sent to all landfill and wastewater treatment operators in Wisconsin. We hope the attached documents will serve as a good reference document on this subject.

Sincerely,

Darrell

Darrell Bazzell

END



END

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SEP 25 2002

September 12, 2002

Everett Wilson, Chief
Division of Environmental Quality
U.S. Fish and Wildlife Service
4401 North Fairfax Drive, Suite 322
Arlington, VA 22203

Everett

Dear Mr. Wilson:

I am writing regarding the proposed rule to list the black carp (*Mylopharyngodon piceus*) as an injurious species of wildlife under the federal Lacey Act, as published in the July 30, 2002 issue of the Federal Register (Vol. 67, No. 146).

In Wisconsin, we are deeply concerned about the threat of all Asian carp to Wisconsin waters and fish communities. Grass carp *(Ctenopharyngodon idella)*, bighead carp *(Hypophthalmichthys nobilis)*, and silver carp *(Hypophthalmichthys molitrix)* are at our borders and threatening our fisheries and aquatic resources. Aquatic exotic species continue to invade both our Great Lakes-- Lakes Superior and Michigan as well as our western boundary waters via the Mississippi River. Exotic diseases (Heterosporis in yellow perch and spring viremia carp virus in carp and minnows) are showing up in our native populations and the likely vector for these introductions is the aquarium trade or the aquaculture trade. We support any federal action taken to control the introduction and spread of invasive aquatic species. A rapid and decisive action on black carp should be taken by the Fish and Wildlife Service at the earliest possible date.

The political actions of Asian carp promoters have aided and assisted the spread of exotic, invasive Asian carp species. The political and economic interests of a few should not be allowed to put extensive and valuable resources at risk! Not only should the black carp be listed as an injurious species of wildlife under the Lacey Act, but more extensive, stronger actions covering all Asian carp species (detailed below), should now be taken. In addition to the Lacey Act listing, measures need to now be taken by federal and state agencies to obtain the authority to destroy all living black carp stocks being held in the United States while they are still confined in fish farm culture operations.

Such destruction of black carp stocks is justified because, if allowed to escape to the wild, the black carp poses a major threat to native shellfish and mussel resources. The black carp was imported for the specific purpose of controlling snails in fish culture ponds. The black carp would prey heavily on native shellfish and mussel resources, many of which are already

endangered in the Mississippi system and in all other river systems in the U.S. While we usually believe that individual states have the authority to manage fisheries resources within their boundaries, this is an extraordinary case where the unilateral actions of some states may severely impact the aquatic resources of the entire nation, therefore federal action may be needed to locate and destroy all living black carp stocks as soon as possible.

Further, the black carp listing should be expanded to include the grass, bighead and silver carp species. This is necessary to eliminate interstate shipment of live Asian carp to food markets and via the baitfish and aquarium trades. Although the bighead and silver carp have expanded their range across much of the Mississippi River Basin, they still do not occur in most North American watersheds and every reasonable effort should be made to limit their spread to other areas especially the Great Lakes. As a result of the current Asian carp infestation in the Illinois River and Waterway (which connects to Lake Michigan), extraordinary measures are now being taken at great public expense by Great Lakes interests in both the United States and Canada to close these waterway connections through the use of various fish control applications. Expanding the Lacey Act listing to include grass, bighead and silver carp would enhance that effort by preventing the interstate shipment of live fish to markets (where live escape is possible) in the Great Lakes watershed. Expanding the black carp listing (as for the 28 snakehead species) to include the grass, bighead and silver carps should therefore, be done immediately.

The U.S. Department of the Interior and the U.S. Department of Agriculture should launch a public relations campaign to educate the public on the threat Asian carp pose to North America waters. Unsuspecting fishermen and bait dealers need to carefully inspect their baitfish resources and destroy any Asian carp that may have inadvertently contaminated their buckets, tanks or livewells. Outreach measures should be developed to be meaningful for target audiences particularly where language or cultural differences could be barriers to an effective presentation program.

Strict measures need to be taken by the U.S. Department of the Interior and the U.S. Department of Agriculture to control the future import of any new species. In Wisconsin the Department of Natural Resources is developing a list of specific fish species that can be permitted into the state. All unlisted species are prohibited for import. Our listings assume that new species will be harmful and should not be allowed into the state. The same effort should be undertaken at the national level. Lists of "permitted" and "prohibited" species should be developed by the federal government. Any species not listed as "permitted" should be prohibited from entering the United States until proven safe to the satisfaction of independent scientific authorities. Proposed solutions to agricultural problems (as was the case for the introduction of Asian carp) should not outweigh the interests of other equally important economic and recreational interests such as the Nation's fisheries and aquatic resources.

In conclusion, I encourage the U.S. Department of the Interior, the U.S. Department of Agriculture, and other federal agencies to take decisive and aggressive action to limit the spread of Asian carp and other invasive species,, and to stand tall in support of our Nation's native aquatic resources and the public interest. The position of all federal agencies should be to protect the integrity of the Nation's natural resources.

It is extremely unfortunate that any of the Asian carp species were allowed into the United States in the first place. With appropriate action by the U.S. Department of the Interior we can all work to prevent similar disasters and threats to our aquatic resources in the future. It is imperative that we act quickly so that our control efforts have a chance of success.

Thank you for the opportunity to comment on this important issue.

Sincerely,

Darrell Bazzell
Secretary

cc: Senator Russ Feingold
Senator Herb Kohl
Representative Paul Ryan
Representative Tammy Baldwin
Representative Ron Kind
Representative Gerald Kleczka
Representative Thomas Barrett
Representative Thomas Petri
Representative David Obey
Representative Mark Green
Representative F. James Sensenbrenner Jr.
WI Assembly Committee on Natural Resources
WI Senate Committee on Environmental Resources
Norm Stuckey, MICRA

domestic end product, *i.e.*, when no domestic offers are received (*see* 225.504(3)) or when a qualifying or NAFTA country offer is lower than the domestic offer (*see* 225.504(2)), evaluate nonqualifying country offers without the 50 percent factor.

(A) If duty is to be exempted through inclusion of the clause at FAR 52.225–8, Duty-Free Entry, evaluate the nonqualifying country offer exclusive of duty by reducing the offered price by the amount of duty identified in the clause at 252.225–7003, Information for Duty-Free Entry Evaluation (*see* 225.504(2)(ii) and (3)(ii)). If award is made on the nonqualifying country offer, award at the offered price minus duty.

(B) If duty is not to be exempted, evaluate the nonqualifying country offer inclusive of duty (*see* 225.504(2)(i) and (3)(i)).

(iv) If these evaluation procedures result in a tie between a nonqualifying country offer and a domestic offer, make award on the domestic offer.

(v)(A) There are two tests that must be met to determine whether a manufactured item is a domestic end product—

(1) The end product must have been manufactured in the United States; and

(2) The cost of its U.S. and qualifying country components must exceed 50 percent of the cost of all of its components. This test is applied to end products only, and not to individual components.

(B) Because of the component test, the definition of "domestic end product" is more restrictive than the definition for—

(1) "U.S.-made end product" under trade agreements;

(2) "Domestically produced or manufactured products" under small business set-asides or small business reservations; and

(3) Products of small businesses under FAR part 19.

225.504 [Amended]

7. Section 225.504 is amended by removing paragraph (4).

225.1101 [Amended]

8. Section 225.1101 is amended as follows:

a. In paragraph (2)(i) by removing "252.225–7007, Buy American Act—Trade Agreements—Balance of Payments Program;";

b. By removing paragraph (3)(ii) and redesignating paragraphs (3)(iii) and (3)(iv) as paragraphs (3)(ii) and (3)(iii), respectively;

c. By removing paragraphs (5) and (6) and redesignating paragraphs (7) through (14) as paragraphs (5) through (12), respectively;

d. In newly designated paragraph (9), by removing "when acquiring information technology products in Federal Supply Group 70 or 74" and adding in its place "if the acquisition is subject to the Trade Agreements Act"; and

e. In newly designated paragraph (12), by removing "252.225–7007, Buy American Act—Trade Agreements'Balance of Payments Program;".

9. Section 225.7501 is amended by revising paragraph (b)(1)(iii) to read as follows:

225.7501 Policy.

* * * * *

(b) * * *

(1) * * *

(iii) For acquisitions subject to the Trade Agreements Act, is a U.S.-made end product; or

* * * * *

PART 252—SOLICITATION PROVISIONS AND CONTRACT CLAUSES

252.225–7006 and 252.225–7007 [Removed and Reserved]

10. Sections 252.225–7006 and 252.225–7007 are removed and reserved.

252.225–7008 [Amended]

11. Section 252.225–7008 is amended in the introductory text by removing "225.1101(7)" and adding in its place "225.1101(5)".

252.225–7009 [Amended]

12. Section 252.225–7009 is amended in the introductory text by removing "225.1101(8)" and adding in its place "225.1101(6)".

252.225–7010 [Amended]

13. Section 252.225–7010 is amended in the introductory text by removing "225.1101(9)" and adding in its place "225.1101(7)".

252.225–7020 [Amended]

14. Section 252.225–7020 is amended in the introductory text by removing "225.1101(10)" and adding in its place "225.1101(8)".

252.225–7021 [Amended]

15. Section 252.225–7021 is amended in the introductory text by removing "225.1101(11)" and adding in its place "225.1101(9)".

252.225–7035 [Amended]

16. Section 252.225–7035 is amended in the introductory text and in Alternate I by removing "225.1101(12)" and adding in its place "225.1101(10)".

252.225–7036 [Amended]

17. Section 252.225–7036 is amended in the introductory text and in Alternate I introductory text by removing "225.1101(13)" and adding in its place "225.1101(11)".

252.225–7037 [Amended]

18. Section 252.225–7037 is amended in the introductory text by removing "225.1101(14)" and adding in its place "225.1101(12)".

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BILLING CODE 5001–08–P

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 16

RIN 1018–AG70

Injurious Wildlife Species; Black Carp (*Mylopharyngodon piceus*)

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The U.S. Fish and Wildlife Service proposes to amend its regulations to add black carp (*Mylopharyngodon piceus*) to the list of injurious fish, mollusks, and crustaceans. This listing would have the effect of prohibiting the importation of any live animal or viable egg of the black carp into the United States. The best available information indicates that this action is necessary to protect the interests of human beings, and wildlife and wildlife resources from the purposeful or accidental introduction and subsequent establishment of black carp populations into ecosystems of the United States. As proposed, live black carp or viable eggs could be imported only by permit for scientific, medical, educational, or zoological purposes, or without a permit by Federal agencies solely for their own use; permits would also be required for the interstate transportation of live black carp or viable eggs currently held in the United States for scientific, medical, educational, or zoological purposes. The proposal would prohibit interstate transportation of live black carp or viable eggs, currently held in the United States, for any other purpose.

DATES: Comments must be submitted on or before September 30, 2002.

ADDRESSES: Comments may be mailed or sent by fax to the Chief, Division of Environmental Quality, U.S. Fish and Wildlife Service, 4401 North Fairfax Drive, Suite 322, Arlington, VA 22203,

FAX (703) 358–1800. You may send comments by electronic mail (email) to: *BlackCarp@fws.gov.* See the Public Comments Solicited section below for file format and other information about electronic filing.

FOR FURTHER INFORMATION CONTACT: Kari Duncan, Division of Environmental Quality, Branch of Invasive Species at (703) 358–2464 or *kari_duncan@fws.gov.*

SUPPLEMENTARY INFORMATION:

Background

The purpose of this proposal is to prevent the accidental or intentional introduction of black carp and the possible subsequent establishment of populations of these fish in the wild.

In February 2000 the Fish and Wildlife Service received a petition from the Mississippi Interstate Cooperative Resources Association (MICRA) to list the black carp (*Mylopharyngodon piceus*) under the Injurious Wildlife Provision of the Lacey Act. The petition was based upon State concerns about the potential impacts of black carp on native freshwater mussels and snails in the Mississippi River basin.

Description of the Proposed Rule

The regulations contained in 50 CFR part 16 implement the Lacey Act (18 U.S.C. 42) as amended. Under the terms of the law, the Secretary of the Interior is authorized to prescribe by regulation those wild mammals, wild birds, fish (including mollusks and crustaceans), amphibians, reptiles, and the offspring or eggs of any of the foregoing, which are injurious to human beings, to the interests of agriculture, horticulture, or forestry, or to the wildlife or wildlife resources of the United States. The lists of injurious wildlife species are at 50 CFR 16.11–16.15. If black carp are determined to be injurious, then as with all listed injurious animals, their importation into, or transportation between, States, the District of Columbia, the Commonwealth of Puerto Rico, or any territory or possession of the United States by any means whatsoever is prohibited, except by permit for zoological, educational, medical, or scientific purposes (in accordance with permit regulations at 50 CFR 16.22), or by Federal agencies without a permit solely for their own use, upon filing a written declaration with the District Director of Customs and the U.S. Fish and Wildlife Service Inspector at the port of entry. In addition, no live black carp, progeny thereof, or viable eggs acquired under permit could be sold, donated, traded, loaned, or transferred to any other person or institution unless such person or institution has a permit issued by the Director of the U.S. Fish and Wildlife Service. The interstate transportation of any live black carp or viable eggs currently held in the United States for any purposes not permitted would be prohibited.

Biology

Black carp, also known as snail carp, Chinese black carp, black amur, Chinese roach, or black Chinese roach, is a freshwater fish that inhabits lakes and lower reaches of large, fast moving rivers. The species inhabits most major drainages of eastern Asia from about 22°N to about 51°N latitude. The natural range of black carp includes China, parts of far eastern Russia, and possibly northern Vietnam. Several published records of black carp from Taiwan and Japan likely represent introductions.

Black carp typically grow to more than 3 feet in length and weigh, on average, 33 pounds. They reportedly can reach 5 feet in length and weigh up to 150 pounds. Individuals of the species are known to live to at least 15 years of age.

Black carp reach maturity from 6 to 11 years of age. They reproduce annually. Spawning occurs in their natural range when water temperatures are at least 65.5°F, water levels are rising, and mollusks are available. They spawn upstream in rivers and their eggs drift downstream. The eggs are carried by currents into floodplain lakes, smaller streams, and channels with little to no current. Female black carp produce 129,000 to 1.18 million eggs each year, depending on body size.

Black carp feed on zooplankton and fingerlings when small. As adults, powerful crushing teeth permit the black carp to crush the thick shells of large mollusks. Reports indicate that the fish can usually handle any food item that it can get into its mouth. In some instances, the fish is able to crack the edge of a shell, extract soft parts, and then spit out shell fragments. A four year old black carp was shown to eat, on average, 3–4 pounds of mussels per day.

Young black carp are difficult to distinguish from young grass carp (*Ctenopharyngodon idella*). Adults may be distinguished externally by the color and the more cylindrical form of the body, and internally by the pharyngeal teeth.

Available information indicates that black carp are currently being maintained in research and fish production facilities in Arkansas, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, and Texas. This species originally entered the United States in the early 1970s as "contaminant" in imported grass carp stocks. The black carp were imported from Asia and were sent to a private fish farm in Arkansas. The second introduction of black carp into the United States occurred in the early 1980s for yellow grub control and as a food fish. The species was also imported by a Mississippi fish farmer during the early 1980s and by a fish farm operation in Missouri during the period 1986–1988.

Need for Proposed Rule—Environmental Consequences

Factors That Contribute to Injuriousness

The likelihood of release or escape of black carp is high. Currently, the predominant use of black carp in the United States is for biological control of snails that are an intermediate host in the life cycle of a trematode that affects catfish being farmed for human consumption. Ninety-five percent of the catfish farms in production are located in the Southeastern United States. Much of the Mississippi River delta region is at moderate to high risk of natural disaster including tornados, floods, and hurricanes. A natural disaster in the Southeast region is likely to result in the release of black carp from catfish farms. The first and only known introduction of black carp into a natural waterway occurred during a flood event. These fish were thought to be triploid (sterile through chromosome number manipulation) and the species has not been found in the wild. Additional risks of release associated with fish farming include movement of live carp from farm ponds to natural waterways via predatory birds and mammals, or escape from aquaculture facilities. Black carp are farm-raised in aquaculture facilities throughout Asia and Eastern Europe for human consumption. If black carp becomes popular for human consumption in the United States and farmed on a larger scale, the associated risks of release would be similar to that described above. However, the risks would be of greater magnitude, as the black carp would be stocked at the aquaculture facilities at a higher rate than they are currently stocked for biological control purposes.

If black carp escaped, or were released into the wild, they would likely survive and/or become established with or without reproduction. Moreover, released black carp would likely spread throughout the United States since no known limiting factors would preclude them from becoming established in U.S.

waters. The black carp, a native of most Pacific drainages in eastern Asia, inhabits large river and lake habitats at the same latitudes as the United States. This carp feeds on aquatic snails and mussels that are similar to those locally abundant in many of our rivers. The grass carp (*Ctenopharyngodon idella*), a close Asian relative with similar reproductive requirements, has expanded into all of the lower 48 States except Montana and Vermont since its introduction into Arkansas and Alabama in 1963.

At all life stages, black carp will compete for food with native species. As discussed above in the Biology section, the fish grow to lengths greater than 1 meter and can weigh up to 150 pounds. The literature indicates that 4-year-old black carp eat 3–4 pounds of mollusks per day. Within their native range, black carp feed on species that are similar to our native mollusk species. Black carp are also known to eat freshwater shrimp, crawfish, and insects. Based on their feeding habits, black carp, if introduced or established, are likely to have a considerable impact on native mussel and snail populations. Native fish (redear sunfish, pumpkinseed sunfish, freshwater drum, snail bullhead, copper redhorse, river redhorse, robust redhorse, and several catfish and sucker species); turtles (sawbacks and musk turtles); birds, including waterfowl (Everglades snail kite, scaup, and canvasback); and vertebrates, such as racoons, otters, and muskrats, are likely to be affected through competition for food.

Although their potential to cause habitat destruction, such as that associated with Cyprinid species, is low, black carp could impact stream communities where snails play an important role as grazers of attached algae. Algae mats could develop and upset the natural balance of wildlife habitats if snail populations become depressed.

Black carp host many parasites and flukes, as well as bacterial and viral diseases that are likely to infect sport, food, or threatened and endangered fish species. They may also be immune or serve as intermediate hosts to the many parasites that use mollusks as intermediate hosts (some of which are harmful to humans). Because black carp carry a diverse fauna of parasites, the potential for the transfer of pathogens is high.

The likelihood and magnitude of effect on threatened and endangered species is high. Black carp are molluscivores (mussel and snail feeders) and have the potential to negatively affect threatened and endangered mollusks, fish, turtles, and birds that rely on mollusks as a food source. The United States, particularly the Southeast, has one of the world's most diverse aquatic mollusk faunas. Currently, about 300 taxa of freshwater mussels are recognized nationwide and nearly 67 percent of this fauna (69 species are federally listed as threatened or endangered) are vulnerable to extinction or already extinct. Our Nation's freshwater snail diversity is about 600 species or about 15 percent of the world's diversity of this faunal group.

Based on the food habits and habitat preferences of the black carp, it is likely to invade the habitat, feed on, and further threaten most of the federally listed freshwater mussels and about one-third of the federally listed aquatic snails. Black carp are likely to also further threaten numerous other potential candidates for Federal protection. Since many freshwater mollusks require a fish as an intermediate host for reproduction, the mussels that require native fishes to reproduce are likely to rapidly decline if the fish are affected by black carp. The establishment of black carp populations in the Mississippi drainages has the potential to reduce mollusk populations to levels that would require listing of the mollusks and the other animals that depend on mollusks for food.

The introduction or establishment of black carp may have negative impacts on humans primarily from the loss of native aquatic mollusk biodiversity and bio-abundance. Freshwater mollusks play an important ecological role in maintaining the health of aquatic ecosystems. These losses would affect the aesthetic, recreational, and economic values currently provided by native mollusks and healthy ecosystems. Educational values would also be diminished through the loss of biodiversity and ecosystem health. Black carp also have the potential to negatively affect the cultured pearl industry through predation on commercial mussel species.

Factors That Reduce or Remove Injuriousness

The ability and effectiveness of measures to prevent escape or establishment are low. Most available protective measures available to prevent escape of black carp from aquaculture facilities are expected to be cost-prohibitive to initiate and maintain. Even with protective measures in place, it is unlikely they would eliminate risks of accidental escape from facilities. Those facilities that are located in floodplains and susceptible to natural storm events are particularly vulnerable. The ability to eradicate or control black carp populations depends on where they are found. If established in large lakes or river systems, eradication and/or control of black carp is expected to be nearly impossible and they would likely become permanent members of the fish community. Additionally, controlling the spread of pathogens once they have been introduced in the wild is practically impossible.

No good tools are currently available to manage established black carp populations. Chemicals are the best option, but their use on a large scale is prohibitively expensive, can cause mortality to non-target fish and aquatic species, are not accepted by the public, and must be repeatedly used. Chemicals rarely kill every fish, and not all life stages are equally susceptible to chemicals. Additionally, some areas cannot be effectively treated due the size of the area, the distribution of the target species, and the effects on the non-target species, for example.

Since effective measures to eradicate, manage, or control the spread of black carp once they are established are not currently available, the ability to rehabilitate or recover ecosystems disturbed by the species is low. Significant risks associated with black carp release relate to endangerment and extinction of native mussels and snails. Re-establishment of extirpated mussel and snail populations, if biologically possible, would be labor and cost intensive and would depend on eradication of black carp within the habitat of the mussels and snails.

While triploidy and sterility may impede breeding of black carp in the natural environment, non-breeding populations are likely to still have significant negative impacts on natural systems. While triploid black carp may not be able to reproduce, allowing black carp in commerce still presents problems. First and foremost, in order to have black carp for sale, someone must have reproducing pairs of the fish, which means that reproductively active fish could escape. Second, the current methods of producing triploidy fish do not ensure that all of the fish are triploid and testing each fish would be cost-prohibitive; therefore, reproductively active fish will be found in otherwise triploid lots of fish. Finally, black carp will feed on native mollusks regardless of their reproductive ability. As described above, black carp eat 3–4 pounds of mussels per day and can live in excess of 15 years. Therefore, non-breeding populations of black carp are likely to have significant negative

impacts on native snail and mussel populations.

Because black carp are likely to escape or be released into the wild; are likely to survive or become established if escaped or released; are likely to spread since there are no known limiting factors; are likely to compete with native species for food; may serve as intermediate hosts for and/or transmit parasites to native species; are likely to feed on native mollusks, which is likely to negatively affect native mollusks, as well as the native fish, turtles, and birds that rely on mollusks as a food source; and because it will be difficult to prevent, eradicate, manage, or control the spread of black carp; it will be difficult to rehabilitate or recover ecosystems disturbed by the species; and because non-breeding populations of black carp are likely to have significant negative impacts on native snail and mussel populations, the Service finds black carp to be injurious to the interests of human beings and the wildlife and wildlife resources of the United States.

Required Determinations

Currently we have approval from OMB to collect information under OMB control number 1018–0092. This approval expires July 31, 2004. We may not conduct or sponsor, and a person is not required to respond to, a collection of information unless we display a currently valid OMB control number.

In accordance with the criteria in Executive Order 12866, the Office of Management and Budget has determined that this rule is not a significant regulatory action.

(a) This rule will not have an annual economic effect of $100 million or adversely affect an economic sector, productivity, jobs, the environment, or other units of the government. A cost-benefit and economic analysis is not required. Catfish producers are the entities most likely to be affected by this rule. However, catfish producers have alternative means of control for snail infestation of catfish ponds. Chemical control with such items as hydrated lime, copper sulfate, and aquatic herbicides greatly reduces the snail population and, in conjunction with biological control, can eliminate snail infestation during the production of catfish. The elimination of the use of black carp as the biological control agent will allow an increase in the non-marketability of some of the catfish. The estimated maximum loss is expected to be less than $9 million per year for the affected catfish producers.

(b) This rule will not create inconsistencies with other agencies. This rule pertains only to regulations promulgated by the Fish and Wildlife Service under the Lacey Act. No other agencies are involved in these regulations.

(c) This rule will not materially affect entitlements, grants, user fees, loan programs, or the rights or obligations of their recipients. This rule does not affect entitlement programs. This rule is aimed at regulating the importation and movement of a non-indigenous species that has the potential to cause significant economic and other impacts on natural resources that are the trust responsibility of the Federal Government.

(d) This rule does not raise novel legal or policy issues. No previous listings of wildlife as injurious in the past have caused legal or policy problems.

This rule will not have a significant economic effect on a substantial number of small entities as defined under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). A Regulatory Flexibility Analysis is not required. Accordingly, a Small Entity Compliance Guide is not required. No individual small industry within the United States will be significantly affected if black carp importation and interstate transport is prohibited.

The rule is not a major rule under 5 U.S.C. 804(2), the Small Business Regulatory Enforcement Fairness Act. This rule will not have an annual effect on the economy of $100 million or more. The black carp is not commercially traded in the United States. No recreational fishery exists for this species. Two firms currently produce and sell black carp, and the Fish and Wildlife Service believes that black carp production is a small part of these businesses so they should not be significantly affected by this rule. As a result, the regulation of this species will only affect catfish farmers that are infected with the yellow grub. Since about 1.5 percent of catfish farmers have permits to use the black carp as a biological control measure for snails in farm ponds, we do not expect that this rule will have a substantial impact on U.S. catfish producers. Alternative control measures for snail infestation are available, and more are being researched and developed. This rulemaking will have the effect of protecting commercial shellfish fisheries as well as endangered and threatened mollusks in the Mississippi watershed from the introduction of black carp. The black carp would devastate many shellfish resources if it escaped from catfish ponds and entered a waterway. This rulemaking, by protecting the environment from the spread of a non-native species that would likely devastate local mollusk populations, will indirectly work to sustain the economic benefits enjoyed by numerous small establishments.

This rule will not cause a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions. Substitute control mechanisms for the control of yellow grubs are available, although they may not be as economical as the use of black carp. The six catfish farms using black carp for snail control account for approximately 1.5 percent of total U.S. catfish production. Under the worst case that all catfish produced at these farms was not marketable, the affected catfish would only amount to 1.5 percent of the annual U.S. production. This small impact would not appreciably affect costs or prices to consumers. Since alternative control methods are available, the economic effect is not expected to be significant. Six firms out of nearly 300 would have a slight increase in production cost.

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), the rule will not "significantly or uniquely" affect small governments. A Small Government Agency Plan is not required. The Service has determined and certifies pursuant to the Unfunded Mandates Reform Act that this rulemaking will not impose a cost of $100 million or more in any given year on local or State governments or private entities, and does not have significant adverse effects on competition, employment, investment productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises.

In accordance with Executive Order 12630, the rule does not have significant takings implications. A takings implication assessment is not required. This rule will not impose significant requirements or limitations on private property use.

In accordance with Executive Order 13132, the rule does not have significant Federalism effects. A Federalism assessment is not required. This rule will not have substantial direct effects on States, in the relationship between the Federal Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 13132, we determine that this rule does not have sufficient Federalism implications to warrant the preparation of a Federalism Assessment.

In accordance with Executive Order 12988, the Office of the Solicitor has

determined that the rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Executive Order. The proposed rule has been reviewed to eliminate drafting errors and ambiguity, was written to minimize litigation, provides a clear legal standard for affected conduct rather than a general standard, and promotes simplification and burden reduction.

We have reviewed this rule in accordance with the criteria of the National Environmental Policy Act and our Departmental Manual in 516 DM. This rule does not constitute a major Federal action significantly affecting the quality of the human environment. An environmental impact statement/assessment is not required. The action is categorically excluded under the Department's NEPA procedures (516 DM 2, Appendix 1.10), which apply to policies, directives, regulations, and guidelines of an administrative, legal, technical, or procedural nature; or the environmental effects of which are too broad, speculative, or conjectural to lend themselves to meaningful analysis and will be subject later to the NEPA process, either collectively or case-by-case.

In accordance with the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951), Executive Order 13175, and 512 DM 2, we have evaluated potential effects on Federally recognized Indian tribes and have determined that there are no potential effects.

On May 18, 2001, the President issued Executive Order 13211 on regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. Because this proposal is intended to prevent the accidental or intentional introduction of black carp and the possible subsequent establishment of populations of these fish in the wild, it is not a significant regulatory action under Executive Order 12866 and is not expected to significantly affect energy supplies, distribution, and use. Therefore, this action is a not a significant energy action and no Statement of Energy Effects is required.

This proposed rule solicits economic, biologic, or other information concerning black carp. The information will be used to determine if the species is a threat, or potential threat, to those interests of the United States delineated above, and thus warrants addition to the list of injurious fish in 50 CFR 16.13.

Public Comments Solicited

Please send comments to Chief, Division of Environmental Quality, U.S. Fish and Wildlife Service, 4401 North Fairfax Drive, Suite 322, Arlington, VA 22030. Comments may be hand delivered or faxed to (703) 358–1800. If you submit comments by e-mail, please submit comments as an ASCII file format and avoid the use of special characters and encryption. Please include "Attn: [RIN 1018–AG70]" and your name and return address in your e-mail message. Please note that this email address will be closed at the termination of this public comment period.

Our practice is to make comments, including names and home addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their home address from the rulemaking record, which we will honor to the extent allowable by law. In some circumstances, we would withhold from the rulemaking record a respondent's identity, as allowable by law. If you wish us for to withhold your name and/or address, you must state this prominently at the beginning of your comment. However, we will not consider anonymous comments. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.

List of Subjects in 50 CFR Part 16

Fish, Imports, Reporting and recordkeeping requirements, Transportation, Wildlife.

Accordingly, we propose to amend part 16, subchapter B, of Chapter I, Title 50 of the Code of Federal Regulations as set forth below.

PART 16—[AMENDED]

1. The authority citation for part 16 continues to read as follows:

Authority: 18 U.S.C. 42.

2. Amend § 16.13 by revising paragraph (a)(2) to read as follows:

§ 16.13 Importation of live or dead fish, mollusks, and crustaceans, or their eggs.

(a) * * *

(2) The importation, transportation, or acquisition of any live fish or viable eggs of the walking catfish, family Clariidae; live mitten crabs, genus *Eriochei,* or their viable eggs; live mollusks, veligers, or viable eggs of zebra mussels, genus *Dreissena;* and any live black carp (*Mylopharyngodon piceus*) or their viable eggs, is prohibited except as provided under the terms and conditions set forth in § 16.22.

* * * * *

Dated: July 18, 2002.

Craig Manson,

Assistant Secretary for Fish and Wildlife and Parks.

[FR Doc. 02–19158 Filed 7–29–02; 8:45 am]

BILLING CODE 4310–55–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 622

[I.D. 071802B]

Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; Sustainable Fisheries Act (SFA) Requirements for Species in the U.S. Caribbean; Comprehensive Amendment Addressing SFA Definitions in Fishery Management Plans of Puerto Rico and the U.S. Virgin Islands; Scoping Meetings

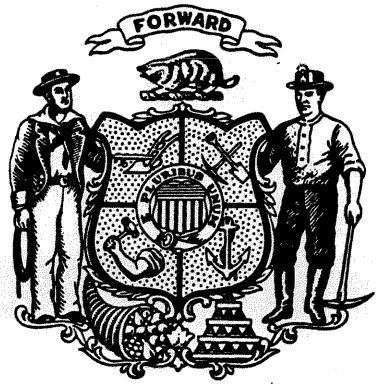
AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of scoping meetings; request for comments.

SUMMARY: The Council will convene scoping meetings to solicit additional public comments on the scope of issues to be addressed in a draft supplemental environmental impact statement (DSEIS) that will assess the impacts on the natural and human environment of the various managed fisheries related to the management measures proposed under the draft Comprehensive Amendment Addressing SFA Definitions and Other Required Provisions of the Magnuson-Stevens Fishery Conservation and Management Act in the Fishery Management Plans (FMPs) of Puerto Rico and the U.S. Virgin Islands (Comprehensive SFA Amendment). The purpose of this document is to solicit additional public comments on the scope of the issues to be addressed in the DSEIS, which will be submitted to NMFS for filing with the Environmental Protection Agency (EPA) for publication of a Notice of Availability for public comment.

DATES: The scoping meetings will be held on August 6 and 7, 2002. See **SUPPLEMENTARY INFORMATION** for specific dates and times for the scoping meetings.

END



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WISCONSIN
DEPT. OF NATURAL RESOURCES

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Scott McCallum, Governor
Darrell Bazzell, Secretary

101 S. Webster St.
Box 7921
Madison, Wisconsin 53707-7921
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January 24, 2002

Allen O'Leary
Northland Cranberries, Inc.
800 First Avenue South, PO Box 8020
Wisconsin Rapids, WI 54495-8020

Subject: Mitigation Banking MOU

Allen

Dear Mr. O'Leary:

This letter is in response to your letter to Franc Fennessy, dated January 14, 2002, regarding your company's mitigation bank and the requirements of soon-to-be-promulgated ch. NR 350, Wis. Adm. Code. I would like to clarify some points made in your letter and respond directly to your questions.

Your letter states that, "... Northland Cranberries has been directed to draft a Memorandum of Understanding...." This is not true. The proposed NR 350 allows for Northland to enter into a Memorandum of Understanding (MOU) with the Department, if your bank wishes to sell credits to parties located outside the effective service area defined by the code. You can operate as a bank in your service area without entering into the MOU. At the meeting on November 26, 2001, Department staff presented a proposal for an MOU, and my staff reported to me that you agreed to take the sample for review and would provide comments back to staff.

Your letter also addresses how the Department will consider compensatory mitigation for cranberry industry projects. Chapter NR 103, Wis. Adm. Code, is not being modified to address how the Department makes water quality certification decisions for cranberry industry activities. Our position is that the Department will not consider compensatory mitigation for cranberry industry project activities in our water quality certification decision process. Compensatory mitigation is a requirement of the federal agencies under the Section 404 program, and thus any questions you have regarding how your bank can serve cranberry projects statewide will need to be addressed directly by the US Army Corps of Engineers- St. Paul District. From the Department's perspective, your bank could be used for both cranberry and non-cranberry projects. The Department will assure that use of your bank is in compliance with NR 350, Wis. Adm. Code, but how the bank will serve cranberry projects is a determination for the Corps to make.

I hope this addresses the questions you have. I suggest you contact the Corps for an answer on your questions about service area for the cranberry industry. We look forward to the receipt of your comments on our proposed MOU language. We are committed to working with you on the MOU, if that is something that Northland chooses to pursue. Please call Dave Siebert at (608) 264-6048 if you have more questions.

Sincerely yours,

Darrell

Darrell Bazzell
Secretary

cc: Rep. Kedzie
Sen. Schultz
Sen. Baumgart
Steve Eggers- USCOE-St.Paul

NORTHLAND CRANBERRIES, INC.

January 14, 2001

Frank Fennessy
Deputy Secretary
Department of Natural Resources
101 South Webster Street
PO Box 7921
Madison, WI 53707

Dear Mr. Fennessy,

Northland Cranberries has been directed to draft a Memorandum of Understanding for operation of the Northland Cranberries Wetland Mitigation Bank under Administrative Rule NR350. The issue of compensatory wetland mitigation for permitted activities within the cranberry industry needs clarification prior to agreement on the MOU.

It is our understanding that NR103 has been modified so that compensatory mitigation for the cranberry industry will not be considered in the NR103 decision process and that the US Army Corps of Engineers will administer any mitigation requirements for cranberry industry projects. The Wisconsin Department of Resources' involvement will be limited to water quality certification under NR103 as it was prior to NR350. I am requesting written confirmation that the above statement is correct. I am also requesting written confirmation that Northland can service both its own Section 404 permit mitigation requirements and those of other cranberry operations outside of the Geographic Management Unit in which our bank is located without the requirement to restore wetlands in the GMU where the project takes place as is required in NR350.04(4)(c).

I will be looking forward to hearing from you and that we can move forward with the drafting of a workable MOU.

Sincerely,

Allen O'Leary
Director of Environmental Resources

Cc Dave Siebert – DNR
Ken Iwinski - Northland

800 First Avenue South • P.O. Box 8020 • Wisconsin Rapids, WI 54495-8020 • 715-424-4444 • FAX 715-422-6800

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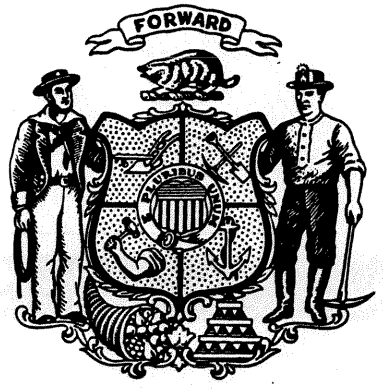

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CLEAN WATER COALITION

NEWS RELEASE

Contacts:

Todd Ambs, River Alliance of Wisconsin, 608-257-2424
Caryl Terrell, Sierra Club, 608-256-0565
Kerry Schumann, WISPIRG, 608-251-1918
Lisa Conley, Wisconsin Association of Lakes, 262-567-5947

FOR IMMEDIATE RELEASE – August 6, 2002

CLEAN WATER COALITION RECOGNIZES KEY PLAYERS IN POLLUTED RUNOFF RULEMAKING PROCESS

MADISON – The Clean Water Coalition (CWC) today presented awards to key individuals who made Wisconsin's new polluted runoff management rules a reality. The awards are a gesture of thanks from the Coalition for the collective hard work, persistence, and dedication to protecting Wisconsin's water quality. Individuals recognized with a *Clean Water Amber* award include:

Senator Brian Burke and Representative DuWayne Johnsrud
– Got the Ball Rolling Award –

During the Budget deliberations of 1999-2001, two legislators pulled in a small group of farmer and agribusiness interest groups to discuss the impasse on non-point water pollution. In the room with Burke and Johnsrud were the Farm Bureau, the Municipal Environmental Group and Wisconsin Rural Development Center. Many observers were surprised to see a budget amendment emerge that directed the DNR and the Department of Trade, Agriculture and Consumer Protection (DATCP) to overhaul and redesign the Nonpoint Regulatory Program. Also, the Farm Bureau stayed at the table throughout the process as result of their involvement in the 1999 budget amendment. For Getting the Ball Rolling, the Clean Water Coalition recognizes Senator Brian Burke and Representative DuWayne Johnsrud.

Senator Jim Baumgart – Feet To The Fire Award –

As Chair of the Senate Agriculture and Natural Resources Committee, Senator Baumgart worked tirelessly to ensure that these new rules were as strong and effective as possible. Thanks to his leadership several key provisions were either added or changed in the rules. He led the effort to send the rules back to the DNR for more modifications which ultimately led to the buffer resolution which will produce a statewide vegetative buffer standard for agricultural lands by 2008. The Senator also secured several improvements in the rules implementation package developed by DATCP. Finally, we want to acknowledge the hard work of Senator Baumgart's key staff person on the rules, Pat Henderson.

Dennis Frame – Truth or Consequences Award –

Very early in the process of developing these rules, then Trempealeau County extension agent Dennis Frame began to ask the question, "How will we know if the best management practices employed through these rules are working?" That initial question ultimately led to the creation of the Discovery Farm project, a part of the Wisconsin Agricultural Stewardship Initiative. Today, on the ground research projects are underway at a number of farms across Wisconsin and many more are planned. The CWC looks forward to working with Dennis in the coming months to learn what management practices are best able to control polluted runoff.

Ron Seely – Media Coverage Award –

The coalition recognized Wisconsin State Journal Reporter Ron Seely for writing about the rules as they wound their way through many versions and technical debates. Although the debates over vegetative buffers, funding for farmers and phosphorus standards may not have had the kind of appeal that makes a good 30-second sound bite, Ron was able to write about the issue in a manner that gave newspaper readers an understanding of its relevance to their lives.

Darrell Bazzell on behalf of DNR staff – Work Horse Award –

The coalition presents DNR Secretary Darrell Bazzell with the "Work Horse" award to accept on behalf of the many people within the DNR who put countless hours into the nonpoint pollution rules. People like Russ Rassmussen, Al Shea, Carol Holden and many others spent years drafting and redrafting the rules. They listened to and summarized public comments and redrafted the rules based on those comments, met with DATCP and outside groups and redrafted the rules based on their input, and listened to the Natural Resources Board and redrafted yet again. The result of their hard work is something to be proud of - the strongest water quality law in the country.

Secretary Harsdorf on behalf of DATCP staff – To the Challenges of New Partnerships

To James Harsdorf, Secretary of Agriculture, on behalf of DATCP staff, we present an award for taking on the challenges of pursuing a new working relationship with the Wisconsin Department of Natural Resources and with Wisconsin's counties in order to design and implement the runoff rules. Special recognition is also extended to Mike Dummer, chairman of the Agriculture, Trade and Consumer Protection Board.

Pat Leavenworth – Special Appreciation Award –

The coalition would like to present a "Special Appreciation" award to Pat Leavenworth, State Conservationist with the USDA Natural Resource Conservation Service, for providing critical assistance with the technical standards that form the basis for these rules.

Rebecca Baumann on behalf of the county conservationists – Reality Check Award –

We would like to present the "Reality Check Award" to Rebecca Bauman (executive director of the Wisconsin Land and Water Conservation Association) for drawing attention to where the rubber meets the road for the new nonpoint rules. We ask her to accept this award on behalf of all the county conservationists that helped us understand the impact and implementation needs of the rules. We'd like to specially recognize: Bill Hafs, Brown County; Pete Van Airsdale, Winnebago County; Troy Krupahl, Washington County; Bill Schuster, Door County; Dan Masterpole, Chippewa County; and Perry Lindquist, Waukesha County; for their special efforts during this long process. We intend to continue to work closely with them on securing adequate funding at the county level for the critical issues of implementation, monitoring and enforcement.

Also being recognized this evening are some of the key organizations that are part of the Clean Water Coalition. Thanks are extended to the Wisconsin Association of Lakes, Wisconsin Public Interest Research Group, the John Muir Chapter of the Sierra Club, the River Alliance of Wisconsin and Trout Unlimited, for their continued efforts in protecting our waters from polluted runoff. Please join us in recognizing these individuals and organizations for their hard work and dedication to clean water.

The CWC, in particular the River Alliance of Wisconsin and Wisconsin Public Information Research Group (WISPIRG), would like to thank the Beldon Fund for the generous support they provided for the work of WISPIRG and the CWC.

Finally, the CWC wishes to thank Todd Hanson, state coordinator of the Wisconsin Stewardship Network, for his generous donation of the awards. A master home brewer, Todd created the "Clean Water Amber" beer for the event. Each award winner receives a bottle of beer with the Clean Water Amber label. The label on the bottle includes a goal that our waters should be "fishable, swimmable and brewable." The bottle also features a warning that reads, "Government Warning: If drinking this beer leads to an upset stomach, please seek and implement a strong buffer!"

The Clean Water Coalition, an alliance of almost 40 conservation organizations representing more than 160,000 citizens, will be working to ensure the effective implementation and enforcement of these new nonpoint pollution rules.