

DEC 27 1995



Minnesota Department of Natural Resources

500 Lafayette Road
St. Paul, Minnesota 55155-40_45

December 22, 1995

Ms. Maryanne V. Hruby,
Executive Director
Legislative Commission to
Review Administrative Rules
55 State Office Building
St. Paul, MN 55155

RE: Proposed Permanent Rules Relating to Floodplain Management

Dear Ms. Hruby:

The Minnesota Department of Natural Resources intends to adopt permanent rules relating to floodplain management. We plan to publish a Notice of Intent to Adopt Rules Without a Public Hearing in the December 26, 1995 issue of the State Register.

As required by Minnesota Statutes, sections 14.131 and 14.23, the Department has prepared a Statement of Need and Reasonableness, which is now available to the public. Also as required, a copy of this Statement is enclosed.

For your information, we are also enclosing a copy of the Notice of Intent to Adopt Rules and a copy of the proposed rules.

If you have any questions on these rules, please contact Bret Anderson (297-4602) or me (296-9564).

Sincerely,

A handwritten signature in cursive script that reads "Kathy A. Lewis".

Kathy A. Lewis, Attorney
Mineral Leasing Manager

cc: B. Anderson



State of Minnesota
Department of Natural Resources
Division of Waters

In the matter of the
Proposed Rules of the
Department of Natural Resources
Relating to Floodplain Management

Statement of Need
and
Reasonableness

Introduction

Minnesota Rules Part 6120.5900, Subp. 6. B. (1) requires that "for urban areas the minimum authorized height and design of proposed structural works shall be at least three feet above the elevation of the regional flood, as confined by the structures, or shall be at the elevation of the standard project flood, whichever provides the greater protection from flooding". The standard project flood is unique to each stream and may vary from a 200-year to a 700-year flood event depending on the stream.

This requirement has caused problems in attempts to provide flood protection to a number of communities around the state and also puts the Department of Natural Resources in direct conflict with the United States Corps of Engineers and the Federal Emergency Management Agency (FEMA) which are currently using a lesser standard for flood protection.

The current federal standard for both the Corps of Engineers and the Federal Emergency Management Agency is three feet above the 100-year flood. This is the minimum and also usually the maximum level that the Corps uses to design urban levees for flood protection. This same standard is also used by FEMA to remove areas protected by levees from the regulatory floodplain.

The federal rule is stated in 44 CFR 65.10 subp. (b) which follows. (Please note: (1) those situations in 44 CFR, Sec. 65.10, subp. (b) (1) Freeboard (i) where in excess of three feet of freeboard is required; and (2) the exception criteria in subp. (b) (1) (ii) where less than three feet of freeboard is acceptable).

44 CFR 65.10

(b) Design Criteria

(1) Freeboard

(i) Riverine levees must provide a minimum freeboard of three feet above the water surface level of the base flood. An additional one foot above the minimum is required within 100 feet in either side of structures (such as bridges) riverward of the levee or wherever the flow is restricted. An additional one-half foot above the minimum at the upstream end of the levee, tapering to not less than the minimum at the downstream end of the levee, is also required.

(ii) Occasionally, exceptions to the minimum riverine freeboard requirement described in paragraph (b) (1) (i) of this section, may be approved. Appropriate engineering analysis demonstrating adequate protection with a lesser freeboard must be submitted to support a request for such an exception. The material presented must evaluate the uncertainty in the estimated base flood elevation profile and include, but not necessarily be limited to an assessment of statistical confidence limits of the 100-year discharge; changes in stage-discharge relationships; and the sources, potential, and magnitude of debris, sediment, and ice accumulation. It must be also shown that the levee will remain structurally stable during the base flood when such additional loading considerations are imposed. Under no circumstances will freeboard of less than two feet be accepted.

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Higher levels of protection can be provided if they are needed and can be economically justified. Flood warning systems and emergency operation plans would be required for all urban protective works.

It is proposed that the minimum state standard be changed to generally three feet above the 100-year elevation. The current rule has caused problems in providing urban flood protection since the greater degree of protection required by the current state rule causes projects to be rejected either because of economic considerations or because they exceed the U.S. Army Corps of Engineers maximum.

The proposed rule revision will eliminate the conflict with the current federal standard and reduce problems in providing flood protection to communities. It also expands the option to remove areas from the regulatory floodplain for both urban and non-urban areas and areas protected by both large and small levees. However, under current FEMA rules, operation of any levee can be required to fall under the jurisdiction of a local governmental unit before an area can be removed from the regulatory floodplain.

Notice of Intent to Solicit Outside Opinion

The first "notice of intent to solicit outside opinion" was published August 23, 1993. The notice was mailed to all persons registered with the agency to receive notice of rulemaking proceedings. On September 11, 1995, another "notice of intent to solicit outside opinion" was published in the State Register. In addition to the mailing to parties registered with the department, an additional mailing was made to parties the Division of Waters has regular contact with in the course of carrying out its responsibilities or parties with a personal interest in water related matters. As of this date a total of twenty-six requests for a copy of the proposed rule and clarification of the proposed rule have been received. Over half of these requests came from various federal, state and local governmental agencies. The rest were from a variety of private individuals, consulting and engineering firms, and mortgage and insurance companies. There have been no comments received, either positive or negative, from any individual, firm or governmental agency.

Freeboard

The current rule has caused problems in providing urban flood protection at several communities including East Grand Forks, Chaska, Houston, Fridley, and Argyle. In some cases the projects were discontinued because it was not economically feasible to provide standard project flood protection. This was the case at East Grand Forks and Fridley. At Argyle and Chaska the hydraulic modeling was redone with some modifications to allow the projects to proceed. For the proposed project at Houston to proceed it will be necessary to sign a cooperative agreement with the Minnesota Department of Transportation to breach a bridge ramp in case of a severe flood. In all of these cases the current rule requiring standard project flood protection, when this level exceeds three feet over the 100-year level of flood protection, has approached or exceeded Corps of Engineers maximums in benefit/cost ratios.

Additional FEMA requirements

Other changes to the rule formally recognize the need to comply with additional regulations in 44 CFR 65.10. These regulations describe the types of analysis and construction requirements that must be used in order to remove an area protected by a levee from the 100-year floodplain. They include discussion of freeboard, closures, embankment protection, embankment and foundation stability, settlement, interior drainage, operations plans, and maintenance plans. The need for this change is that there is currently increased interest in upgrading emergency or non-engineered levees in order to remove communities or parts of communities from the regulatory floodplain. These projects may or may not be designed and constructed by federal agencies and the new standards will help to insure that levees comply with the minimum standards for levee protection.

Emergency operations plan

The Corps of Engineers currently establishes a flood warning system and an emergency operations plan as a part of the process of implementing urban protective works. FEMA currently requires an emergency operations plan for all urban areas protected by levees in

order to remove them from the 100-year floodplain. Amendment of this rule will not impose any additional state requirements.

Subp. 7. Criteria for Commissioner's Determination

While the lower standard for the height of flood control structures will provide a sufficient level of protection in the majority of cases, prudence dictates that in certain circumstances greater levels of protection will be necessary. The unique physical characteristics of stream channels or the likelihood of certain types of rainfall and runoff events may dictate that a higher standard of structural protection be required.

Expenditure of Public Money by Local Public Bodies

Minnesota Statute, Section 14.11, Subd. 1, requires agencies to include a statement of the estimated financial impact of the rule to local public bodies if the rule would have a total cost of over \$100,000 to all public bodies in the state in either of the two years following adoption of the rule. These rules will not result in additional spending by local public bodies in excess of \$100,000 per year for the first two years following adoption of the rule. This change will not increase costs at the state or local level for communities that do not implement new urban protective works. For communities that do construct levees, diversions or dams, the less restrictive height requirement will lower the cost of construction.

Small Business Considerations

Minnesota Statute Section 14.115, Subd. 4, requires that the notice of rulemaking include a statement of the impact of the proposed rule on small business. Five methods are prescribed for reducing the impact: 1) less stringent requirements, 2) less stringent schedules, 3) consolidation or simplification of requirements, 4) performance standards, and 5) exemption. The proposed rule revision should have little direct adverse impacts on small business. Height requirements for flood control structures will be less stringent and the process for certification of flood control structures will be simplified since the state rule (with some possible exceptions: see Commissioner's Determination) will be brought into conformity with the federal rule. The new rule will actually benefit small business by making it

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easier for flood control works to be constructed for protection of businesses behind levees, thereby reducing site development and insurance costs.

Impact on Agricultural Lands

Minnesota Statute Section 14.11, Subd. 2, and 14.111 do not apply because adoption of these rules would not have a direct and substantial impact on agricultural land in the state or for farming operations.

Department Charges Imposed by the Rules

Minnesota Statute Section 16A.1285, does not apply because the rules do not establish or adjust charges for goods or services.

Witnesses

If these rules go to public hearing, the witnesses listed below may testify on behalf of the Department, as necessary, in support of the need and reasonableness of the rules. If these witnesses are needed to testify, they will be available to answer questions about the development and content of the rules.

Bret Anderson
Planner, Floodplain Management Program
Tom Lutgen
Supervisor, Floodplain Management Program
Ogbazghi Sium
Supervisor, Land Use Management Program
Department of Natural Resources, Division of Waters
500 Lafayette Road, St. Paul, MN 55155-4032

Any other employee of the Minnesota Department of Natural Resources.

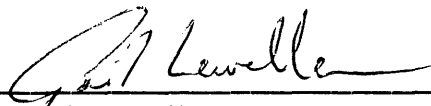
Conclusion

Based on the foregoing, the Department of Natural Resources' proposed rules governing floodplain management are both necessary and reasonable.

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DEPARTMENT OF NATURAL RESOURCES

Rodney W. Sando, Commissioner

By  _____
Gail Lewellan, Assistant Commissioner
for Human Resources and Legal Affairs

DATE