

Floodplain and Shoreland Management

Notes

Change in DNR Engineering Review of Floodplain Projects

As a result of Act 118, changes have been proposed to Chapter NR 320, Bridges and Culverts, and other Chapter 30 permits and procedures. The proposed changes impact DNR review procedures for hydrologic and hydraulic analyses completed for Chapter 30 Permits.

As has always been the case, if an area is mapped as floodplain on a community's adopted maps, the community is responsible for ensuring that the standards of their local ordinance are being met.

Local zoning staff will need to ensure that all applications for floodplain projects, which could affect flood elevations, include the necessary engineering analysis prior to issuance of a local permit.

In the past, if the DNR issued a Chapter 30 Permit, local zoning staff could take that as assurance that standards of NR 116 and the local

floodplain ordinance had been met.

Often, these permits were issued for navigable streams that were not mapped as floodplain and did not automatically fall under the floodplain provisions of either NR 116 or the local floodplain ordinance, but were utilized as "best available information" in establishing development plans. This

review will no longer be completed under the Chapter 30 Permit process.

DNR staff may still provide community assistance in reviewing the engineering information in floodplains, when requested, depending on staff availability.

DNR staff will not be able to withhold a Chapter 30 Permit on the basis of floodplain concerns. Communities should check that projects, even if granted Chapter 30 Permits, meet the requirements of their ordinance. If floodplain maps and/or base flood elevations (BFE's) are being revised as



- Culverts, if not properly designed, can easily impact upstream flood elevations.



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part of the project, FEMA concurrence is also required for the project.

If an area is unmapped, but a

community wishes to use "best available" floodplain information in permitting a development plan, official review and approval by the DNR under NR 116 is not required. FEMA concurrence is also not required. At any point, should this information be proposed for inclusion into an adopted floodplain map, review and approval by the DNR and FEMA would be required prior to adoption.

Please contact your local DNR Water Management Engineer if you have questions about changes to DNR engineering review.

Additional information on Chapter NR 320 and other administrative rules can be found at:

<http://adminrules.wisconsin.gov>



- Proposed changes to Chapter NR 320 would establish a general permit for clearspan bridges.

Floodplain and Shoreland Management Notes

"Floodplain and Shoreland Management Notes" is published by the WDNR, Bureau of Watershed Management. Its purpose is to inform local zoning officials and others concerned about state and federal floodplain management, flood insurance, shoreland and wetland management, and dam safety issues. Comments or contributions are welcome.

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Practice Better Staff Reports:

Writing staff reports on proposed development and permit applications is a core skill.

A good report concisely communicates vital information on development proposals to members of the planning commission, the local legislative body, the board of zoning appeals, the public, and the persons applying for any type of development permission.

The ideal report provides an adequate amount of information for the board, commission or other body to make a decision, for the public to be considered adequately informed, and for the applicant to determine what additional information it needs to submit or what changes to make to the proposal in order to win approval.

A local planning department's standard practice for preparing reports is developed over time by those who prepare reports and those who use them. Legal requirements, personal preferences, institutional memory and changing technologies all play a role.

Several problems common to staff reports include:

- poor organization and format
- mixing facts with subjective information
- excessive detail or inadequate detail
- unclear language.

Poor Organization

Staff reports from all types and sizes of planning agencies tend to contain the same elements (see inset). A chief difference between a good report and a bad report lies in how that

information is organized and presented. Poorly organized reports include bits of information scattered throughout, which skips between facts, analysis, suggestions, commentary, and recommendations.

A well-written and formatted staff report allows the reader to glean quickly the most important issues under consideration. It usually includes a cover sheet with pertinent information, sometimes presented in a form, or under

clear, bold subheadings.

Staff reports should be consistent in format, no matter which staff planner prepares them. The reader should expect to find the same elements in the same order in each type of report.

Mixing Facts with Subjective Information

Many staff reports share the common problem of mixing factual information with subjective information. For

Common Elements on Staff Report Cover Sheets
Project name
Case number
Report preparer's name
Action requested
Applicant name
Property owner
Date of hearing
General location of subject property
Existing zoning
Surrounding zoning
Existing land use
Surrounding land use
Parcel size
Comprehensive plan map designation, plus relevant policies

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instance, a drafter may intermingle statements of fact with subjective assessments, analysis, and commentary that seems to contain recommended conditions for approval. Taken on its face, such language would make it difficult for both the applicant and the commissioner to know what action he or she could or should take.

Findings of fact, staff analysis, and recommendations should each be presented in separate sections of the report, with each highlighted by a heading.

In contrast, some reports often leave out vital information that could have a bearing on a planning commissioner's decision to approve, deny or conditionally approve a development project. This can be the case where a particular reviewing agency, such as the engineering department, has not provided comments, or a particular requirement of the application has yet to be completed. With the former, such omissions make it difficult for the reader to discern if a reviewing agency had indeed reviewed the proposal and determined it to have no effect on its interests, or if they had reviewed it, but had yet to provide comments for inclusion in the staff report. Thus, inadequate detail leaves questions hanging that may delay the resolution of the approval or suggest that local government agencies are failing to complete timely and thorough reviews.

Unclear Language

Staff reports sometimes contain unclear language that makes it difficult for the applicant or reviewing body to decipher exactly what standard is being applied or what action will be necessary to address the concerns raised in the report. Recommendations must provide clear guidance on what aspects of the proposal need to be revised, and by what date, for the proposal to be considered for approval.

For instance, if one of the conditions of approval in the staff report is the submission of a specific plan, document, or other needed drawing or data that technically should have been included as part of the initial application but was not, then the application is in effect incomplete and is not ready for review.



- Staff reports on variances to build at reduced setbacks will sometimes lack sufficient information on alternative building locations on a parcel.

Excessive Detail or Inadequate Detail

Planners who prepare staff reports often unwittingly provide excessive information in an attempt to gear the report to all audiences and to cover all bases of potential inquiries from commissioners, applicants and other users. Too much detail makes the report, which the members of the decision-making body often read shortly before the public meeting, hard to fathom.

Staff Recommendations

The staff report should analyze all of the information contained in it and make a recommendation to the appropriate public body against the backdrop of policies in the comprehensive plan and the decision-making criteria or standards in the development code. The recommendation is a concise statement of whether or not the decision-making body should approve, or recommend approval of, the application.

Sometimes the recommendation will include conditions, where the zoning ordinance or subdivision regulations permit this. At other times, the recommendation may state one or several other alternatives. For example, in a rezoning, the requested use district or configuration of district boundaries may be inappropriate for the area or may conflict with the comprehensive plan. In such a case, an alternative that would be appropriate or not in conflict should be recommended.

Conclusion

Staff resources in planning departments are often stretched thin, and staff reports are often sent at the last possible minute prior to the deadline for a hearing. This leaves commissioners, applicants, and the public with a very narrow window of time to thoroughly review the report, absorb its contents, and consider appropriate action before the formal hearing. The well-researched, well-organized staff report will therefore be a key determinant of the efficiency of the development review process and will ensure that relevant planning policies, development standards, and review criteria are identified in a systematic fashion and complied with.

This article is excerpted from "Practice Better Staff Reports", in the November 2004 Zoning Practice, from the American Planning Association. To read the full article or for more information on Zoning Practice, please go to www.planning.org/zoningpractice/index.htm

FEMA Assigns Staff to Madison

We are pleased to announce that FEMA Region V has assigned one of its disaster assistance employees, Mike Klitzke, to the Madison DNR office to assist in the model floodplain ordinance update effort.

Mike spent this past summer meeting with Wisconsin communities impacted by floods to discuss permitting and inspection requirements for properties with substantial damage issues.

Mike is a Wisconsin native, and now back in town after retiring from Wheeling, Illinois in 2001 as its

Community Development Director. Mike is a registered engineer (UW grad) to boot.

Currently, Mike is working with 35 Mississippi River communities that received a FEMA ordinance update letter in August 2004. He is also working on a second round of ordinance update letters that will be sent to all 36 counties which received a 2004 disaster declaration.

Feel free to contact Mike if you need assistance. His phone number is 608-266-9273 and his e-mail is michael.klitzke@dnr.wi.gov.

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How to Regulate Land-Based Houseboats



- Two "houseboats" found in western Wisconsin.

A call comes in to your office: "Someone is building a cabin on the river, but it is only 15 feet from the water - how can they do that?" The county investigates and finds out the property owner is building a "houseboat". Do floodplain and shoreland zoning regulations apply?

The answer is "Yes". A houseboat is a structure, even if licensed as a boat, and is subject to the requirements of county floodplain and shoreland zoning

ordinances. These structures must be set back 75 feet from the ordinary high-water mark when placed on land, unless stored inside a boathouse that

is exempt from shoreland zoning setback requirements. These "houseboats" must also comply with all applicable floodplain zoning standards.

In many instances the "houseboats" have pontoons or barrels attached to them, but the houseboat is unlikely to float. By terming the structure a "houseboat" and obtaining a boat registration, owners hope to get around zoning regulations, as well as avoid property taxes.

Counties may want to follow Marathon County's lead and prohibit the use of houseboats on land for human habitation.

If there is a legal nonconforming houseboat that is licensed as a boat



and it is floating below the ordinary high-water mark, it can only be maintained in compliance with the requirements of s. 30.121, Wis. Stats.

Understanding the Hazard Mitigation Planning Process

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Hazard mitigation planning is the process of determining how to reduce or eliminate the loss of life and property damage resulting from natural and human-caused hazards.

Mitigation, also known as prevention, encourages long-term reduction of hazard vulnerability. Mitigation should be both cost-effective and environmentally sound, reducing the costs of disasters to property owners and all levels of government. Mitigation can also protect critical community facilities, reduce exposure to liability, and minimize community disruption. Examples include land use planning, adoption of building codes, elevation of homes, and acquisition or relocation of homes away from floodplains.

It has been demonstrated time after time that hazard mitigation is most effective when based on an inclusive, comprehensive long-term plan that is developed before a disaster actually occurs.

However, in the past, many communities have undertaken mitigation actions with good intentions but with little advance planning. In some of these cases, decisions have been made "on the fly" in the wake of a disaster. In other cases, decisions may have been made in advance but without crucial consideration of all options, effects, and contributing factors. The results have been mixed at best, leading to less than optimal use of limited resources.

The primary purpose of hazard

mitigation planning is to identify community policies, actions, and tools for implementation over the long term that will result in a reduction in risk and potential for future losses community-wide.



- Highway 45 in Antigo, flooded March 2004.

Communities with up-to-date mitigation plans will be better able to identify and articulate their needs to government officials, giving them a competitive edge for grant funding. Planning also enables communities to better identify sources of technical and financial resources outside of traditional venues.

Information on hazard mitigation planning is available in FEMA's how-to guide "Getting Started: Building Support for Mitigation Planning". Copies are available by calling 1-800-480-2520 and requesting FEMA 386-1 (for hard copy), FEMA 386-1CD (CD-ROM), or at www.fema.gov/fima/planning_toc5.htm.

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Public Hearing Phase to Begin in NR 115 Rule Revision Effort

After working for three years and reviewing five drafts of proposed changes, the NR 115 Advisory Committee has turned over its final comments on proposed changes to Chapter NR 115. Department staff are now working to prepare all of the

accomplish, a summary of the proposed rule itself, and who will be impacted by the rule and how.

2. An environmental assessment (EA) describing the effect of the proposed rule on the environment.

3. An order providing the proposed rule language, the authority of the agency to promulgate the rule, related statutes or rules, a plain language analysis of the proposed rule, a comparison of the rule with other states' programs, and a summary of factual data and analytical methodologies used by the Department in support of the proposed rule revisions.



- Proposed changes to NR 115 are designed to decrease the need for variances, while giving more protection with mitigation.

documents needed to ask the Natural Resources Board for permission for public hearings on the proposed changes to Wisconsin's minimum shoreland zoning standards.

To receive authorization for public hearings for NR 115, DNR staff will submit a "green sheet package" to the Natural Resources Board.

Documentation in the green sheet package will include:

1. A background memo describing why the rule is being amended, a summary of the what the proposed rule is to

The Department plans to request permission for public hearings at the April Natural Resources Board meeting, and hopes to hold public hearings in May, June and July.

Tentative plans are for 8 to 10 public hearings around the state. For those unable to attend public hearings, written comments will be accepted or comments can also be submitted at the new State website:

<http://adminrules.wisconsin.gov>

For more information on changes to ch. NR 115, including the public hearing schedule, please refer to: www.dnr.wi.gov/org/water/wm/dsfm/shore/news.htm

Fighting Floods, Saving Property, Protecting Lives

During extensive heavy rains, Kenosha County emergency management personnel and law enforcement officers keep in steady contact with National Weather Service officials concerning rainfall predictions and monitored river levels.

When the waters of the Fox River rise to hazardous flood stage levels, the county executive will issue an emergency declaration (see inset), to set in motion safety procedures to protect citizens in the path of flood-waters.

In an emergency declaration, county law enforcement officers personally warn residents of the imminent danger of fast-moving flood waters and will provide help to evacuate them if the need arises. At times, officers patrol the flooding areas in four-wheel drive vehicles, carrying personal flotation devices, in case people need assistance.

In the span of ten years, five emergency declarations have been issued for the Fox River Floodplain in Kenosha County. But with the

emergency declaration issued in May, 2004, when the Fox River again overflowed its banks, many fewer homes and residents were at risk because, over those ten years, 56 property owners participated in the Fox River Flood Mitigation Program, administered by the Kenosha County Housing Authority, with staff support provided by the Southeastern Wisconsin Regional Planning Commission (SEWRPC).

Local Emergency Declaration for Fox River

Notice to all citizens in low-lying areas along the Fox River South of Hwy 50 and North of Hwy F:
". . . the Fox River will rapidly rise from its current flood stage level to 12.5 feet by Saturday morning and will maintain that level through Sunday. Rapid river rise will mean that dangerous river flowage may surround many low-lying homes overnight. Residents are strongly urged to evacuate until river levels subside on Monday or Tuesday. Rapidly-rising swift currents will provide an extreme danger to residents and responders."

- May 19, 2000

In 1994 Kenosha County officials initiated a plan to help people move out of the flood-prone area that was mapped as the 100-year floodplain of the Fox River.

In the intervening years, owners of 56 properties in the communities of Wheatland, Salem and Silver Lake have participated in the voluntary buyout program,

coordinated by Kenosha County.

Various sources have been tapped to fund the program including Community Development Block Grants - Emergency Assistance Program (CDBG-EAP) from the Wisconsin Department of Commerce, as well as

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grant money from the Hazard Mitigation Grant Program and Flood Mitigation Assistance program that is administered through Wisconsin Emergency Management (WEM).

During the emergency phase of the 2004 flooding, Kenosha County Emergency Management/Homeland Security Director Ben Schliesman said

Reductions in flood fighting and emergency response costs are only a small piece of the savings a buyout program such as this can accrue. Tina Chitwood, coordinator of the program and senior economic development planner for SEWRPC, said monetary damages from past floods that were reported by buyout participants included the cost of staying at hotels when they couldn't return to their flood-damaged home, lost wages from missed work, costs associated with cutting down trees and using power generators, repair of damaged foundations and siding, and mold and flood debris cleanup. Cost estimates recounted on participant surveys used by Chitwood in the buyout process ranged from \$2,000 to \$7,000 in damages incurred by households in the program area.

Under the disaster declaration of 2000, eligible flood victims in the Silver Lake and Salem communities received grants from FEMA that averaged \$2,800 for minimal repairs to make the home livable. If the homes had remained in the floodplain, with each successive flood event, like in 2004, an estimated \$156,800 in disaster recovery grants for these residents could be incurred, not to mention all the property replacement and cleanup costs that grants do not cover, and the emotional strain on losing property from flooding.

The relief of not worrying about flooding every spring is apparent in Megan Shuemate's comments about participating in the buyout program. Shuemate said every time the Fox River flooded, her family always had water on their property. "Our garage got flooded, water got up under the



- Floodwaters damaged this home five times in ten years and the owner took the opportunity to participate in the buyout program.

that because of the buyout program, emergency responders had far fewer doors to knock on as they went door-to-door to warn residents of the dangerous flooding situation. Schliesman reported that in addition to fewer enforcement personnel required, no rescue squads were dispatched to help people leave the flooded area.

Additionally, flood fighting and emergency response costs were below previous years of serious flooding, even though the May event was the second highest crest level of the Fox River, at almost four feet above flood stage. More importantly, lives of first responders and residents are not put at risk.

house" said Shuemate. "Although we didn't have a basement, the house was damp all the time and we had mold problems. If we would have still been there, this year's flood would have been worse than other years."

But the buyout program provided the Shuemates with an opportunity to move out of the unhealthy conditions of flood-prone properties. Especially useful to Wisconsin buyout participants are the aids that help in buying another home outside of the floodplain that include a purchase price based on pre-flood fair market value of the house, and relocation expenses up to \$25,000 for homeowners in additional funds to buy a comparable house to the one that is being vacated.

"The buyout program went smooth for us and helped us get into our next house," said Shuemate. The Shuemate family moved to nearby Burlington, and as Shuemate describes, found a house "at the highest point of the hill in our development."

Costs/Benefits of the Program

So far, the Fox River Flood Mitigation Program removed 56 structures from harm's way at a cost of \$5.5 million dollars, with FEMA contributing \$2.5 million in HMGP and FMA grants and CDBG providing approximately \$3 million in grants.

Using a formula based on past experiences with flood damages to homes and the effect on infrastructure, recovery officials estimate that the height of the water in

the flooding in May of 2004 would have caused projected damages to homes in the floodplain at an estimated 20% of the value of the home. The value of those houses that were removed from the site of the flooding averaged \$84,000 for the 56 properties. Using projected damage estimates, the flood of 2004 would have caused \$940,000 in damages to homes and the associated costs of recovery had the acquisition project not occurred.

For more information on mitigation in Wisconsin:

Please contact Roxanne Gray, State Hazard Mitigation Officer, by phone at 608-242-3211 or email at roxanne.gray@dma.state.wi.us.

For more information about the Wisconsin Division of Emergency Management, go to <http://emergencymanagement.wi.gov>

- Acquiring and demolishing 56 structures, including this one, and opening the Fox River floodplain to green space will save an estimated \$940,000 in flood damages and recovery costs for each flood event.



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