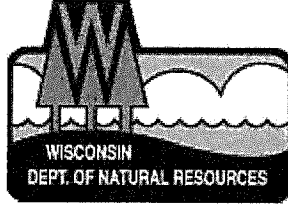


Checklist for Submitting a Floodplain Study

Wisconsin Department of Natural Resources



This outline for department review of floodplain studies may not contain all of the requirements of the administrative code. It is a general outline and detailed examination of the codes should be done to be assured that a submittal may meet department approval. Appropriate areas should be filled in by the engineer submitting the study for WDNR review.

Community/Zoning Authority: _____

Official Stream Name: _____

County: _____

Study Author: _____

Submission Date: _____

Submitted to: _____

Legal Description:

Upstream Limit ___ 1/4(QQ), ___ 1/4(Q), Section(s) _____, Township _____, Range _____

Downstream Limit ___ 1/4(QQ), ___ 1/4(Q), Section(s) _____, Township _____, Range _____

Study Type (circle): Bridge/Culvert Channel Realignment Enclosure Filling/Grading BFE determination

Other _____

Addendum B

I) General Documentation

- _____ Contact (Telephone Conservation) Reports
- _____ Meeting Minutes/Reports
- _____ General Correspondence
- _____ Submittal letter or e-mail from zoning authority requesting review

II) Narrative Report

- _____ Purpose of the study
- _____ Geographic location of the study
- _____ Detailed description of the methodology used for hydrology, hydraulics and any special applications used in the study
- _____ Description of the project location related to model river stations
- _____ Documentation of the changes made between each model run
- _____ Floodway Data Table
Note: Include at least one table with the following output variables:
'River Sta' 'Q Total' 'W.S. Elev' 'Top Wdth Act' 'Flow Area' 'Vel Total'
- _____ Previous studies on the same watercourse – date/author/source of study
- _____ Data collection methods
- _____ Past flooding
- _____ Benchmark identification and location
- _____ Coordination with other agencies
- _____ Other supporting documentation provided
(circle) Soils Maps Watershed Maps Photographs Stream Flow Records
Other: _____

III) Engineering Analyses

1) Hydrologic Analysis (electronic input/output files)

_____ Is there an existing model?

Existing model input file name: _____

The *two* techniques used to determine the regional flood flow discharges:

_____ Log-Pearson Type III, described in Technical Bulletin #17B

_____ Regional Regression Equations (i.e. Congers)

_____ Synthetic hydrographs (i.e. HEC-HMS)

_____ Was floodplain storage explicitly taken into account to attenuate flood peak flow?

_____ If yes, have flood storage district maps been created for the community to adopt?

_____ Which rainfall distribution was used?

_____ If a distribution other than NRCS's MSE3/MSE4 was used, what duration was the critical duration when the critical duration analysis was performed to identify the peak storm duration?

_____ Technical Release No. 55 (TR-55)

_____ Comparison of similar drainage basins at gaged sites

_____ Historic flood data

_____ Other methods with department approval (comment on what method)

Input file name: _____

_____ New peak flows tie in with upstream and downstream published flows

Addendum B

2) Hydraulic Analyses (electronic input/output files)

Note: The same model must be used for both existing and proposed conditions for relative consistency

_____ Is there an existing model?

Existing model input file name: _____

_____ Existing model was not truncated from its original study reach

New hydraulic model type (i.e. HEC-RAS) _____

New input file name (project model name that has one or multiple runs):

Model plan descriptions: _____

_____ (ex. p.01 = effective, p.02 = corrected effective, p.03 = pre-project, p.04 = post-project...)

What is the vertical datum of the survey/geometric data (NAVD88, NGVD29...) _____

_____ Is there a dam with operable gates in the study reach?

_____ If yes, does the modeled operation represent the DNR approved Inspection, Operations, and Maintenance Plan (IOM)? The dam operator then assumes liability that the gates will be operated as outlined in the IOM.

If not, explain _____

_____ Is there a detailed study upstream of the submitted reach? (Y/N)

_____ If yes, do the profiles match within 0.5' at the boundary? (Y/N)

_____ Is there a detailed study downstream of the submitted reach? (Y/N)

_____ If yes, do the profiles match exactly at the boundary? (Y/N)

_____ Model shows increases due to development (proper legal arrangements required)

Addendum B

3) Miscellaneous

_____ Supporting hand calculations, sketches and figures used in analyses

_____ Key to Cross-Section Labeling

_____ Key to Transect Labeling (coastal study only)

IV) Mapping information

_____ Workmaps including floodway, floodfringe, cross sections, and stream centerlines

_____ Floodway Data Table

Note: Include at least one table with the following output variables:

'River Sta' 'Q Total' 'W.S. Elev' 'Top Wdth Act' 'Flow Area' 'Vel Total'

Digital mapping data provided: _____
(Circle) ESRI shapefile(s)/database CAD data Other

Horizontal coordinate system used: _____

V) Certification

_____ Signed, stamped, and submitted by a Professional Engineer registered in Wisconsin

Name _____ Registration # _____