

THE CITY OF LA CROSSE

FLOODPLAIN TASKFORCE

**COMPREHENSIVE PLAN
FOR ADDRESSING FLOODPLAIN
RELATED ISSUES**



400 La Crosse Street
La Crosse, WI 54601

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FLOODPLAIN TASK FORCE COMPREHENSIVE PLAN FOR ADDRESSING FLOODPLAIN RELATED ISSUES

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Commonly used terms

BFE	Base Flood Elevation
CLOMR	Conditional Letter of Map Revision
CRS	Community Rating System
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
ISO	Insurance Services Office, Inc.
LOMR	Letter of Map Revision
NFIP	National Flood Insurance Program
SFHA	Special Flood Hazard Area
USACOE	United States Army Corps of Engineers
WDNR	Wisconsin Department of Natural Resources
FPE	Flood Protection Elevation

Executive Summary

The Floodplain Task Force, consisting of six Council Members and two citizens, was created by Council Resolution File #2005 -4-022. The stated purpose of the task force was to “review and make recommendations relative to the various floodplain concerns experienced by the property owners and citizens in the city.”

The Floodplain Task Force has been meeting since August 3, 2005. The Task Force divided their time equally between floodplain issues and flooding related to storm water issues since floodplain and localized storm water related flooding are interrelated. This plan, however, is focused on floodplain issues since the City is attempting to address storm water issues via its Phase II storm water quality requirements as well as the possible creation of a storm water utility. There are seven chapters related to floodplain issues with the seventh chapter devoted to recommendations. The first chapter provides an introduction to the various floodplains in the City along with a brief overview of the public education efforts over the years to inform residents about floodplain issues.

The second chapter provides a synopsis of the City’s long history of opposing floodplain regulation and the consequences of that permissive attitude toward regulation. The chapter also suggests that the city is now working diligently with FEMA and the WDNR to rectify long-standing issues in the City. The City must continue to be vigilant in oversight of floodplain regulation so as to continue to be eligible for reduced flood insurance rates for mortgage holders. Chapter three presents information on the City’s efforts to identify all structures in the floodplain as part of FEMA’s Map Modernization Program and the County-wide effort to prepare an All Hazards Mitigation Plan. Both efforts benefit property owners since the Map Modernization Program removed several hundred properties from the Special Flood Hazard Area (SFHA) and the All Hazards Mitigation Plan will serve to identify actions that will reduce the impacts of flooding.

Chapter 4 provides a brief overview of another long chapter in the City’s efforts to protect property by creating a flood levee system. While not exhaustive, the chapter illustrates the City’s repeated attempts to receive federal funding to upgrade the City’s levees on the north side. The City now continues efforts at improving the levee system but recognizes that federal funds will not likely be available to assist the City. Chapter 3 and Chapter 5 are interrelated. In Chapter 3, hazards (structure identification) are covered whereas in Chapter 5 possible mitigation projects are discussed. Through the All Hazards Mitigation Plan, the City will be able to enumerate mitigation projects with the hope that some federal funds may assist in paying for some of the projects. Much discussion took place amongst Task Force members as to possible incentives that property owners (especially homeowners) might receive from the City to encourage homeowners to invest in their homes. Possible City incentives are outlined in Chapter 6 as well as in the recommendations found in Chapter 7.

Floodplain Issues and Action Plan

Chapter 1 Floodplain Education Efforts

Regulated Floodplains in the City

It is hoped that this Floodplain Task Force Comprehensive Plan will be the first step in further educating the public on floodplain issues. This Floodplain Task Force Comprehensive Plan to the Common Council and to the citizens of La Crosse can serve to explain the City's floodplain issues and potential strategies to reduce damage and loss from flooding. The City of La Crosse has chronic flooding areas throughout the city many of which are not in designated floodway or floodplain areas. Flooding, floodplains and storm water management are interrelated; however, this report will concentrate exclusively on floodplain management issues.

The following is a list of Special Flood Hazard Areas (SFHA) in the city along with a short descriptor of issues associated with these floodplains. Some areas are newly mapped while others recently have been restudied and remapped. A recent mapping effort, which began in 2000 by the Federal Emergency Management Agency (FEMA), is known as the Map Modernization Project. The Wisconsin Department of Natural Resources (WDNR) took over as the contractor for this project in 2004 and the project was completed in 2007. The final maps and county-wide flood study were adopted in March of 2008 with an effective date of April 2, 2008.

Mormon Coulee Creek and Smith Valley Creek

These are newly mapped Special Flood Hazard Areas as a result of studies completed by La Crosse County. There are no structures in either the flood fringe or floodway. Some areas are being cultivated for agricultural uses, which is a permitted use. All new development will be restricted in these areas and this area has been included on the new FEMA/WDNR maps.

Pammel Creek

When the City and U.S. Army Corp of Engineers (USACOE) finished the concrete channel, which now conveys Pammel Creek from just east of Hagen Road to the Mississippi River, it removed all existing structures from the SFHA. The current SFHA is now located within the channel itself and some of the adjacent streets. During the construction of the channel, the City had an opportunity to make some improvements to the golf course area to remove it from the SFHA, but the property owner chose not to make the improvements because it was going to be considered a betterment and all related cost was going to be local share with no Federal or State cost sharing. The City, through a developer's agreement with Mr. Joe Hengel, agreed to pay up to \$100,000 to make the improvement, which removed a portion of the former golf course area from the SFHA and allow homes to be built in this area. The remapping of this area is now complete and the developer received a Letter of Map Revision (LOMR).

Ebner Coulee

In 2001, the City worked with Mead and Hunt Consulting Engineers to use a new computer model called the UNET program. This updated model more accurately represented the floodway and the floodplain conditions than previous models. In doing so, the City was able to remove 342 homes from the SFHA. That was the good news; the bad news was the model identified eight homes located within the floodway.

The City completed a small flood control project that removed seven homes from the SFHA south of State Road (East Fairchild). The design included collecting water and piping it to the 10 x 12 box pipe adjacent to the Burlington Northern railroad tracks. This project cost approximately \$75,000. Now that the LOMR has been issued by FEMA, the City will be able to sell a vacant lot it had purchased for storm water storage, since the new design did not need water storage. The City Engineering Department completed preliminary designs for a flood control project as a way to eliminate eight homes in the floodway and to reduce the SFHA north of Farnam Street. This project was considered by the Common Council in 2007 but was not approved because the project did not meet the requirements of the TIF. The City has since applied for several mitigation grants in an attempt to provide some relief to the “Floodway 8.”

South Seventh Street (Mississippi River on South Side of La Crosse)

The SFHA boundaries in this area were reviewed by FEMA and the WDNR as part of the Map Modernization Project. The maps were prepared using more accurate (two foot contours rather than four foot or ten foot contours) topographic information and the WDNR completed the remapping on behalf of FEMA. The new FIRM's should represent the filling that has taken place before the year 2000. In areas where fill has been placed on property after 2000, the property will have to be removed by a Letter of Map Revision (LOMR) submitted by the property owner. The USACOE completed a restudy of the Mississippi River (as part of the Map Modernization Project) and adjusted the Base Flood Elevations (BFE) for much of the north side, but there were no significant changes in the 7th Street area.

La Crosse River

Mead and Hunt consulting engineers remodeled this floodway/floodplain in 2005. The City adopted new flood maps which were approved by the Wisconsin DNR. The new flood boundaries were incorporated into the Map Modernization Project. The April 2, 2008 FIRM maps fully incorporate the 2005 study and flood boundaries.

Mississippi River

The floodplain boundaries were modeled in 2004 by the USACOE using more accurate topographic information. The Wisconsin Department of Natural Resources (WDNR) contracted with FEMA for the La Crosse County Map Modernization Project. The USACOE completed a restudy of the Mississippi River from Hastings, MN to Alton, IL and adjusted the BFEs. FEMA

accepted the USACOE's restudy so the WDNR used the new data when developing the new FIRM's.

Previous Efforts at Public Education

La Crosse has a long history of flooding. Flooding did not pose a problem before European settlement, but as the city expanded and property owners developed in the floodplain, property damage occurred. Floodplain mapping was non-existent in the City until 1974 and development occurred in areas that eventually became designated as floodplain and floodway by the Federal and State government. The previous Flood Insurance Study for the City of La Crosse was issued on November 15, 1984; however, the Flood Insurance Rate Maps and the Floodway Maps did not become effective until May 15, 1985. Floodplain regulations were adopted by the City on June 13, 1985. The City held public meetings as part of the adoption process for these studies, maps and regulations. As noted elsewhere in this report, the City of La Crosse did not adopt floodplain regulations, so the WDNR did on behalf of the City.

As various floodplain projects occurred in the city in an attempt to relieve flooding or to remove property from the regulated SFHA, the City held public informational meetings. While not summarized in detail, the overall outcomes of these efforts are summarized below.

Pammel Creek Floodplain Meetings

The City held a series of meetings prior to the construction of Pammel Creek. Following completion of the flood control project, the City hosted additional meetings as part of the request to re-map the area to remove property from the Pammel Creek floodplain as well as a portion of the Ebner Coulee floodplain.

Ebner Coulee Floodplain Meetings

The City held meetings for the construction of the 10 x 12 foot box-pipe south of Farnam Street and subsequently held meetings when consulting engineers Mead and Hunt were hired to analyze the effect of the 10 x 12 foot box pipe on the Ebner Coulee Floodplain. That study revealed that the box pipe did remove some homes from the Ebner Coulee floodplain, but it also revealed that a remapping of the area was needed to change the SFHA designation of some properties. Some properties were removed, others added, and eight homes were found to be in the floodway. Additionally, some areas were changed from flood fringe to regional flood storage (which requires compensating storage if filled).

La Crosse River Floodplain Remapping Effort

Most recently, the City hired Mead and Hunt consulting engineers to re-map the La Crosse River from its confluence with the Black and Mississippi Rivers to just east of State Highway 16. Many changes had occurred over the years that included wider bridge openings as roadways were constructed, some farm levee improvements, a law suit that established the floodplain line near Highway 16, the construction of River Valley Drive, changes in land use and most importantly better data and better computer modeling. The effort significantly reduced the

SFHA and enabled the construction/expansion of the Mathy Asphalt Plant off of Conoco Road. Several public hearings were required prior to adoption of the revised map and flood study.
North La Crosse Flood Issues Public Informational Meeting (February 23, 2004)

In early 2004, then-City Council Member Todd Olson, then-Council President Johnsrud, and then-Mayor Medinger requested a public meeting be held to address north side flood questions and issues. The questions and issues pertained to ongoing concerns with regulation, enforcement, insurance issues, and the FEMA Map Modernization Project, which apparently had stalled at that point. The City held a public informational meeting on February 23, 2004 in the Common Council chambers. That public meeting along with subsequent meetings led to the development of a floodplain informational document that the City, DNR and FEMA prepared. That document was made available to the general public in print form and via the City's website. That document addressed 58 questions raised by the public. This document still serves to answer basic but relevant questions from the public with regard to floodplain management.

Recent Public Education Efforts

The most recent public meetings relate to the now completed Map Modernization Project that was led by FEMA and the WDNR (see the section on the Map Modernization Project). A meeting was held at UW-La Crosse in the Cleary Alumni Center on November 21, 2006 where FEMA and the DNR unveiled the proposed maps. On its own, the City held a subsequent public informational meeting on February 12, 2007 at Roosevelt Elementary School. Additionally, at the request of the Lower North Side and Depot Neighbors, the City Planning and Engineering Departments held a meeting on February 26, 2007 to assist lower north side residents in determining how their property might be affected by the mapping project.

Community Rating System (CRS) – Benefits

The City has been involved in the Community Rating System (CRS) for more than 15 years. Because the City is a participating community and meets certain standards, residents of the City who pay flood insurance can receive a discount on their flood insurance. The rating system is on a 1-10 scale with one being the best and 10 being the worst. The City has been at an eight (8) for over 10 years. As a community improves their ability meet the CRS standards, the Insurance Services Office, Inc. (ISO) can improve the community's score (by giving them a lower numbered ranking).

As a participating community in the CRS program, the ISO encourages an annual public informational meeting hosted by the City to inform property owners, elected officials, and City staff on floodplain management issues. The purpose of such meetings is to explain the various Federal, State, and local requirements and to answer general questions. By having annual meetings, the City can earn points in the CRS program which further assists residents by keeping insurance premiums low.

Total Number of Houses/Properties Removed as a Result of Flood Control Projects, Flood Studies and Remapping Efforts

The City completed several projects to reduce the number of homes and properties in the floodplain. The most significant was the construction of the Pammel Creek flood channel. This project cost in excess of \$35 million dollars and removed homes from both the Pammel Creek and portions of the Ebner Coulee SFHA and allowed several properties to be developed such as Linden Park and the Pammel Creek Addition. The next significant event was the Ebner Coulee flood study completed by the United States Geological Survey (USGS) and then by Mead and Hunt consulting engineers. This study was initiated to remove additional homes in the remaining portions of the Ebner Coulee floodplain. While the USGS study was rejected by FEMA, the Mead and Hunt study resulted in the determination that the 10 X 12 box pipe did reduce flood elevations and a total of 345 homes were removed from the floodplain.

In 2005 and 2006 the City hired Mead and Hunt to complete a flood study and computer modeling effort of the La Crosse River. That study resulted in a better definition of the floodway boundary and enabled Mathy Construction to expand and construct their new asphalt plant on the existing site. The Map Modernization Project by FEMA (and WDNR) resulted in approximately 300 homes and business being removed from the floodplain. As noted in Section 3 below, the City is attempting to create a more detailed map of the north side (as was done in Ebner Coulee) which may further eliminate a number of homes from the floodplain. In order to remove additional homes a substantial expenditure of funds would be needed. For example, on the south side, it is estimated to cost \$8.2 million to remove 75 homes from the Ebner Coulee floodplain north of Farnam Street (\$109,000/home). This would leave 110 homes still in the floodplain with little chance of them ever being removed. On the north side there will remain approximately 400 homes in the floodplain after the Map Modernization Project and unless a USACOE certified levee system is installed, these homes could forever remain in the SFHA. It is estimated that a complete USACOE certified flood control levee system on the north side would cost more than \$25 million dollars (2008 dollars).

Floodplain Project/Study	# of homes before project	# of homes removed	# of homes remaining
Pammel Creek east bank and northwest bank/ portion of Ebner Coulee Southeast Bank	*500	*500	0
Ebner Coulee (Mead and Hunt Study)	530	345	185
Ebner Coulee (East Fairchild)	7	7	0
La Crosse River	0	0	0
Map Modernization Project	*700	*300	*400
TOTAL	*1737	*1152	*585

Chapter 2 FEMA/Building Permit Concerns

Floodplain Regulations Overview

There is a history of floods occurring throughout the City of La Crosse. Not only have floods occurred on the Mississippi and Black Rivers, but they have also occurred on the southeast side of the city in the Ebner Coulee Floodplain and the State Road Coulee (Pammel Creek) floodplain. Records have been kept on Mississippi River stages since 1873 and major floods (over 15 foot flood stage) occurred in 1880, 1951, 1953, 1965 (the flood of record), and 1969. More recently, flooding occurred in 1993, 1997, and 2001 on the Mississippi River. A Flood Insurance Study (FIS) was prepared by FEMA as part of the administration of the Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This Flood Insurance Study was finalized in November of 1984 and led to the creation of the Flood Insurance Rate Maps (FIRM) and the Floodway Maps that were adopted in May of 1985.

As noted elsewhere, FEMA and the U.S. Army Corps of Engineers (USACOE) updated the County Flood Insurance Study including computer modeling and mapping in 2002. The WDNR completed the new Flood Insurance Rate Maps in 2007 and became effective April 2, 2008.

After the 1965 flood the Wisconsin DNR created a floodplain map and the City was forced to create Floodplain Zoning Regulations. The regulation of building construction in the floodplain stems from FEMA regulations, Wisconsin DNR Regulations and the City's Zoning Code. As noted above, the City was a reluctant partner in adopting and administering floodplain regulations. In fact, the Wisconsin DNR adopted the City's floodplain zoning ordinance on behalf of the City. The federally required program consists of several aspects including floodplain planning, mapping, a flood mitigation program, an insurance program, and administering Federal, State and local regulations.

Perhaps because of the City's overall reluctance to floodplain management, a number of structures were built below the Base Flood Elevation (BFE) in violation of Federal, State, and local regulations. Over the past several years, the City has been working diligently with FEMA to resolve these outstanding violations. As a result, the number of actual violations has been reduced from initial estimates to 72. Of the 72 violations, none involve the construction of habitable structures and the vast majority is accessory structures including garages and yard sheds. There were two commercial buildings however one is no longer in violation because of the revised BFEs on the north side of the city.

Current Status of Remediating Violations

The City was contacted as part of the City's CRS review in April of 1997, and during the review it was discovered that several buildings were built below the Flood Protection Elevation (FPE). The City was not obtaining elevation certificates and the Zoning Board of Appeals was granting variances to allow basements or crawlspaces below the required elevation. Recall that the City is a participant in the Community Rating System (CRS) administered by the Insurance Services Office, Inc. This program allows homeowners with federally backed mortgages to obtain cheaper flood insurance if the City is a good steward of the federal floodplain program. Over the

years the City has been notified several times that it was not in compliance with the National Flood Insurance Program (NFIP). On several occasions, the City was told that it was in jeopardy of being given sanctions such as raising the ISO rating from eight back to 10, which would have increased homeowners' flood insurance premiums. The City could be put on probation from the NFIP or the City could be kicked out of the NFIP altogether, which would require that the State would have to administer the City's regulations. Implications beyond increased insurance premiums included the inability of homeowners to obtain federally backed mortgages or the possibility that a Presidential Disaster Declaration would not be able to be obtained. The City has received funds as part of a disaster declaration in the past and this "carrot and stick" approach did bring pressure upon the City to seriously address these issues.

As a result, the City made several changes to its floodplain regulations to prohibit basements and crawlspaces, and prohibited by ordinance the ability for a property owner to seek a variance. This was in response to what FEMA considered a blatant defiance of floodplain standards when the Board of Zoning Appeals granted 22 basement exemptions for the Moorings development. This was nearly the final straw for the WDNR and FEMA. The issue of noncompliant decks, gazebos, and structures at the Pettibone Park Resort were another major compliance issue that FEMA pressured the City to resolve.

The City made further improvements but also did not provide complete oversight on some building construction. In 2004, FEMA officially requested that the City remedy violations of the Federal regulations. In the intervening years the City has narrowed the scope of the review to projects since the early 1990s. As noted, that scope which initially was thought to be nearly 1,000 violations has been reduced to 72. Using 1993 as the starting date, FEMA agreed to reduce the number to 240. The list of 240 structures was further reduced to 119 by gaining specific elevation data. After conferring with FEMA this list has now been reduced to 72.

This is primarily as a result of the following factors:

- Using information from 1993 forward.
- [Map comparison with new preliminary maps.](#)
- [Determining actual elevation.](#)
- [Decks < 200 sq. feet are code compliant.](#)
- [Conversations with FEMA that indicated they are not concerned with decks and handicapped ramps.](#)
- [Structure in question was never built.](#)
- [Structure in question no longer exists.](#)
- [Permits were for alterations that would come under the legal non conforming status and 50% rule](#)

[Below is a breakdown of the 72 "Non Compliant Parcels".](#)

53 new [garages.](#)

[39 of the 53 are less than or equal to 2' below BFE. Before the City was made aware of the "FEMA Technical Bulletins" for this area they were considered compliant by the "Slaback](#)

Amendment". Of the 39 garages, 17 are less than or equal to one foot below the required BFE. The garage that is most out of compliance is 4.6' below the BFE.

According to David Schien of FEMA, the agency does not have a minimum requirement for accessory structures as to how far below BFE an accessory structure can be. However, the WDNR has a stricter standard in that an accessory structure cannot be more than two feet below the BFE. Wet or dry flood proofing is a requirement if the accessory structure is below the BFE.

Nine (9) yard sheds.

Six of the yard sheds are less than two feet below the appropriate BFE (Slaback Amendment before technical bulletins)

Four (4) garage additions

Two (2) new commercial buildings

(Midwest Fuels @ 615 Sumner St – Still determining which building)

(Murphy Frame and Axle – 1220 St. Andrew St. -1.2 feet) (Now in compliance with new BFE)

Two (2) commercial additions

418 Lang Dr – hair salon (-0.4 feet)

1 Copeland Ave – Dahl Auto Body (-0.1 feet)

Two (2) residential additions

Sun porch and deck @ 1644 Prospect St. (1.9 feet above BFE)

4 season room @ 812 28th St. S (1.3 feet below BFE)

On the current list of non compliant parcels #'s 72 and 73 are 2114 Charles St and 324 Caledonia St. 2114 Charles St. permit was for the installation of a \$2,400 pitched roof on the existing structure and comes under the 50% rule and can be removed from the list. 324 Caledonia St. permit was for the \$3,300 replacement of an existing porch and comes under the 50% rule and can be removed from the list.

FEMA and ISO Visit – August - 2007

The Floodplain Taskforce was made aware that representatives from FEMA and the ISO visit the city periodically (at least every five years for ISO rating purposes). FEMA staff did not visit the city and just the ISO representative made the site visit in early August of 2007 to review the above information and conduct a detailed review of the City's floodplain management program. The City received its ISO determination in February and the City did retain its ISO rating of eight (8). City staff have stated that it is quite feasible to attain an ISO rating of seven (7) primarily because of the City's more recent efforts at improved floodplain management. By working with the agencies, it is hoped that the City will continue to receive planning and

mitigation grants, provide homeowners with discounted flood insurance rates, and remain in good standing in the NFIP program. Should a disaster strike, it will be in the citizens' best interests to have the community eligible for a federal Presidential disaster declaration. In fact in August of 2007, the region did have a flood disaster and the City did become eligible for Federal flood disaster assistance.

Chapter 3 Hazards Identification

Federal Emergency Management Agency (FEMA) Maps: (FEMA Map Modernization Project)

Prior to 2002, FEMA contracted with its consultant Dewberry and Davis to revise the Flood Insurance Study (FIS) report and the Flood Insurance Rate Map (FIRM) for the entire United States of America. On August 28, 2002, FEMA sent out the preliminary Flood Insurance Study and Flood Insurance Rate Map to local communities. In May 2003, the City of La Crosse received from FEMA copies of the preliminary FIS report and the FIRM for La Crosse County asking the City of La Crosse to review and comment on the City's portions of the mapping. At that time, FEMA thought the maps and study were accurate enough to start the public notification and the 90-day comment period required by law. The City reviewed the preliminary FIS report and the FIRM and found numerous errors and discrepancies. In response to the preliminary data that was submitted for review and comment, the City sent a six-page letter to FEMA appealing the draft Flood Insurance Rate Maps and outlined most of its concerns. The City also requested a time extension of 90 days (October 1, 2003) on the comment period because the City felt we did not have enough time to correct the draft data. On August 11, 2004 Dewberry and Davis finally sent a response letter to the City's letter of September 9, 2003. The City believes that this was the point when FEMA decided to terminate Dewberry's contract and in turn entered into a contract with the Wisconsin Department of Natural Resources to complete the County-wide flood mapping efforts.

Department of Natural Resources (DNR) Mapping (also Map Modernization Project):

In the fall of 2004, the City of La Crosse began working with the WDNR to again start revising the FIS report and the FIRM. This time, because the U.S. Army Corps of Engineers (USACOE) was closer to finalizing their remodeling of the upper Mississippi River, the WDNR decided to complete the remapping utilizing the new base flood elevations that the USACOE had established in their new model. This was a huge addition to the remapping effort; however, it made the delay in the mapping effort worthwhile. From the fall of 2004 to the fall of 2006, the WDNR worked on the remapping effort for the County of La Crosse. In some cases it was not a remapping but the first time areas like Mormon Coulee Creek and Smith Valley Creek were ever mapped. During that time frame the WDNR met with the Cities, Townships, and County on two occasions. The purpose of these meetings was for the local governmental jurisdictions to review and comment on the accuracy of the draft maps. Finally, on November 21, 2006, the WDNR with FEMA held an open house showing the general public the revised preliminary map and report. Once the open house was held, the following time schedule was established which culminated with the maps and study becoming effective:

February 2, 2007 – 1st Publication

February 9, 2007 – 2nd Publication and beginning of the 90-day appeal period

May 9, 2007 – Last day of the 90-day appeal period

April 2, 2008 – Maps and Study become effective

City of La Crosse Review of the Map Modernization Project:

On December 22, 2006, the WDNR sent the Revised Preliminary Flood Insurance Study and Flood Insurance Rate Map of the La Crosse County to the County Director of Planning, Zoning, and Land Title and Mapping. The County forwarded the submitted data to the City of La Crosse for the City's review and comments. The City reviewed the maps and submitted to FEMA and WDNR its suggested changes and revisions found during the 90-day appeal period (which ended May 9th, 2007).

Flood Mitigation Assistance (FMA) Program – Phase I:

Knowing the City would have an opportunity to comment and modify the flood maps while they were being revised, the City Planning Department, with much assistance from the Mississippi River Regional Planning Commission (MRRPC), put in an application to the Wisconsin Division of Emergency Management for a State-Local Flood Mitigation Assistance Planning Grant. On December 20, 2005 the City received notification from the State that FEMA had approved the Planning Grant in the amount of \$17,866 with the federal portion being 75% or \$13,399 and 25% or \$4,467 being the local match.

Scope of Work: The Planning Department with the help of the Public Works, Engineering and Building and Inspection Departments identified all structures within the SFHA. After the structures were identified, a consultant was hired to determine first floor elevations and lowest adjacent grades on some of these structures. The Engineering Department assisted in determining elevations where needed. A data base was created for all the elevation data collected.

The Planning Department began by taking the preliminary flood maps as provided by the WDNR and overlaying them on the County's parcel mapping to try and identify which parcels would still be in the SFHA, out of the SFHA and too close to call. On July 13, 2006 the City of La Crosse Common Council adopted a Resolution hiring Coulee Region Land Surveyors to collect elevation data on parcels the Engineering/ Planning Department identified as being too close to call. Coulee Region Land Surveyors collected elevation data on 245 parcels. The elevation data collected included the first floor elevation of all habitable structures along with the lowest adjacent ground elevation on all three corners of said structure and the top of concrete elevation of all accessory structures. This data was given to the Engineering Department to enter into a database for determining better accuracy of the floodplain boundary. The Engineering Department continues to analyze this data and to more accurately determine the SFHA limits.

FMA Program – Phase II

On February 8, 2007, the City of La Crosse Common Council adopted a Resolution extending Coulee Region Land Surveyors contract to collect more elevation data with the intent that this information might also be available for use during the 90-day appeal period for the new County-wide Floodplain maps. The Mayor signed the contract with Coulee Region Land Surveyors on February 16, 2007, for the additional elevation work. Although the additional survey work was initiated, the Common Council authorized the Planning Department and the MRRPC to apply for

another Flood Planning/Mitigation grant. This grant application was submitted electronically to the State for a 2007 grant. At the time of the grant submittal, it was hoped that some of the City's additional \$14,000 paid to Coulee Region Land Surveyors would be reimbursable through the grant. The City was informed in late April of 2007 that it would not receive the grant. Coulee Region Land Surveyors completed their work in July of 2007 and information on an additional 309 parcels was combined with the earlier FMA Planning Grant results into a floodplain data base for the north side.

Final Map with Data Base

The purpose of the data collection efforts noted above is two-fold. First, the City needed to identify all of the structures in the City that are located in the floodplain as part of the County-wide All Hazards Mitigation Plan (see below). The second purpose was to develop a more detailed map of the floodplain on the North Side as was done in the Ebner Coulee area. By utilizing this new elevation data, the Engineering Department will be able to "fine tune" the SFHA. It is hoped that the number of homes in the floodplain may be reduced further with more detailed maps. This detailed information can be submitted to FEMA to amend the new FIRM maps via LOMRs once the data collection and mapping effort is complete. It should be noted that several hundred properties will be removed as a result of Map Modernization Project as the data used to create the maps was more accurate and therefore the delineation of the SFHA is more accurate.

County-wide All Hazards Mitigation Plan

La Crosse County through the Mississippi River Regional Planning Commission completed an All Hazards Mitigation Plan in 2008. The Wisconsin Department of Military Affairs has approved the plan and the City adopted the plan in June of 2008. Flooding is one component of that planning effort. The purpose of the plan is to identify hazards and then develop a plan for reducing risk to property owners and residents from these hazards. The following is an extended excerpt from the Wisconsin Department of Military Affairs publication *Resource Guide to All Hazards Mitigation Planning in Wisconsin: A Guide and Model for Preparing a Local Government and Tribal Organization All Hazards Mitigation Plan*.

Almost weekly we hear and read news reports about the destruction and turmoil caused by tornadoes, flooding, wildfires, and severe thunderstorms. These, and many other forms of hazard events, coupled with increasing population growth and development activity, have caused public and private expenditures on hazard recovery activity to increase substantially. From 1993 through 2000 the Federal Emergency Management Agency has spent more than \$20 billion in over 5,000 counties on disaster recovery. Growing costs are due in large part to the fact that more development stands in harm's way than ever before. *Hazard mitigation planning is the process of developing a set of actions designed to reduce or eliminate long-term risk to people and property from hazards and their effects.* The rising costs associated with hazard recovery activity have led to placing a much greater emphasis on dealing with hazards before they occur through hazard mitigation planning. Hazard mitigation planning is the process of developing a set of actions designed to reduce or eliminate long term risk to people and property from hazards and their effects. This definition distinguishes actions that

have a long-term impact from those that are more closely associated with immediate preparedness, response, and recovery activities.

The Disaster Mitigation Act of 2000 — DMA2K

In an attempt to stem the losses from disasters, reduce future public and private expenditures and to speed up response and recovery from disasters the U.S. Congress passed the Disaster Mitigation Act of 2000 (DMA2K). This Act (Public Law 106-390) signed into law on October 30, 2000, amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act. The following is a summary of the parts of DMA2K that pertain to local governments and tribal organizations.

1. The Act establishes a new requirement for local governments and tribal organizations to prepare an All Hazards Mitigation Plan to be eligible for funding from FEMA through the Pre-Disaster Mitigation Grant Program, Flood Mitigation Assistance Program and the Hazard Mitigation Grant Program.
2. The Act establishes a requirement that natural hazards such as tornadoes, floods, wild fires, and severe thunderstorms need to be addressed in the risk assessment and vulnerability analysis parts of the All Hazards Mitigation Plan. Addressing manmade hazards such as hazardous material spills, civil disturbances, terrorism, transportation and nuclear power plant hazards is encouraged to be included, but is not required to be part of the All Hazards Mitigation Plan.
3. The Act authorizes up to seven percent of Hazard Mitigation Grant Program funds available to a state after a federal disaster to be used for development of state, local and tribal organization All Hazards Mitigation Plans.
4. The Act has a provision for states to receive a five percent increase in Hazard Mitigation Grant Program funds if at the time of the declaration of a major disaster the state has an enhanced state mitigation plan that meets the requirements of DMA2K.
5. The Act establishes November 1, 2004 as the date by which local governments and tribal organizations are to prepare and adopt their respective plans in order to be eligible for the FEMA Hazard Mitigation Grant Program and November 1, 2003 Pre-Disaster Mitigation Program.
6. If a plan is not prepared by November 1, 2004, and a major disaster is declared, in order for a local government or tribal organization to be eligible to receive funding through the Hazard Mitigation Grant Program they must agree to prepare an All Hazards Mitigation Plan within one year.
7. In addition, by not having an All Hazards Mitigation Plan local governments and tribal organizations cannot utilize funding through the Pre-Disaster Mitigation Grant Program.

Chapter 4 La Crosse Flood Protection by Dikes and Levees

The City's Dike and Levee System

A significant portion of the northside of the City of La Crosse remains in a SFHA despite the various floodplain and floodway improvements that have been made in recent years. A series of dikes and levees generally constructed in the mid 1960s under emergency conditions provide some protection to the North Side. The city's dike and levee system is divided into seven sections, known as reaches. The maps found in the appendices depict the location of these reaches. Some data related to those dikes and levees is presented below and is shown on the attached map.

REACH	ESTIMATED LENGTH
1	4,300 ft
2	3,300 ft
3	1,900 ft
4	requires placement of emergency material
5	1,900 ft
6	11,500 ft
7	<u>2,200 ft</u>
Total	25,100 ft (~ 4.75 miles)

There is much more data and information related to the levees and it is beyond the scope of this report to present it here. The intent is simply to provide an appreciation of the magnitude of the city's levee system.

Non-Federal Flood Control Works Inspection Program

The city's levee system has been studied in detail a number of times by the U.S. Army Corps of Engineers (USACOE).

May, 1973	Interim Survey Report Mississippi River at La Crosse, Wisconsin for Flood Control
September, 1973	Mississippi River, La Crosse, Wisconsin Feasibility Report Flood Control and Related Purposes
November, 1988	Condition Survey Report, Non Federal Levees
September, 1997	Non-Federal Flood Control Works Initial Eligibility Inspection Report

The September, 1997 report concluded that only levee reach #6 was acceptable to be included in the **Non-Federal Flood Control Works Inspection Program**. There were numerous reasons cited for this conclusion including design, construction, and maintenance deficiencies.

The USACOE conducted follow-up inspections of the levee system in 2001, 2003, and 2005; however, their records indicate that the 2003 inspection report may not have been provided to the

City. The 2005 report, transmitted to the City in 2006, downgraded reach #6 to an unacceptable performance levee and was therefore removed from the Non-Federal Levee Program. The rationale given for the downgrade related to encroachments, levee erosion, tree/brush growth, and general lack of maintenance.

The significance of the levees not being in the Non Federal Flood Control Works program relates directly to funding for storm or flooding damage. Public Law PL84-99 provides rehabilitation assistance funding at 80% Federal, 20% local share to repair and rehabilitate levees that are damaged by a flooding event to the pre-event condition. PL84-99 does not, however, provide funding to initially construct dikes and levees, or to bring existing levees up to acceptable standards and levels of performance to be included in the program.

Levee Design and Construction Standards

The USACOE has established design and construction standards and guidelines for levees to function as flood protection structures. Generally, the standards and guidelines deal with the height and width of the levee in relation to anticipated height of the water or flood level, and also the soil types that the levee is constructed from. Typically, the top of the levee should be flat and of a sufficient width that allows maintenance vehicles access along the levee reach. A top width of ten (10) feet is recommended. The elevation of the levee top must meet or exceed the 10-year flood elevation plus two feet of freeboard to receive an acceptable performance rating. More freeboard is desirable approaching three feet for the 100 year (1% chance) flood elevation.

Side slopes may vary depending on the type of soil material used to construct the levee. Side slopes may also vary from the side in contact with the flood water to the dry land side of the levee. Sandy, fine grained, permeable or porous soils require side slopes that are gentler ranging from 1 vertical on 3 horizontal to 1 vertical on 6 horizontal. Soils that have more clay content, are highly impervious, and cohesive can be used to build levees with steeper side slopes in the 1 vertical on 2 horizontal slope.

The USACOE and FEMA have numerous other design standards and guidelines for the construction of levees. It is beyond the scope of this report to go into detail on the design and construction of levees. However, as the City acquires easements to maintain and improve the levees, an engineering assessment will be necessary to determine how the system rates in relation to the standards and guidelines. The reports referenced above also contain information related to the design and construction of the City's levees.

Levee Easements

As previously noted, the majority of the city's levees were constructed in 1965 under the emergency conditions of the '65 flood. Many were constructed on private property and no easements or rights of entry were acquired at the time of construction. They were constructed as a response to the flooding emergency in an effort to protect property. Since the city had no easements for many of the levees, maintenance of those levees has been limited. The City is now in the process of obtaining levee easements and is upgrading the maintenance of the levee

system. The attached maps identify the locations of the required easements and the table lists the property owner and the status of the easement.

Levee Maintenance, Encroachments, and Adverse Use

Once the City has acquired the easement for a reach of levee, an in-depth levee inspection can be completed by City staff. Many of these inspections have already revealed the need to complete significant levee maintenance. This includes relatively simple brush and tree removal and the filling of rodent burrows as well as more significant repair of levee bank erosion and washouts. Easements may also require property owners to refrain from placing buildings or personal property in the easement that may encroach on the levee or restrict necessary maintenance activities.

Adverse use issues include activities such as driving of off-road and all-terrain vehicles on levee side slopes and levee tops. This can and has resulted in some serious erosion issues and rutting of the levees that in turn could weaken the levee itself.

Flood Protection Benefit/Cost Analysis

The U.S. Army Corps of Engineers (USACOE) has studied and analyzed levees throughout the country for many years. As a result they have established design and construction guidelines and standards for levees. Over the years, the USACOE has conducted studies and performed analyses of the city's levee system. Their conclusions generally indicate that the city's levee system does not meet minimum engineering and maintenance standards.

The USACOE studies and reports have provided recommendations for improvements to the city's levee system. However, a USACOE benefit/cost (B/C) analysis completed in 1989 for significant improvements to the levee system concluded that the B/C was 0.64 for a \$20 million project. A B/C greater than 1.0 would normally be required for a project to be considered economically feasible.

Certainly points can be made that many things have changed since that 1989 B/C study. Improvements such as filling properties to elevations above the base flood elevation have reduced the risk of flooding to those properties. Other improvements have included the reconstruction of some streets at elevations to act as additional levees. Unfortunately, these improvements, while important in helping to reduce some localized flood risk, can not be included in a new B/C analysis as benefits since they are now existing conditions. The benefits from a flood control mitigation project have to be directly related to a proposed project.

Conclusion – Flood Protection by Dikes and Levees

No dike or levee system can provide full protection from flooding. All levees are generally designed and constructed based on a level of protection and flooding event. Events of greater magnitude may result in the overtopping of the levee. Additionally, the soil types that levees are constructed from can impact how long a levee may provide protection before the soil becomes saturated, with a corresponding elevated risk of failure. Where possible, filling of land to

elevations above base flood elevation provides a higher degree of protection from flooding than a levee.

FEMA also has a program known as Provisionally Accredited Levees (PALs). Simply stated, a PAL levee is one that has been designed, constructed, and is maintained in accordance with FEMA and USACOE standards and criteria. Properties “protected” by a PAL may be able to reduce or eliminate the requirement for flood insurance. Currently, none of the city’s levees are accredited primarily due to the issues previously discussed. It is also not clear if the entire levee system could be accredited in the future. This is due primarily because the city’s levee system is not continuous in all locations. There are areas that require the temporary placement of fill material to close streets or alleys that pass through the levees to make them a continuous barrier to flooding events.

Significant parts of the city will continue to receive some protection from flooding by levees. Increased levee maintenance will now be possible with the acquisition of the easements thereby increasing the reliability of the entire system. Increased budgetary funding to support the maintenance will also be necessary.

Chapter 5 Flood Mitigation Initiatives

The City has limited options for mitigating flood prone property. The City has previously removed several hundred properties through flood control projects (Pammel Creek), floodplain studies and remapping efforts such as the Ebner Coulee Mead and Hunt Study, the La Crosse River Flood Study and the 2002-2008 FEMA Map Modernization Project. As has been shown, the construction of a flood control project is the most costly approach to remove properties from the flood hazard area (e.g. Pammel Creek at \$35 million). The City has been fortunate that with modern technology and state of the art computer models, many properties have been removed from the floodplain through these less costly but time consuming processes. There is still work to be done on remapping efforts on the north side that may remove some properties but those properties that remain in the SFHA after that effort will be very costly to remove. In some cases, it may be cost prohibitive to remove properties as they remain five to six feet below the BFE. In Ebner Coulee, it is estimated that it will cost approximately \$109,000 per property to remove 75 homes from the floodplain and floodway.

On the North Side options include costly upgrades to flood dikes/levees or buying out properties and filling the land as part of a long-term redevelopment strategy. On the South Side, in the Ebner Coulee SFHA, a flood control structure and purchase of properties was considered at a cost of approximately \$8.2 million. This project was not funded by the Common Council when discussed in 2007. If this project were funded an additional 75 homes would be removed but 110 homes would remain in the Ebner Coulee floodplain and there are no other options to remove the remaining homes from the regulated floodplain.

For the North Side, a more detailed analysis needs to be done to determine the number of properties that remain in the floodplain now that the Map Modernization Project is completed. With this information and the detailed survey elevation data, the City can create a map of properties that can be individually mapped out of the floodplain. Once this number is known efforts can be concentrated to determine if or how the remaining properties can be removed from the floodplain.

For the South Side, there is little that can be done along south 7th Street and likely the only floodplain mitigation measure will be to fill the property after a house is demolished. As noted for Ebner Coulee, at this time there is only a project for 75 properties north of Farnam Street and if a cost/benefit ratio was applied it is doubtful that it could be met. There are no options for the remaining homes south of Farnam Street as that ponding area receives floodwaters from within the pond as well as from the bluff area to the east. The cost per home to remove them from the floodplain would exceed \$100,000 per home. The City will continue to apply for mitigation grants to remove as many of the “Floodway 8” homes as possible.

Chapter 6 *Incentives for Development/Redevelopment*

The issue of incentives for development and redevelopment has been at the heart of the floodplain discussion since the Floodplain Task Force began. The discussion has focused on redevelopment rather than development; and in particular, the emphasis has been on the individual homeowner as opposed to businesses. The federal, state, and local regulations, from a homeowner's standpoint, discourage reinvestment in their home. From a City standpoint, the same is true in that if homeowners are not investing in their homes because of floodplain restrictions then the City also loses out because on a larger scale, neighborhoods are not seeing the investment either.

The argument at times seems circular. If flood control projects were constructed, property owners would be able to invest in their home and therefore the community. However, the cost to construct the flood control project might be more than the actual value of the property the control measure is trying to protect. Property owners are at the mercy of the regulations as well as the inability of communities to fund flood control projects that would allow them the ability to improve their property. As the City cannot meet a federal cost/benefit ratio (other than what was done for Pammel Creek), funding options for large scale flood control projects are limited to the annual Capital Budget process. While Tax Incremental Districts (TID) (also known as Tax Incremental Finance Districts) or TIFs are a tool for financing debt, the actual monies to pay for a project must be borrowed and must compete along with all projects through the Capital Budget process. Therefore, flood control projects have to compete for funding along with all of the other projects in the City including streets, park and recreation, new equipment, storm water, libraries, La Crosse Center, Municipal Transit Utility, bridges, and the Fire Department.

Depending on the option for removing a property from the SFHA, such either a large scale projects or filling of an individual property, incentives differ. If the City were to construct a large scale public works project, no incentives would be needed as the City would have removed the obstacle to development or redevelopment.

In the case of a property that may never come out of the floodplain, options for City assistance include:

- The City could pay the cost of clean fill for those with a building project.
- For the Ebner Coulee area, the City could purchase either a vacant lot, use a City park or purchase a lot and house and tear down the house to create areas for compensating storage (areas where fill in the floodplain is removed in order for the fill to be placed in another part of the floodplain where the volume of fill has to be equal to the volume removed) so homeowners could build projects that require fill.
- The City could pay a surveyor or engineer to prepare an elevation certificate both pre and post construction. (the City could bid out the services so as to obtain the most competitive price)
- The City could buy-out properties from willing sellers to either restore areas to wetlands or to eventually bring in fill to reconstruct a home or several homes on a block
- The City could pay the cost of small scale CLOMRs and LOMRs for homeowners

Goal

The overarching goal of this floodplain comprehensive plan is to remove all structures from the regulated floodplain over the next 50 years. The City will prioritize on homes and then business structures.

Recommendations – Public/ Staff Education

- 1.) The City should begin hosting annual “Town Hall” meetings on floodplain issues to keep residents and developers informed of the latest developments in floodplain regulations, insurance, projects, and mapping efforts. Notices should be sent to all property owners who own land in the various floodplains in the City. The City should attempt to make an effort to invite property owners who may have recently acquired a property in the SFHA. The City should do this not only as an obligation to inform the public but also as part of the CRS program. Funding for the mailings should be appropriated by the Common Council.
- 2.) This Floodplain Taskforce “comprehensive plan” should be made available via printed form and via the City’s website.
- 3.) The City shall maintain a separate “floodplain” section on its Website so as to make information readily available to residents and property owners. The page should contain basic information as well as links to key WDNR, FEMA, and the Flood Insurance Administration. Most importantly, the Website should contain the latest floodplain and floodway maps.
- 4.) The City should continue to work toward reducing the City’s CRS rating by having City staff attend ISO training sessions followed by completing the steps necessary to submit an application to the ISO.
- 5.) The City should develop its own cost/benefit ratio parameters to determine the cost effectiveness of future projects for removing structures from the SFHA using federal guidelines.
- 6.) Place the FEMA FIRM maps on the City public Web site with a mapping tool that allows residents to “zoom-in” on their property.
- 7.) Make property owners aware that “Preferred Risk” flood insurance policies are available for Zone X areas on the Flood Insurance Rate Maps.
- 8.) Consider amending the floodplain ordinance to require flood protection of new primary structures in the shaded Zone X. (500 year floodplain)

Recommendations – FEMA/WDNR Compliance

- 1.) The City, having adopted new floodplain zoning in March of 2008, must now vigorously enforce those new regulations and utilize the County Flood Study to make floodplain determinations. In order to maintain and improve the City’s ISO rating and to keep the City in good standing with the National Flood Insurance Program (NFIP), the City must fairly and uniformly enforce floodplain regulations.

- 2.) The City of La Crosse should complete the revisions to its subdivision ordinance to reflect up to date engineering standards.
- 3.) The City must fully train staff and the Board of Zoning Appeals on the new ordinance and the floodplain requirements of the City, WDNR, and FEMA. This includes the Attorney's Office, Engineering Department, Planning and Inspection Department. Staff must hold public hearings and informational meeting for the Common Council and the public so they become more acquainted with the local regulations.
- 4.) Work with FEMA to rectify the 72 violations. Determine the most cost effective way to bring properties into compliance.(e.g. Raising Structures, Wet Flood proofing, Anchoring)
- 5.) Consider creating a full-time position with a dual function as a Certified Floodplain Manager and the Community Rating System Coordinator.
- 6.) Amend the city's permit forms to include requirements for elevation certificates and certification as to whether floodplain encroachments will occur in the floodway or in areas needing compensating storage.
- 7.) Consider amending the city's floodplain regulations to require setbacks from the Floodway.
- 8.) Require elevation certificates for pre-construction drawings (prior to a building permit), during construction when the footings are poured, and for as-built conditions (before a Certificate of Occupancy is issued).

Recommendations - Hazard Mitigation

- 1.) The City should continue to update its list of all structures in the floodplain and make that information available for updates to the County-wide All Hazards Mitigation Plan.
- 2.) The City should prioritize projects that have been identified in the County-wide All Hazards Mitigation Plan and annually submit a project to the State of Wisconsin Department of Military Affairs for federal funding.

Recommendations - Flood Protection by Dikes and Levees

- 1.) The City should accelerate the acquisition of flood dike easements by hiring a contracted negotiator.
- 2.) The City's levees will likely never meet the criterion for USACOE funding and therefore the City should continue to upgrade the levees and control vegetation as funds are made available by the Common Council.
- 3.) The City should encourage filling of property where practicable, especially where such filling can further support the existing levee system (examples include the former Buchner property where the Three Rivers Plaza is located and the Mobil Oil property).

Recommendations - Flood Mitigation Initiatives

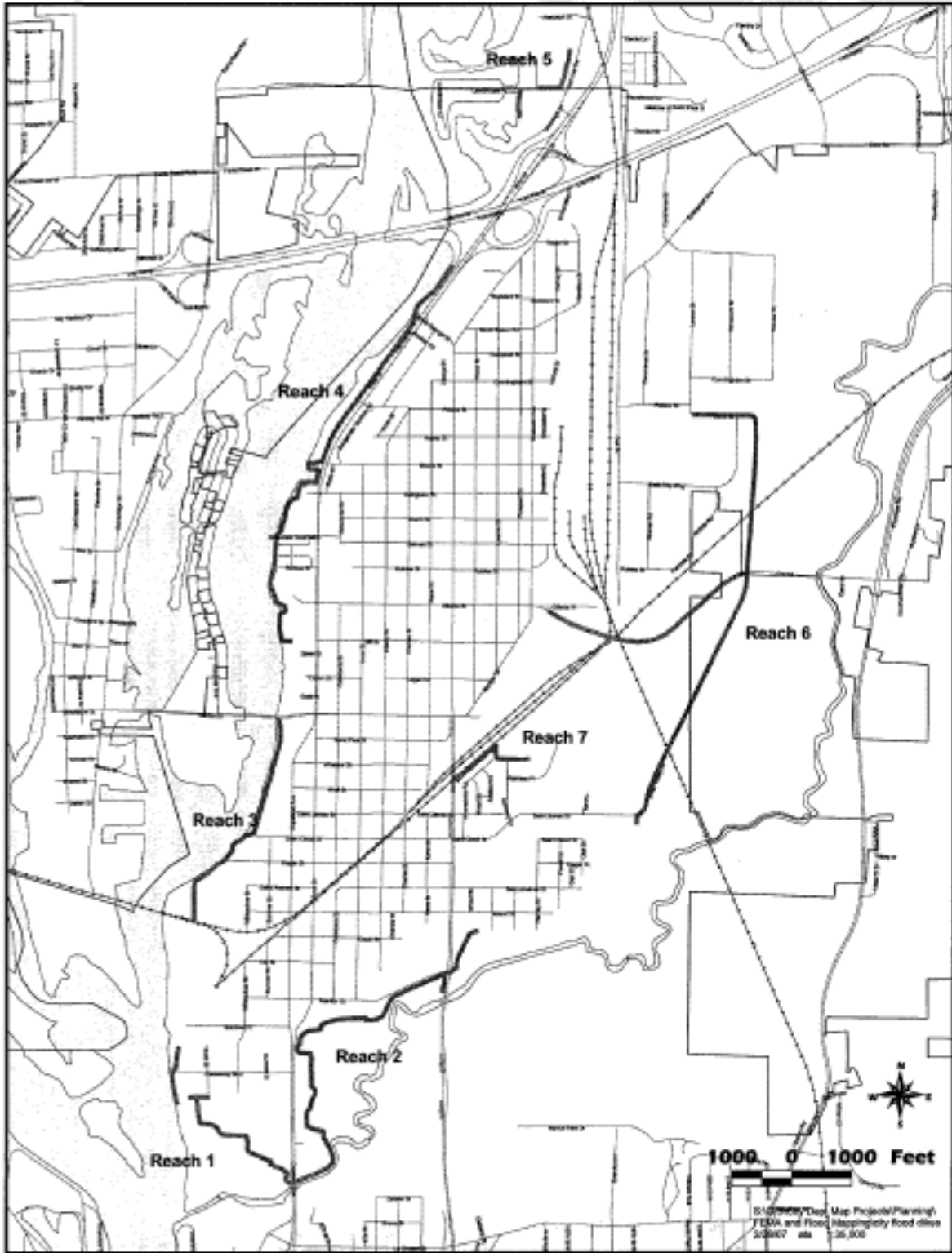
- 1.) The City should develop a local cost/benefit ratio that also factors in whether an area is in a flash flood area or a slowly rising area.
- 2.) As part of the All Hazard Mitigation Plan, the City should continue to identify mitigation projects for homes, businesses, city-owned property and infrastructure.

- 3.) The City should create three separate TIFs on the North Side (just as was done on the South Side for the Ebner Coulee area) to determine if TIF districts can successfully fund floodplain improvements, acquisitions, or home improvements.
 1. TIF #1 north end of Hwy 53 to encompass the north George, west George Street areas and the north end of the North Side.
 2. Explore expanding the Kwik Trip TIF (TIF #13) to cover the eastern edge of the North Side
 3. A TIF in the vicinity of former Trane Plant 6 and the lower North Side (Depot Neighborhood)

Recommendations - Incentives for Development/Redevelopment

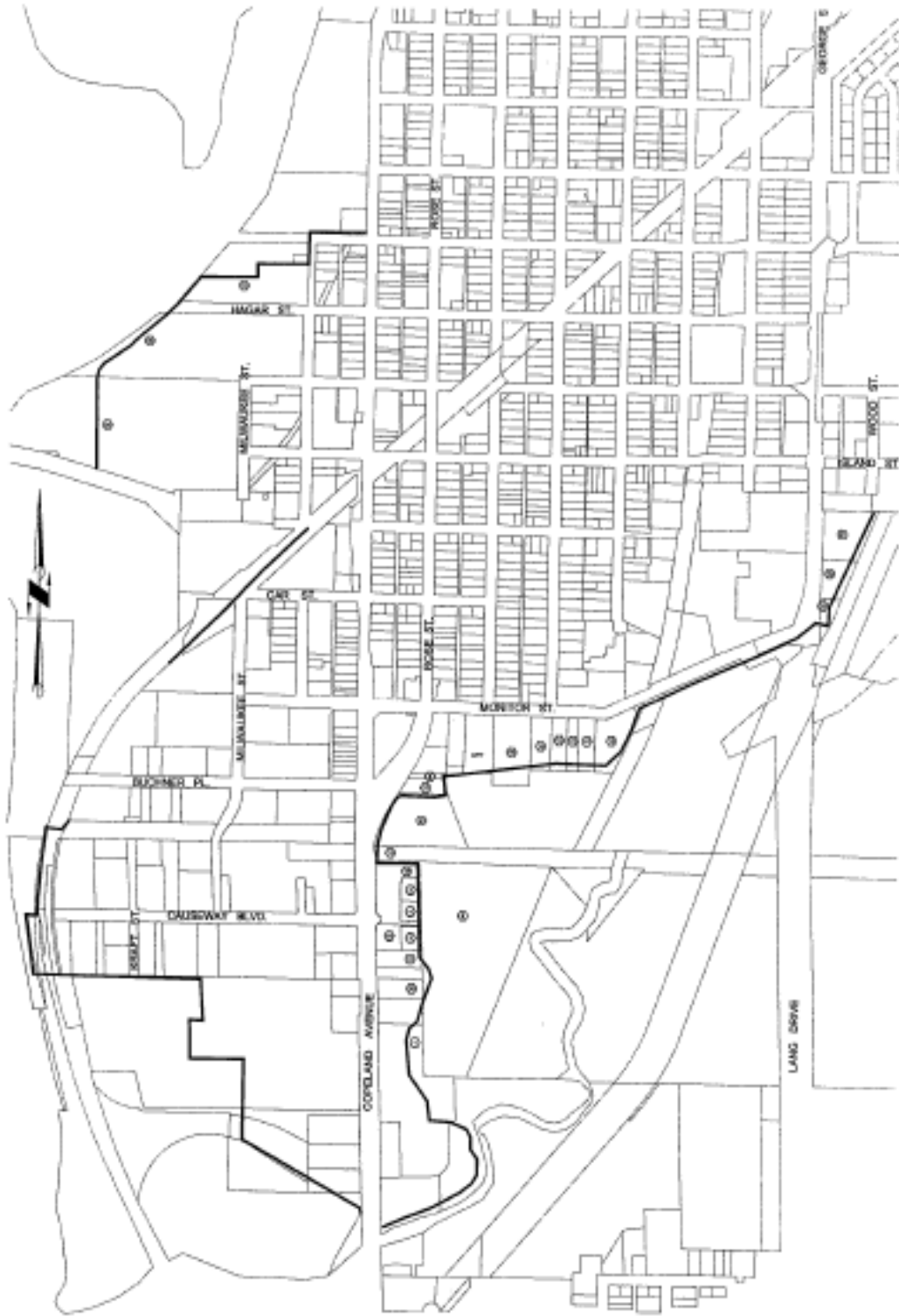
- 1.) The City should create a detailed map of the North Side (as was done for Ebner Coulee).
- 2.) The City should consider whether to assist home owners by submitting a mass LOMA for areas that are able to be removed as a result of the detailed mapping noted in #1 above.
- 3.) Primary Structures should be identified as being in the SFHA by six (6) inches or less, between 6 and two feet, and greater than two feet.
 - For primary structures that are within six inches concentrate on Elevation Certificates and Letter of Map Amendment (LOMA) possibilities.
 - For primary structures, which are between 6 inches and two feet too low, not eligible for LOMAs, concentrate on clean fill, retrofitting, elevating the structures.
 - For structures that are greater than two feet in the floodplain redevelopment should be considered.
- 4.) The City should conduct an evaluation of possible sites in each ponding area in Ebner Coulee that can be used for compensating storage. Once sites are identified, the City should place a funding line item in the Capital Budget for the purchase of those properties.
- 5.) The City should place a line item in the Capital Budget for the purchase of dilapidated housing caused by the inability to reinvest due to SFHA restrictions. The City should pay no more than assessed value for these properties. The City would then demolish the structure(s) and either convert the lot to water storage, fill for redevelopment, or land bank so that an entire block can be purchased for eventual fill and redevelopment.

Appendices



CITY OF LA CROSSE DIKE and LEVEE SYSTEM

FLOOD DIKE EASEMENTS - NORTHSIDE OF LA CROSSE										
PLAT OF SURVEY MAP	ORIGINAL EASEMENT NUMBER	TAX ID	OWNER	ADDRESS	SURVEY	NEW EASEMENT NO. FOR MAP	RETAINING WALL NEEDED	INCLUDE BIKE TRAIL	DATE EASEMENT REC'D	RECORDING INFORMATION
B	B1	17-20255-020	Kohar, LLC	40 Copeland Avenue	X	1				
B	B2	17-20255-060	Norbert J. Schaefer Trust	62 Copeland Avenue	X	2			July, 2004	#1384904
B	B3	17-20255-085	Norbert J. Schaefer Trust	68 Copeland Avenue	X	3				
B	B4	17-20255-088	Norma Jeane Thorne Trust	72 Copeland Avenue	X	4	RET. WALL			
B	B5	17-20255-087	Norma Jeane Thorne Trust	74 Copeland Avenue	X	5	RET. WALL			
B	B6	17-10294-090	Collins, Charles & Marjorie	122 Rose Street	X	6	RET. WALL			
B	B7	17-10293-060	State of WI DNR	702 Monitor Street	X	7			May, 2005	#1423168
B	B8	17-20256-020	Northern States Power Co	48 Copeland Avenue	X	8			November, 2003	#1380233
B	B9	17-10296-010	Collins, Charles & Marjorie	100 Rose Street	X	9				
B	B10	17-10297-030	Stoeckly, Donald & Diane	816 Monitor Street	X	10	RET. WALL?		May, 2005	#1423169
B	B11	17-20255-010	Northern States Power Co	90 Copeland Avenue	X	11				
B	B12	17-10297-020	Norman & Maxine Kane Trust	830 Monitor Street	X	12				
B	B13	17-10401-010	Sierp Family Trust	810 Monitor Street	X	13			December, 2003	#1382584
B	B14	17-10294-110	Austin, G. Thomas	750 Monitor Street	X	14			December, 2003	#1382583
B	B15	17-10294-100	Burg, Robert W.	726 Monitor Street	X	15			6/5/06	#1450751
B	B16	17-10294-055	Boyd, Barbara	700 Monitor Street	X	16				
B	B18	17-10296-020	Wiebke Products, Inc.	110 Rose Street	X	17				
B	B19	17-20255-080	Norbert J. Schaefer Trust	70 Copeland Avenue	X	18				
B	B21	17-20255-070	Norbert J. Schaefer Trust	66 Copeland Avenue	X	19				
B	B22	17-20255-030	Richard L. Schaefer	52-54 Copeland Avenue	X	20				
B	C1	17-10298-020	Ardith Daffinson Trust	400 Lang Drive	X	21				
B	C3	17-10298-030	Dalyn, LLC	316 Lang Drive	X	22				
C	C2	17-10298-035	Collins La Crosse Sign Corp	310 Lang Drive	X	23				
C	D1	17-10255-040	La Crosse Brush Inc	3235 George Street	X	24			July, 2006	#1455248
C	E1	18-938-0	Evenson & Company, Inc.	1000 2nd Avenue S W	X	25				
D	E2	18-1181-0	Evenson & Company, Inc.	1401 Lauderdale Place	X	26				
E	H1	17-10291-050	Gateway Development Trust	1814 St. James Street	X	27				
E	I	17-10287-030	Northern States Power Co	1899 St. James Street	X	28				
H	K1	17-10029-010	La Crosse Fuels, Inc.	501 Milwaukee Street	X	29				
I	K2	17-10028-010	La Crosse Fuels, Inc.	615 Sumner Street	X	30		BIKE		
K	K3	17-10016-080	Hydrite Chemical Company	701 Sumner Street	X	31		BIKE		



= EASEMENTS FOR DIKE INSTALLATION & MAINTENANCE

