

AGENDA
COMMITTEE OF THE WHOLE MEETING
Village Hall – Board Room
Monday, December 9, 2019
Following Regular Village Board Meeting

Reasonable accommodations / auxiliary aids will be provided to enable persons with disabilities to effectively participate in any public meetings of the Board. Please contact the Village Administrative Office (847-883-8600) 48 hours in advance if you need special accommodations to attend. The Committee of the Whole will not proceed past 10:30 p.m. unless there is a consensus of the majority of the Trustees to do so. Citizens wishing to address the Board on agenda items may speak when the agenda item is open, prior to Board discussion.

CALL TO ORDER**1.0 ROLL CALL****2.0 ITEMS OF GENERAL BUSINESS****2.1 Planning, Zoning and Land Use****2.2 Finance and Administration**

2.21 Consideration of an Ordinance Amending Title 1 (Administration), Chapter 5 (Village Board) of the Lincolnshire Village Code (Village of Lincolnshire)

2.22 Consideration of an Ordinance Amending Title 2 (Boards and Commissions) Chapter 7 (Administrative Procedure to Determine Eligibility for Benefits Under the Public Safety Employee Benefits Act) Pertaining to Designating Basic Health Insurance (Village of Lincolnshire)

2.23 Consideration of a Resolution Designating the Basic Health Insurance Plan (Village of Lincolnshire)

2.3 Public Works

2.31 Village of Lincolnshire All Natural Hazard Mitigation Plan Update (Village of Lincolnshire)

2.4 Public Safety**2.5 Parks and Recreation****2.6 Judiciary and Personnel****3.0 UNFINISHED BUSINESS****4.0 NEW BUSINESS****5.0 EXECUTIVE SESSION****6.0 ADJOURNMENT**

**REQUEST FOR BOARD ACTION
COMMITTEE OF THE WHOLE
December 9, 2019**

Subject: An Ordinance Amending Title 1 (Administration), Chapter 5 (Village Board), of the Lincolnshire Village Code

Action Requested: Consideration, Discussion and Placement on the January 13, 2020 Consent Agenda for Approval

**Originated
By/Contact:** Brad Burke, Village Manager

Referred To: Village Board

Summary / Background:

As part of an ongoing review of various sections of the Lincolnshire Village Code, staff recently reviewed Title 1 (Administration), Chapter 5 (Village Board) which details rules and regulations related to Mayor and Village Board duties and responsibilities as well as procedures and processes for Village Board meetings. Attached is a draft ordinance amending this section of the Village Code to reflect current Village Board practices as well as ensure compliance with state law. The proposed reflects text to be deleted with a strikethrough and proposed new text via double underline.

A number of the proposed changes are purely cleanup in nature to codify existing practice. However, there are a provisions where Village Board feedback is requested. Substantive sections proposed to be deleted include comments via track changes to explain why the deletion is proposed. Sections where Village Board feedback is requested are also identified via comments tracked in the proposed ordinance. Questions for Village Board consideration related to the proposed Village Code amendment are as follows:

- Two different section of the Village Code in Chapter 5 note that the Mayor and Village Board will receive compensation as may be established by the Trustees of the Village from time to time. Since neither the Mayor nor members of the Village Board currently receive compensation for service, does the Village Board want to affirm that the members of the Board receive no compensation?
- In Section 1-5-3-5 Rules of Order, does the Village Board want to continue to rely on Robert's Rules of Order? The Village Attorney can offer substitute rules more designed for municipalities.

Village staff and Attorney Simon have reviewed the proposed changes and will be available to answer questions at Monday's meeting.

Budget Impact:
None.

Service Delivery Impact:
None.

Recommendation:



**Agenda Item
2.21 COW**

Staff recommends consideration and approval of this ordinance as part of the January 13, 2020 consent agenda upon receipt of feedback/direction from the Village Board.

Reports and Documents Attached:

- Proposed Ordinance Amending Title 1 (Administration), Chapter 5 (Village Board) of the Lincolnshire Village Code

Meeting History	
Initial Referral to Village Board (COW):	November 25, 2019
Regular Village Board Meeting:	

ORDINANCE NO. XX-XXXX-XXX

**AN ORDINANCE AMENDING TITLE 1 (ADMINISTRATION),
CHAPTER 5 (MAYOR & BOARD OF TRUSTEES) OF THE LINCOLNSHIRE VILLAGE CODE**

WHEREAS, from time to time the Village reviews its codes and the regulation of amusement licenses to ensure that they are up to date and that they regulate matters as intended by the Village; and

WHEREAS, Village staff recently undertook a review of the Lincolnshire Village Code for those purposes, and Village staff recommends the Mayor and Board of Trustees of the Village of Lincolnshire adopt revised regulations regarding various administrative functions; and

WHEREAS, the Mayor and Board of Trustees have reviewed and considered the recommendations of Village staff and have considered all the facts and circumstances related to the proposed Municipal Code amendments.

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND BOARD OF TRUSTEES OF THE VILLAGE OF LINCOLNSHIRE, LAKE COUNTY, ILLINOIS, IN THE EXERCISE OF THEIR HOME RULE POWERS, AS FOLLOWS:

SECTION ONE: The foregoing recitals are incorporated into this Ordinance as findings and intent of the Mayor and Board of Trustees.

SECTION TWO: Title 1, Chapter 5 of the Lincolnshire Village Code is hereby amended in the manner described in Exhibit A attached hereto and incorporated as though fully recited herein. The changes are shown as additions described with underlines and deletions are described with strikeouts.

SECTION THREE: If any section, subsection, sentence, clause, phrase, or portion of this Ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, either facially or as applied, such portion shall be deemed a separate, distinct, and independent provision and such holding shall not affect the validity of the remaining portions hereof or any other application under which such provision is deemed permitted.

SECTION FOUR: All prior Ordinances in conflict or inconsistent herewith are hereby expressly repealed only to the extent of such conflict or inconsistency.

SECTION FIVE: This Ordinance shall be in full force and effect from and after its passage, approval and publication in pamphlet form as provided by law.

SO ORDAINED this _____ of _____, 2020, at Lincolnshire, Lake County, Illinois.

AYES:
NAYS:
ABSENT:

APPROVED:

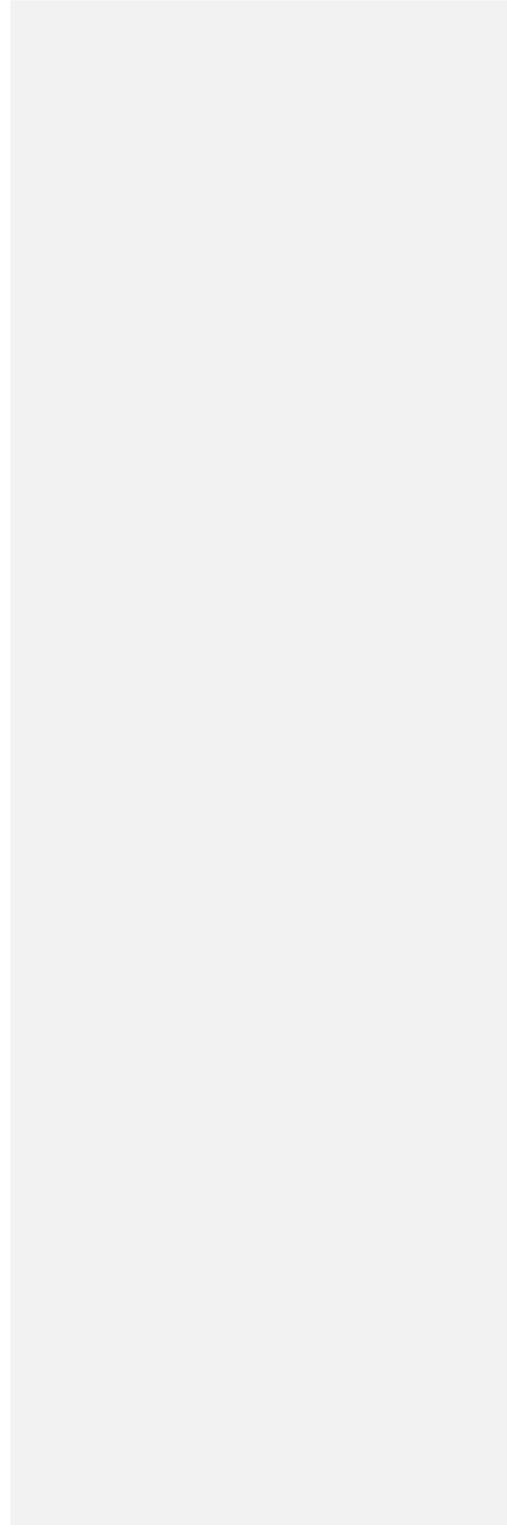
Elizabeth J. Brandt, Mayor

ATTEST:

Barbara Mastandrea, Village Clerk

EXHIBIT A

**TITLE 1, CHAPTER 5 OF THE LINCOLNSHIRE VILLAGE CODE
MAYOR AND VILLAGE BOARD OF TRUSTEES**



TITLE 1: ADMINISTRATION
CHAPTER 5
: MAYOR AND VILLAGE BOARD OF TRUSTEES

SECTION:

- 1-5-1: Mayor**
- 1-5-2: Village Board of Trustees**
- 1-5-3: Meetings of the Village Board**
- 1-5-3-1: Regular and Special Meetings**
- 1-5-3-2: Mayor as Presiding Officer**
- 1-5-3-3: Committees**
- 1-5-3-4: Voting Requirements**
- 1-5-3-5: Rules of Order**

1-5-1: MAYOR

- A. Designation as Mayor: Pursuant to Section 1-1-2.1 of the Illinois Municipal Code, the Village President may be referred to as the Mayor of this Village (1971 Code, §2-1-1).
- B. Election; Term of Office: The Mayor shall be elected for a term of four (4) years and until ~~his~~**his/his/her** successor is elected and qualified, as provided by Statute, and shall be the President of the Board of Trustees (1971 Code, §2-1-2).
- C. Bond, Oath and Compensation: Before entering upon the duties of ~~his~~**his/his/her** office, the Mayor shall give a bond with sureties to be approved by the Village Board conditioned upon the faithful performance of ~~his~~**his/his/her** or her duties in the sum as set forth under Section 1-6-2 of this Code. The Mayor shall take the oath of office as prescribed by statute,¹ and shall receive such compensation for the performance of ~~his~~**his/his/her** duties as Mayor, as may be from time to time established by the Trustees of the Village (1971 Code, §2-1-5).
- D. ~~President~~**Mayor** Pro-Tem; Acting ~~President~~**Mayor**
 - 1. During the temporary absence or disability of the Mayor, the Trustees of the Village shall elect one of its members to act as ~~President~~**Mayor** pro-tem, who during the absence or disability of the Mayor shall perform the duties pertinent to the office.
 - 2. Whenever vacancy in the office of the Mayor occurs during ~~his~~**his/his/her** ~~other~~ term, the vacancy shall be filled ~~for the remainder of the term at~~**in the manner provided by law until** the next municipal election, ~~unless the vacancy is filled by a special election, as provided by Statute.~~ During the period from the time that the vacancy occurs until a Mayor is elected, and has qualified, the vacancy ~~may~~**shall** be filled by the election of an acting Mayor by the Trustees of the Village. (1971 Code, §2-1-6)
- E. Duties
 - 1. General: The Mayor shall be the chief executive officer of the Village, and ~~he~~ shall perform all such duties as may be required by Statute or ordinance. The Mayor shall have supervision over all employees of the Village. The Mayor shall have the power and

Commented [BB1]: Does the Village Board want to amend to reflect that the Mayor serves with no compensation?

¹ 65 ILCS 5/3-4-3.1-10-25

authority to inspect, at any reasonable time, all books and records kept by any Village officer and employee (1971 Code, §2-1-3).

2. Designation of Duties: Whenever there is a question as to the respective powers or duties of any appointed officer of the Village, this shall be settled by the Mayor who shall have the power to delegate to any such officer, any duty which is to be performed when no specific officer has been directed to perform the duty **by statute or Village ordinance** (1971 Code, §2-1-4).
3. Issuance of Permits and Licenses: The Mayor **or his/her designee** shall sign all permits granted by the Village Board and grant all licenses, except as otherwise provided by law or **ordinance or this Code Village ordinance** (1971 Code, §2-1-7).
4. Powers as to Litigation: The Mayor shall sign, and is authorized to sign on behalf of the Village, all instruments necessary to the prompt prosecution or defense of any or all actions brought by or against the Village, including bonds for injunction (1971 Code, §2-1-8).

Commented [SA2]: The Village Board has final authority over the organization of the Village departments. Once the departments are organized, the Mayor has supervision over them.

1-5-2: VILLAGE BOARD OF TRUSTEES

- A. Election; Functions: The members of the Village Board of Trustees (“Trustees of the Village”), consisting of six (6) persons, shall be elected to office for four (4) year terms, according to the method provided by Statute. The trustees of the Village, along with the Mayor, where appropriate, shall be the legislative department of the Village government and shall perform such duties and have such powers as may be delegated by Statute to it.¹
- B. Oath, Salary: The Trustees of the Village shall take the oath of office prescribed by Statute. They shall receive such compensation for performance of their duties as Trustees as may be from time to time fixed by ordinance (1971 Code, §2-2-2).

Commented [BB3]: Would the Village Board want to clarify service comes with no compensation.

1-5-3: MEETINGS OF THE VILLAGE BOARD

1-5-3-1: REGULAR AND SPECIAL MEETINGS

- A. Time of Regular Meetings: The Village Board shall hold its regular meetings on the second and fourth Monday of each month, **except as otherwise scheduled** at such time, date and place as provided in the annual notice and schedule of regular meetings given in accordance with the Illinois Open Meetings Act.² (Ord. 82-695-02; Amd. Ord. 93-1274-04, eff. 3/8/93; Amd. Ord. 03-1885-62, eff. 12/8/03)
- B. Time of Committee of the Whole Meetings: A Committee of the Whole Meeting shall be held by the Village Board on the second and fourth Mondays of each month, **except as otherwise scheduled** at such time, date and place as provided in the annual notice and schedule of regular meetings given in accordance with the Illinois Open Meetings Act (Amd. Ord. 93-1309-39, eff. 11/22/93; Amd. Ord. 93-1313-43, eff. 12/20/93; Amd. Ord. 03-1885-62, eff. 12/8/03).
- C. Meetings Open to the Public: All meetings of the Village Board shall be open to the public. The Mayor and Board of Trustees may adjourn any meeting to go into closed session as may be provided by law (1971 Code, §2-7-10).

¹ 65 ILCS 5/3-1-45-15-11-9
² 5 ILCS 120/1

D. Quorum: A majority of the Trustees of the Village or three (3) Trustees and the Mayor shall constitute a quorum of the Village Board (1971 Code, §2-7-8).

E. A special meeting of the Village Board of Trustees shall be held at the written request of the Mayor or any two Trustees of the Village. The special meeting shall be held as soon as is practicable after the written request that one be held is received by the Village Clerk or ~~his~~**his/her** or her deputy (Ord. No. 03-1825-02, eff. 1/13/03).

1-5-3-2: MAYOR AS PRESIDING OFFICER

The Mayor shall be the presiding officer of all regular and special meetings of the Village Board **and** at all times when the Board meets as a Committee of the Whole. The Mayor shall be an ex-officio member of all committees and boards of the Village but without the power to vote on those committees and boards except as otherwise designated. **During the temporary absence of the Mayor from any meeting of the Village Board or Committee of the Whole, the Trustees shall elect a Temporary Chair to serve as the presiding officer of the meeting but who shall continue to perform the duties of trustee** (1971 Code, §2-7-4).

1-5-3-3: COMMITTEES

A. There shall be a Committee of the Whole consisting of the Mayor and all Trustees of the Village which shall meet on as "as needed" basis, but shall take no final action.

B. The Mayor shall also appoint individual Trustees to act as liaison to the following Boards and Commissions and/or the following subject area:

Zoning Board (Ord. Amd. 03-1882-59, eff. 11/10/03)

Architectural Review Board

— ~~Public Works~~

— ~~Public Safety and Legal~~

Parks and Recreation (Ord. 93-1279-09 eff. 3/8/93)

C. All special committees shall be appointed by the Mayor with the consent of the Village Board (Ord. 81-686-39; and. Ord. 83-763-17).

1-5-3-4: VOTING REQUIREMENTS

A. Mayor to Have Deciding Vote: The Mayor shall not vote on any ordinance, resolution or motion except (1) where the vote of the Trustees of the Village has resulted in a tie; or (2) where one-half (1/2) of the Trustees ~~of the Village~~ elected have voted in favor of an ordinance resolution or motion even though there is no tie vote; or (3) where a vote greater than a majority of the corporate authorities is required by law ~~or an ordinance of the Village ordinance~~ to adopt an ordinance, resolution, or motion. In each instance specified, the Mayor shall vote. Nothing in this Section shall deprive an acting Mayor or Mayor pro-tem from voting in the capacity of Trustee of the Village but shall not also be entitled to another vote in the capacity of acting Mayor or Mayor pro-tem.

B. Voting on Ordinances; Veto

1. Every ordinance and resolution shall be reduced to writing and presented to the Village Board before a vote is taken.

2. The passage of all ordinances for whatever purposes, and of any resolution or motion (1)

to create any liability against the Village or (2) for the expenditure or appropriation of its money, shall require the concurrence of a majority of all members then holding office of the Village Board, **including the Mayor**, unless otherwise expressly provided by law.

All such designated resolutions and motions, and all ordinances, shall be decided by a roll call vote, the result of which vote shall be recorded. All ordinances passed by the Village Board shall be deposited with the Village Clerk. If the Mayor approves of them, the Mayor shall sign them. Those which are disapproved shall be returned to the Trustees with specific written objections at the next regular meeting of the Village Board occurring not less than five (5) days after their passage. The Mayor may disapprove of any one or more sums appropriated in any ordinance, resolution, or motion making an appropriation, and, if so, the remainder shall be effective. However, the Mayor may disapprove entirely of an ordinance, resolution, or motion making an appropriation. If the Mayor fails to return any ordinance, resolution, or motion with **his/his/her** written objections, within the designated time, it shall become effective despite the absence of the Mayor's signature (1971 Code, §2-7-6).

Every resolution, motion, or ordinance which has been disapproved by the Mayor and returned to the Trustees shall be voted upon again by the Trustees. If two-thirds (2/3) of all the Trustees then holding office then vote to adopt the resolution, motion, or ordinance despite the Mayor's disapproval, it shall become effective.

- C. Procedure of Reconsideration: **A** vote of the Village Board upon the adoption of an ordinance, resolution, or motion may be reconsidered at the same meeting at which the vote was taken or at the next regular meeting on motion of any Trustee not present at the time the ordinance, motion, or resolution was adopted, or on the motion of any Trustee previously voting on the prevailing side of the ordinance, motion, or resolution. However, no ordinance, resolution, or motion shall be rescinded except by the same **or greater** number of votes which were required to pass the matter sought to be reconsidered.

No vote of the Mayor and Board of Trustees shall be reconsidered at a special meeting, unless there are present at that special meeting as many of the Mayor and Board of Trustees as were present when the vote was taken. (1971 Code, §2-7-7)

- 1-5-3-5:** **RULES OF ORDER:** The following rules of order shall be adhered to in all cases, but the same may be suspended when no objections are made, or upon a vote of a majority of the Village Board, except Rules 4, 7, and 12 (1971 Code, §2-7-9):

Rule 1. The order of business at all regular meetings of the Village Board shall be as follows:

- ~~1. A fifteen (15) minute period prior to the beginning of the regular meeting for an informal gathering of the Village Board to receive citizen comments.~~

1.0 Roll Call

2.0 Pledge of Allegiance

- ~~3. The minutes of the proceedings of the last meeting shall be read and approved.~~

3.0 Reports of Village Officers

3.1 Mayor's Report

3.2 Village Clerk's Report

3.3 Village Treasurer's Report

Commented [BB4]: Recommend deletion. Previous provision not in compliance with State Open Meetings Act

Commented [BB5]: Minutes will be included on the consent agenda for approval. Any trustee may pull minutes like other items included on the consent agenda.

3.4 Village Manager's Report

~~3.4.5.0~~ Payment of Bills

4. **Citizens wishing to address the Village Board (on non-agenda items)**

~~7. Petitions and Communications.~~ 5. Consent Agenda

~~An item shall be removed from the Consent Agenda at the request of any one Trustee. Any such item so removed shall then be considered during "Unfinished Business". A roll call shall be taken on approval of the Consent Agenda and recorded in the minutes.~~

Commented [BB6]: Suggest deletion. There are rarely, if ever, petitions and communications. If there are, this can be handled via "Citizens wishing to address the Village Board on non-agenda items."

6. **Reports-Items** of General Business

- 6.1 Planning, Zoning, and Land Use
- 6.2 Finance and Administration
- 6.3 Public Works
- 6.4 Public Safety
- 6.5 Parks and Recreation
- 6.6 Judiciary and Personnel

10. Reports of Special Committees

Commented [BG7]: Is this section needed?

- 11. Unfinished Business
- 12. New Business
- 13. Executive Session
- 14. Adjournment (Ord. 83-763-17; amd. Ord. 93-1279-09 eff. 3/8/93)

Rule 2. The Mayor shall decide all questions of order and in all cases where these rules are not applicable, the Village Board shall be governed by parliamentary law as laid down in Roberts' Rules of Order.

Rule 3. Trustees discussing a question shall address the Mayor, and no Trustee shall be deemed to have the floor until recognized by the Mayor. Persons who are not Trustees shall be permitted to address the Village Board only as ~~established by the agenda or with permission of the Mayor or the majority of the Trustees~~ **permitted by the public comment rules adopted by the Village Board.**

Commented [BB8]: Suggested to reflect public comment rules previously adopted by the Village Board

Rule 4. The "yeas" and "nays" shall be taken upon the passage of all ordinances, and upon all propositions to create any liability against the Village, or for the expenditure or appropriation of its money, and in all other cases at the request of the Mayor or any Trustee, which shall be entered on the journal of its proceedings. The concurrence of a majority of all the Village Board, **including the Mayor**, shall be necessary to the passage of any such ordinance or proposition unless otherwise provided by Statute.

~~Rule 5. All resolutions and amendments shall be reduced to writing before action shall be taken.~~

Commented [BB9]: Repetitive with other provisions in this section.

Rule 6. Standing and special committees, to whom references are made, shall in all cases make their reports in writing.

~~Rule 7. Upon the request of any two (2) Trustees present, final action on any report to the Village Board relating to any Ordinance, Resolution, or motion shall be deferred to the next regular meeting of the Village Board. (amd. 94-1365-49 eff. 10/10/94)~~

~~Rule 8. No bill against the Village shall be allowed by the Village Board until the same has been referred to an appropriate committee for examination unless otherwise ordered, and in all cases, receipts for money paid out and proper vouchers shall accompany each bill.~~

~~Rule 97.~~ — Every member who shall be present when a question is stated by the chair shall vote thereon, unless excused by the rest of the Village Board, or unless the person is directly interested in the question, in which case the person's action shall be governed by applicable law.

~~Rule 108.~~ When a question is before the Village Board, no motion shall be in order but these: (1) to adjourn; (2) to lay on the table; (3) for the previous question; (4) to postpone indefinitely; (5) to postpone to a certain time; (6) to commit; (7) to amend. These motions shall be privileged and have precedence in the order in which they are made to succeed each other by this rule; and motions to adjourn, to lay on the table, and for the previous question shall be decided without debate.

~~Rule 119.~~ A motion to adjourn shall always be in order except (1) when a member is in possession of the floor, (2) when the yeas and nays are being called, (3) when the members are voting, (4) when adjournment was the last preceding motion, (5) when it has been decided that the previous question shall be taken; and the "previous question" shall be as follows: "Shall the main question now be put?"

~~Rule 1210.~~ The Village Manager, under the direction of the Mayor, shall prepare an agenda (including Consent Agenda) for each meeting of the Village Board. The Consent Agenda shall include all items of a routine and noncontroversial nature. The Village Manager shall be responsible for determining what items are subject to placement on the Consent Agenda. The Consent Agenda shall include a specific enumeration of the various items and the proposed action relating thereto. Any such item on the Consent Agenda is subject to removal at the request of the Mayor or Trustee at the Board meeting as indicated above in Rule 1 (Ord. 79-570-17).

~~Rule 1311.~~ Amd. 94-1365-49, eff. 10/10/94 - deleted in its entirety

~~Rule 142.~~ No Ordinance or Resolution need be presented or read at a regular Village Board Meeting more than once before being acted upon, and the same may be acted upon at the same meeting at which it is first introduced, so long as the ordinance or resolution was read and considered at ~~at least~~ one prior Committee of the Whole Meeting held by the Village Board (Ord. 93-1274-04, eff. 3/8/93; Amd. Ord. 93-1315-45, eff. 12/20/93).

If an Ordinance or Resolution is presented for the first time at a regular Village Board Meeting, however, it may be acted upon without a second reading at a subsequent Regular Village Board Meeting upon a vote of two-thirds (2/3) of the Trustees present voting on a motion to waive first reading and to permit action on the ordinance or resolution at the meeting at which it is first introduced (Amd. Ord. 93-1315-45, eff. 12/20/93).

Commented [BB10]: Suggest deletion. Question as to why a minority of Board members should have ability to defer action agreeable to rest of Village Board.

Commented [BB11]: This provision does not follow current practice since the committee structure is no longer in place. All bills are shared with the Village Board prior to payment. Could require a trustee be identified to review if the Board sees fit.

**REQUEST FOR BOARD ACTION
Committee of the Whole
December 9, 2019**

Subject: An Ordinance Amending Title 2 (Boards and Commissions), Chapter 7 (Administrative Procedure to Determine Eligibility for Benefits Under the Public Safety Employee Benefits Act) and a Resolution Designating the Public Safety Employee Benefits Act Basic Health Insurance Plan

Action Requested: 2.22 Consideration of an Ordinance Amending Title 2 (Boards and Commissions), Chapter 7 (Administrative Procedure to Determine Eligibility for Benefits Under the Public Safety Employee Benefits Act) and Direct Placement on the January 13, 2020 Consent Agenda for Approval

2.23 Consideration of a Resolution Designating the Public Safety Employee Benefits Act Basic Health Insurance Plan and Direct Placement on the January 13, 2020 Consent Agenda for Approval

Originated By/Contact: Brad Burke, Village Manager

Referred To: Village Board

Summary / Background

The Public Safety Employee Benefits Act (PSEBA) was enacted in November 1997 to require municipalities to pay the entire premium of the employer's health insurance plan in the event a police officer suffers a catastrophic injury or is killed in the line of duty. The law also requires the same benefit for the injured or killed employee's spouse, and for each dependent child of the injured/killed employee until the child reaches the age of majority, or until the end of the calendar year in which the child reaches the age of 25 as long as the child continues to be dependent for support, or the child is a full-time or part-time student and is dependent for support. In January 2018, the Village Board passed an ordinance amending to the Lincolnshire Village Code to establish an administrative procedure to determine eligibility for benefits under PSEBA. A copy of Title 2, Chapter 7 (Administrative Procedure to Determine Eligibility for Benefits Under the Public Safety Employee Benefit Act) of the Lincolnshire Village Code pertaining to these administrative procedures is attached for reference.

Recently, an Appellate Court decision affirmed a municipality's power to designate which health insurance plan a PSEBA beneficiary can receive at the Village's expense. The appeals court held the language of the act clearly states any public employer's obligation is to pay the entire premium amount for "basic" health insurance, not the health insurance of the employee's choice, or the most expensive health insurance, or any plan with more favorable coverage as might become available. Based on this case, the Village should consider adopting an ordinance designating which health insurance plan is the "basic" plan which PSEBA beneficiaries will be eligible to receive at no cost.

In response to this recent court decision, Village Attorney Simon developed the attached ordinance amending Title 2, Chapter 7 of the Lincolnshire Village Code to add a new provision regarding the Basic Health Insurance Plan. In addition to this code amendment, a

resolution identifying the basic health insurance plan is also recommended for approval by the Village Board. Village staff and Village Attorney Simon will be available at Monday night's meeting to answer any questions from the Board.

Recommendation

Staff recommends Village Board discussion and consideration of placing the proposed ordinance amending the Lincolnshire Village Code and resolution designating the Basic Health Insurance Plan on the January 13, 2020 consent agenda.

Reports and Documents Attached

- Current - Title 2, Chapter 7 of the Lincolnshire Village Code
- Proposed Ordinance Amending Title 2 (Boards and Commissions), Chapter 7 (Administrative Procedure to Determine Eligibility for Benefits Under the Public Safety Employee Benefits Act), Pertaining to Designating Basic Health Insurance
- Proposed Resolution Designating the Basic Health Insurance Plan

Meeting History	
Committee of the Whole – First Reading	December 9, 2019

STATE OF ILLINOIS)
) SS.
COUNTY OF L A K E)

CLERK'S CERTIFICATE

I, **Barbara Mastandrea**, do hereby certify that I am the duly appointed and qualified Village Clerk for the Village of Lincolnshire, Lake County, Illinois.

I do further certify that the above and attached is a true and correct copy of an Ordinance entitled:

ORDINANCE 18-3760-188

AN ORDINANCE TO ESTABLISH AN ADMINISTRATIVE PROCEDURE TO DETERMINE ELIGIBILITY FOR BENEFITS UNDER THE PUBLIC SAFETY EMPLOYEE BENEFITS ACT

I do further certify that the aforesaid Ordinance was entrusted to my care and custody, that the same is duly spread upon the record of proceedings of said Village, and that I am the custodian of all Village records, including the journal of proceedings, ordinances, and resolutions of said Village.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 8th day of January, 2018

Barbara Mastandrea

Barbara Mastandrea, Village Clerk
Village of Lincolnshire
Lake County

**Prepared by and Mail to:
Village of Lincolnshire
One Olde Half Day Road
Lincolnshire, IL 60069**

**VILLAGE OF LINCOLNSHIRE
LAKE COUNTY, ILLINOIS**

ORDINANCE 18-3760-188

**AN ORDINANCE TO ESTABLISH AN ADMINISTRATIVE PROCEDURE TO
DETERMINE ELIGIBILITY FOR BENEFITS UNDER THE PUBLIC SAFETY
EMPLOYEE BENEFITS ACT**

WHEREAS, the Village of Lincolnshire is a home rule municipality authorized to act in accordance with the Constitution of the State of Illinois and powers granted to it thereunder and by statute; and

WHEREAS, the Village, pursuant to its municipal powers under the Illinois Constitution of 1970 and the Illinois Municipal Code, including 65 ILCS 5/1-2-1 and 65 ILCS 5/10-4-1 relating to its General Corporate Powers and General Corporate Powers Respecting Employment, has authority to adopt ordinances and to promulgate rules and regulations consistent with state law on matters of group health insurance and other related benefits in relation to all municipal officers and employees in respect to each other, the municipality, and the people; and

WHEREAS, the Corporate Authorities desire to establish and provide a fair and efficient method of determining the eligibility of applicants for the benefits enumerated under the Public Safety Employee Benefits Act (820 ILCS 320/1 *et seq.*); and

WHEREAS, the Corporate Authorities believe that the procedures set forth in this Ordinance achieve the goal of providing a fair and efficient method which will benefit public safety workers, the Village and the residents thereof; and

WHEREAS, the Corporate Authorities have determined that the procedures set forth herein are in the best interest of the municipality and its citizens and therefore desire to amend the Village Code.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and Board of Trustees of the Village of Lincolnshire, Lake County, Illinois, in the exercise of its home rule powers, as follows:

SECTION 1: The above recitals are incorporated by this reference.

SECTION 2: The Village Code is amended by adding Title 2, Chapter 7, as more specifically described in Exhibit A to this Ordinance, which is incorporated by reference as though fully restated herein.

SECTION 3: If any section, paragraph, clause, phrase or part of this Ordinance is for any reason held invalid, such decision shall not affect the validity of the remaining provisions of this Ordinance, and the application of these provisions to any person or circumstances shall not be affected thereby.

SECTION 4: This Ordinance shall be in full force and effect from and after its passage, approval and publication in the manner provided by law.

SECTION 5: All Ordinances or parts of Ordinances in conflict with this Ordinance are hereby repealed to the extent of such conflict.

SECTION 6: If any part or parts of this Ordinance shall be held invalid for any reason such decision shall not affect the validity of the remaining part or parts of this Ordinance.

Passed and approved this 8th day of January, 2017.

Ayes: Feldman, Grujanac, Hancock, Leider, Servi

Nays: None

Absent: McDonough

Abstain: None

VILLAGE OF LINCOLNSHIRE, ILLINOIS

By: Elizabeth J. Brandt
Elizabeth J. Brandt

ATTEST: Barbara Mastandrea
Barbara Mastandrea, Village Clerk

EXHIBIT A

CHAPTER 7

**ADMINISTRATIVE PROCEDURE TO DETERMINE ELIGIBILITY FOR BENEFITS
UNDER THE PUBLIC SAFETY EMPLOYEE BENEFITS ACT**

SECTION:

2-7-1: Purpose

2-7-2: Administrative Composition

2-7-3: Procedure

2-7-1: PURPOSE: The purpose of this Chapter is to provide a fair and efficient method of determining the eligibility of applicants for the benefits enumerated under the Public Safety Employee Benefits Act (820 ILCS 320/1 *et seq.*) ("PSEBA"). All benefits provided applicants pursuant to PSEBA will be consistent with PSEBA.

2-7-2: ADMINISTRATIVE COMPOSITION

A. Appointment of a PSEBA Claims Administrator: The Finance Director is hereby appointed as PSEBA Claims Administrator, who shall be responsible for scheduling and making all necessary arrangements for the holding of hearings under this Administrative Procedure. The duties of the PSEBA Claims Administrator include, but are not limited to:

1. Receiving and filing applications for PSEBA benefits;
2. Receiving and filing all documents required by this Chapter to accompany such claims;
3. Reviewing applications for completeness and returning incomplete applications to the applicant;
4. Upon receipt of a complete application, scheduling hearings in accordance with the availability of the applicant, his or her counsel, counsel for the Village, and the Hearing Officer; and posting and serving a Notice of Hearing in accordance with the Illinois Open Meetings Act, 5 ILCS 120/1;
5. At the direction of the Hearing Officer, posting and serving additional notices of hearing in the event that any hearing date should be continued to a later date;
6. Arranging for a court reporter to prepare a transcription of the hearing;

7. Receiving, filing and serving the parties with the determination of the Hearing Officer and any order, ruling, or intermediate or supplemental determination of the Hearing Officer;
8. Responding to requests for information or subpoenas relating to an application for PSEBA benefits or a hearing thereon; and
9. Preparation of the record of any application and hearing thereon for purposes of judicial review.

B. Appointment of a Hearing Officer: The Mayor, with the consent of the Village Board, is hereby authorized to appoint a person to hold the position of Hearing Officer for the purpose of holding hearings and making determinations concerning the eligibility for persons claiming benefits under PSEBA. In making such selection, the Mayor shall consider:

1. The candidate's ability to perform the duties set forth herein;
2. The background and experience of the candidate;
3. The qualifications of the candidate, including but not limited to, the requirement that the candidate must be an attorney licensed to practice law in the State of Illinois for at least three (3) years, with a knowledge of and experience in labor and employment law, general civil procedure, rules of evidence, and administrative practice.

C. Power of the Hearing Officer: The Hearing Officer shall have all of the powers granted to him or her under applicable state statutes and the common law relative to the conduct of administrative hearings, including the power to:

1. Preside over all Village of Lincolnshire hearings involving PSEBA;
2. Administer oaths;
3. Hear testimony, and accept evidence that is relevant to the issue of eligibility for benefits under PSEBA upon an applicant for such benefits;
4. Issue subpoenas and orders to secure attendance of witnesses and the production of relevant papers and documents upon the request of one or more of the parties to a hearing or their representatives;
5. Rule upon objections concerning the admissibility of evidence;
6. Preserve and authenticate the record of any hearing and all exhibits that are introduced into evidence at the hearing;
7. Issue a determination based on the evidence presented at the hearing;
8. If the determination is that the applicant is eligible for PSEBA benefits, issue a finding as to the extent of the reduction, if any, of PSEBA benefits resulting

from the existence of health insurance benefits payable from any other source.

2-7-3: PROCEDURE

A. **Application for PSEBA Benefits:** A PSEBA benefit application form prepared by the Village shall be the standard form required for PSEBA benefit applicants to use in requesting benefits under PSEBA. The form shall be completed and executed by the requesting applicant and delivered to the PSEBA Claims Administrator. Information required by the form shall include:

1. The full particulars of the employee's claim for benefits, including the date, time, place, and nature of the injury giving rise to the claim for benefits,
2. The names of any witnesses to the injury and the circumstances under which it occurred, together with any other factual circumstances surrounding the incident(s) alleged to have occasioned the injury;
3. The names, ages, and relationship to the applicant of legal dependents for whom PSEBA benefits may be claimed; and
4. Information relating to the existence of health insurance benefits payable from any other source, which information must be current as of the date of application.

The application also must be accompanied by:

1. The written decision of the Village of Lincolnshire Police Pension Board determining or declaring the injury to have been incurred in the applicant's line of duty as a public safety employee of the Village of Lincolnshire;
2. A signed release authorizing the collection and production by voluntary agreement or subpoena, of information, including protected health information, relating to the injury and the incident giving rise to the injury; and
3. If the applicant is seeking reimbursement for health insurance premium payments or out-of-pocket payments for PSEBA-related health insurance coverage or medical expenses, copies of all payment records or receipts for payments made by the applicant.

B. **Application Review:** The PSEBA Claims Administrator shall review the application for completeness. If incomplete, the PSBA Claims Administrator shall return the application to the applicant for completion in accordance with the requirements of Section 2-7-2. If complete, the PSBA Claims Administrator shall forward the completed application to the Hearing Officer and, after determining

the availability of the parties, shall give notice concerning the holding of a hearing on the application. No hearing on the application shall be held and no award of PSEBA benefits may be awarded until the application is complete.

C. Administrative Hearing: The conduct of the administrative hearing shall be as follows:

1. Upon receipt of a completed application, the PSEBA Claims Administrator shall arrange for the posting and serving of a Notice of Hearing in accordance with the Illinois Open Meetings Act, 5 ILCS 120/1, *et seq.*, notifying the parties and the public of the date, time, and place of a hearing to be held on the application.
2. The parties to the hearing, who may be represented by counsel, shall be the applicant and the Village of Lincolnshire. Both the applicant and the Village of Lincolnshire are necessary parties to the hearing.
3. Upon motion by a party, or on the Hearing Officer's own determination after consultation with the parties, the initial hearing date or any subsequent date for the hearing may be reset by the Hearing Officer to mutually convenient dates and times.
4. Hearings shall be held on the date and time and at the place specified in the Notice of Hearing, as originally set or reset and posted and served in accordance with law;
5. All hearings shall be attended by a certified court reporter whose presence at the hearing has been arranged by the PSEBA Claims Administrator at the direction of the Hearing Officer, and a transcript of all proceedings shall be made and preserved.
6. The applicant and the Village may examine and cross-examine witnesses, introduce exhibits, and request orders or subpoenas compelling the appearance of relevant witnesses or the production of relevant documents. A failure of a party or non-party to respond to discovery orders issued by the Hearing Officer shall not be cause for unreasonable delay but shall be evaluated by the Hearing Officer in assessing the weight of the evidence comprising the record of the hearing.

7. It shall be the applicant's obligation at the hearing to present in evidence any and all documents, including medical records, which were presented to the Village of Lincolnshire Police Pension Board that considered the applicant's claim for a duty-related pension. All other medical records, health insurance records (including records relating to health insurance or self-insurance coverage of the applicant as a dependent), employment records, military records, accident reports, witness statements, injury reports (including any or all injury reports prepared or submitted by the applicant, whether or not in conjunction with the injury giving rise to the claim for PSEBA benefits), police reports, workers' compensation claims, reports and records, and records establishing dependency status (including marriage and birth certificates) that are relevant to the applicant's claim for PSEBA benefits shall be admissible at the hearing and shall be obtainable by any party requesting such records in pre-hearing discovery, subject to the requirements of applicable law.
8. The strict rules of evidence shall not apply to the hearing. The Hearing Officer may consider such evidence that a prudent person would reasonably rely upon in the course of managing his or her own affairs.
9. Upon conclusion of the hearing, the parties may make closing arguments on the record or, if either party so requests, may submit post-hearing briefs in support of their positions, which briefs may contain appropriate citations to legal authority.
10. The determination by the Hearing Officer as to whether the applicant is eligible for benefits under PSEBA shall be in writing, shall include findings of fact and conclusions of law, and shall be consistent with PSEBA. If the Hearing Officer determines that the applicant is eligible for benefits under PSEBA, the determination shall include a finding as to the extent of the reduction, if any, of PSEBA benefits resulting from the existence of health insurance benefits payable from any other source.
11. Such determination shall constitute a final determination for the purpose of appeal to a court of competent jurisdiction.

**VILLAGE OF LINCOLNSHIRE
LAKE COUNTY, ILLINOIS**

ORDINANCE _____

Consideration of an Ordinance Amending Title 2 (Boards and Commissions) Chapter 7 (Administrative Procedure to Determine Eligibility for Benefits Under the Public Safety Employee Benefits Act) Pertaining to Designating Basic Health Insurance

NOW, THEREFORE, BE IT ORDAINED by the Mayor and Board of Trustees of the Village of Lincolnshire, Lake County, Illinois, in exercise of its home rule power, as follows:

SECTION 1. Legislative Findings and Intent. The Board of Trustees hereby finds that:

- A. The Village of Lincolnshire is an Illinois home rule municipal corporation; and
- B. The Village employs police officers who are or may become eligible for health insurance benefits under the Public Safety Employee Benefits Act (the “Act”), 820 ILCS 320/10; and
- C. The Act expresses that the health insurance plan for which the Village must pay premiums for eligible beneficiaries does not include supplemental benefits that are not part of the basic group health insurance plan; and
- D. Courts have held that municipalities may enact administrative procedures for resolving claims for benefits under the Act as long as the procedures enacted are not inconsistent with the requirements of the Act; and
- E. Courts have held that the administrative procedures and regulations adopted by municipalities may designate the basic group health insurance plan for which the Village will pay the entire premium for beneficiaries entitled to coverage; and

F. The Village has previously adopted administrative procedures to determine eligibility for benefits under the Act as Title 2, Chapter 7 of the Municipal Code of the Village of Lincolnshire; and

G. It is the intent of the Mayor and Board of Trustees to hereby amend Title 2, Chapter 7 to designate the “basic health insurance plan” for which the Village will pay the entire premium for beneficiaries entitled to coverage.

SECTION 2. Basic Health Insurance Plan. Title 2, Chapter 7 of the Municipal Code of the Village of Lincolnshire is hereby amended by adding a new Section 2-7-4 as presented below:

2-7-4: BASIC HEALTH INSURANCE PLAN: For applicants and beneficiaries who are eligible to receive benefits under PSEBA, the Village will pay the premium of the group health insurance plan designated by resolution of the Village Board as the “basic group health insurance plan,” made available to Village employees. The Village may designate a new or substitute plan at any time by adopting a resolution for that purpose, provided that the designation of the new or substitute plan shall not take effect until the next open enrollment period. The Village shall not pay for any supplemental benefits that are not part of the basic health insurance plan.

SECTION 3. Severability. Each provision and application of this ordinance is intended to be considered severable from every other provision and application, so that a finding that any provision or application of this ordinance is unlawful or unenforceable shall not affect the legality and enforcement of every other provision or application to the fullest extent permitted by law.

SECTION 4. Effective Date. This Ordinance shall take effect immediately upon adoption and approval in the manner provided by law.

SO ORDAINED this _____ Day of _____, 2019, at Lincolnshire,
Illinois.

AYES:

NAYS:

ABSENT:

APPROVED:

Elizabeth J. Brandt, Mayor

ATTEST:

Barbara Mastandrea, Village Clerk

**VILLAGE OF LINCOLNSHIRE
LAKE COUNTY, ILLINOIS**

RESOLUTION _____

**A RESOLUTION DESIGNATING THE
BASIC HEALTH INSURANCE PLAN**

NOW, THEREFORE, BE IT RESOLVED by the Mayor and Board of Trustees of the Village of Lincolnshire, Lake County, Illinois, in exercise of its home rule power, as follows:

SECTION 1. Legislative Findings and Intent. The Board of Trustees hereby finds that:

- A. The Village of Lincolnshire is an Illinois home rule municipal corporation; and

- B. The Village employs police officers who are or may become eligible for health insurance benefits under the Public Safety Employee Benefits Act (the “Act”), 820 ILCS 320/10; and

- C. The Act expresses that the health insurance plan for which the Village must pay premiums for eligible beneficiaries does not include supplemental benefits that are not part of the basic group health insurance plan; and

- D. Courts have held that municipalities may enact administrative procedures for resolving claims for benefits under the Act as long as the procedures enacted are not inconsistent with the requirements of the Act; and

- E. Courts have held that the administrative procedures and regulations adopted by municipalities may designate the basic group health insurance plan for which the Village will pay the entire premium for beneficiaries entitled to coverage; and

F. The Village has previously adopted administrative procedures to determine eligibility for benefits under the Act as Title 2, Chapter 7 of the Municipal Code of the Village of Lincolnshire; and

G. It is the intent of the Mayor and Board of Trustees to designate the “basic health insurance plan” for which the Village will pay the premium for beneficiaries entitled to coverage.

SECTION 2. Basic Health Insurance Plan. Pursuant to Section 2-7-4 of the Municipal Code of the Village of Lincolnshire, the Board of Trustees hereby designates the plan identified below as the “basic health insurance plan” for which the Village will pay the premium for applicants and beneficiaries who are eligible to receive benefits under PSEBA:

INSURER: North Suburban Employee Benefits Cooperative

PLAN NAME: Blue Cross ASO

PLAN TYPE: \$2500 PPO

GROUP ID: P61758

SECTION 3. Effective Date. This resolution shall take effect immediately upon adoption and approval in the manner provided by law.

SO RESOLVED this _____ Day of _____, 2020, at Lincolnshire,
Illinois.

AYES:

NAYS:

ABSENT:

APPROVED:

Elizabeth J. Brandt, Mayor

ATTEST:

Barbara Mastandrea, Village Clerk

**REQUEST FOR BOARD ACTION
COMMITTEE OF THE WHOLE MEETING
December 9, 2019**

Subject: Village of Lincolnshire All Natural Hazard Mitigation Update

Action Requested: Information Only

Originated By: Marc Facchini, Public Works Management Analyst

Referred To: Mayor and Board of Trustees

Summary / Background:

Hazard mitigation is the effort to reduce loss of life and property by lessening the impact of disasters. It is most effective when implemented under a comprehensive, long-term mitigation plan. Local governments engage in hazard mitigation planning to identify risks and vulnerabilities associated with natural disasters, and develop long-term strategies for protecting people and property from future hazard events. Mitigation plans are key to breaking the cycle of disaster damage, reconstruction, and repeated damage.

On September 22, 2014, the Village Board adopted the Village of Lincolnshire All Natural Hazards Mitigation Plan (ANHMP). Having an adopted mitigation plan allows the Village of Lincolnshire to be eligible for mitigation grant funds from the Federal Emergency Management Agency (FEMA) such as home buyouts. The ANHMP is also eligible for credit for communities such as Lincolnshire that participate in FEMA's Community Rating System (CRS) under the National Flood Insurance Program which provide for residents to secure discounts when purchasing flood insurance.

The original purpose of the plan was to examine the various natural hazards facing the Village to identify known natural hazards to develop responses to these events should they occur, mainly flooding from the Des Plaines River. However, other natural hazards such as wind, extreme heat and extreme cold are also included in the plan.

FEMA requires the ANHMP to be updated every 5 years. As part as the Village's update to the All Natural Hazard Mitigation Plan, staff has developed the attached survey to receive feedback from residents on how to best mitigate natural disasters in the Village. This survey will be sent out in lieu of forming a planning committee which took place for the development of the initial plan. Following feedback from the public, Village staff will be updating the ANHMP to reflect public comments received through the survey as well as updates from Lake County's ANHMP for the region which included input from the Village when their plan was updated in 2018. The updated ANHMP will then be presented to the Village Board for approval at a later Village Board Meeting.



Budget Impact

None

Recommendation:

N/A

Reports and Documents Attached:

- 2014 Village of Lincolnshire All Natural Hazard Mitigation Plan
- Village of Lincolnshire All Natural Hazard Mitigation Public Outreach Survey

Meeting History	
Committee of the Whole	December 9, 2019

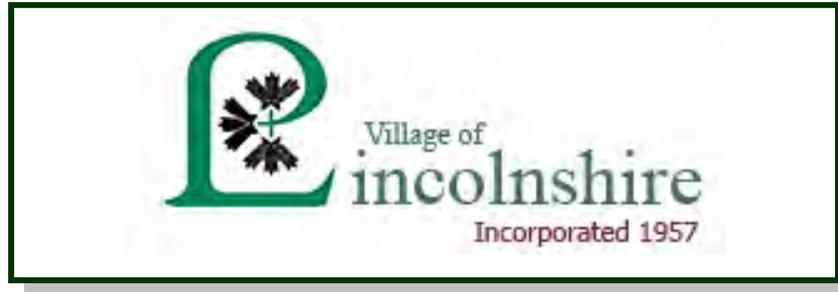
Village of Lincolnshire Natural Hazards Mitigation Plan



Village of Lincolnshire Hazard Mitigation
Planning Committee

September 2014





Village of Lincolnshire Natural Hazards Mitigation Plan

September 2014

Developed by:

Village of Lincolnshire Mitigation Planning Committee

With Supplemental Information
Included in the Adopted

**Lake County All Natural Hazards
Mitigation Plan, June 2012**

Planning Consultant:

Molly O'Toole & Associates, Ltd.

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Village of Lincolnshire Natural Hazards Mitigation Plan

Table of Contents

September 2014

Executive Summary	ES-1
Chapter 1 Introduction.....	1-1
1.1 Purpose of the Plan	1-1
1.2 Organization of the Plan	1-1
1.3 Village of Lincolnshire Overview	1-3
1.4 Land Use and Development	1-4
1.5 Critical Facilities	1-5
Chapter 2 Planning Process	2-1
2.1 Plan Approach.....	2-1
2.2 Public Involvement	2-3
2.3 Agency Coordination	2-4
2.4 Plan Adoption and Implementation	2-4
Chapter 3 Risk Assessment	3-1
3.1 Natural Hazards in Lake County and Lincolnshire.....	3-1
3.2 Floods.....	3-2
3.3 Summary of Natural Hazard Risk Assessment.....	3-13
Chapter 4 Mitigation Goals	4-1
4.1 Review of ANHMP Goals and Guidelines	4-1
4.2 Lincolnshire’s Mitigation Goals and Guidelines	4-2
4.3 Consideration of Other Plans	4-3
Chapter 5 Mitigation Strategies and Capabilities Assessment	5-1
5.1 Preventive Measures	5-2
5.2 Property Protection	5-5
5.3 Natural Resource Protection	5-13
5.4 Emergency Services.....	5-15
5.5 Structural Measures	5-20
5.6 Public Information Activities.....	5-23
5.7 Capability Assessment Summary	5-24
Chapter 6 Action Plan and Implementation Strategy	6-1
6.1 Lake County ANHMP Action Items for Lincolnshire.....	6-1
6.2 Lincolnshire Mitigation Action Plan	6-2

6.3 Implementation Strategy 6-7

Chapter 7 Plan Maintenance 7-1

7.1 Plan Adoption 7-1

7.2 Maintenance and Monitoring 7-1

7.3 Continued Public Participation 7-2

7.4 Evaluating the Plan’s Success..... 7-2

Appendix A Village of Lincolnshire Resolutions A-1

Appendix B Public Information MaterialsB-1

Appendix C Planning Committee Materials C-1

List of Exhibits

Exhibit 1-1 Village of Lincolnshire Municipal Map 1-3

Exhibit 1-2 Village of Lincolnshire Future Land Use 1-6

Exhibit 1-3 Village of Lincolnshire Critical Facilities 1-7

Exhibit 3-1 Lake County Watersheds and Subwatersheds 3-6

Exhibit 3-2 Village of Lincolnshire April 2013 Known Flood Issues 3-11

Exhibit 3-3 Village of Lincolnshire Flood Focus Areas 3-14

List of Tables

Table 1-1 Summary of Lake County ANHMP and Village of Lincolnshire Mitigation Plan Contents 1-2

Table 1-2 Village of Lincolnshire Population Data 1-4

Table 1-3 Village of Lincolnshire Land Use 1-5

Table 1-4 Village of Lincolnshire Critical Facilities 1-5

Table 2-1 Village of Lincolnshire Natural Hazards Mitigation Planning Committee..... 2-2

Table 3-1 Presidential Disaster (DR) And Emergency Declarations (EM)
 In Lake County 3-1

Table 3-2 Des Plaines River Watershed in Lake County 3-5

Table 3-3 North Branch of the Chicago River Watershed in Lake County 3-7

Table 3-4 Lake County Flood Insurance Active Policies and Claims, FEMA 2011 3-8

Table 3-5 Lake County Repetitive Loss Structures 3-8

Table 3-6 Structures Located in Lake County Floodplains 3-12

Table 3-7 Estimated Market Value of Structures Located in Lake County

Floodplains 3-12

Table 3-8 Summary of Lake County Natural Hazards from the Lake County ANHMP 3-15

Table 3-9 IEMA Hazard Ratings for Lake County..... 3-16

Table 5-1 Natural Hazard Mitigation Activities 5-1

Table 5-2 NWS Flood Forecast Points 5-17

Table 6-1 Summary of Village of Lincolnshire Mitigation Action Items 6-8

Table 6-2 Summary of Village of Lincolnshire Mitigation Plan Goals..... 6-9

Table 6-3 Summary of Lake County ANHMP Action Items 6-10

List of Figures

Figure 3-1 Description of a Floodplain..... 3-3

Executive Summary

The Federal Emergency Management Agency (FEMA), through the Disaster Mitigation Act of 2000 (DMA 2000) and the Stafford Act require communities develop and adopt a FEMA-approved natural hazard mitigation plan to be eligible for hazard mitigation grant funds. To meet this requirement, the Village of Lincolnshire participated with Lake County and other Lake County municipalities in the development of the 2012 Lake County All Natural Hazards Mitigation Plan (ANHMP). The Village of Lincolnshire adopted the Lake County ANHMP in August 2012.



FEMA's National Flood Insurance Program's (NFIP) Community Rating System (CRS) provided CRS floodplain management planning credit to the Village of Lincolnshire; however, the Lake County ANHMP does not meet certain CRS planning requirements, which if met, the Village of Lincolnshire could improve beyond the current CRS Class 5 rating. Currently, properties located in the Special Flood Hazard Area (SFHA) receive a 25% discount in flood insurance premiums. Moving to a Class 4 rating would mean a 30% premium discount.

The Village of Lincolnshire Natural Hazard Mitigation Plan allows the Village to meet all planning requirements of the CRS, and it also furthers the Village's efforts to protect life, health and safety, and reduce damage to property and infrastructure from natural hazards. This Mitigation Plan assesses the natural hazards affecting the Village of Lincolnshire, sets mitigation goals, considers current mitigation efforts being implemented, evaluates additional mitigation strategies, and recommends mitigation actions to be implemented in the next five years. The mitigation actions are designed to protect the people and assets of the Village of Lincolnshire, and designed to be undertaken by both the public and the private sectors.

This Mitigation Plan was developed by the Village of Lincolnshire Natural Hazard Mitigation Planning Committee consisting of residents, community stakeholders, Village elected officials and Village staff, along with the assistance of a mitigation planning consultant. The Planning Committee was formed by a Village resolution passed on August 6, 2013 to facilitate the development of this Mitigation Plan and other CRS-related plans.

The Planning Committee identified priority hazards listed in Chapter 3. Due to the April 2013 flooding in Lincolnshire and the Village's interest in improving the CRS class rating, the focus of this Mitigation Plan is on floods.

The Planning Committee developed goals and guidelines for this Plan, developed recommendations for mitigation measures (preventive, property protection structural measures, emergency services and public information), and identified an action plan for the

Village to use to implement this plan. The Planning Committee is fully aware recommendations and action items will only be implemented when the Village's resources (staff time and funding) allow.

The Planning Committee will continue to meet annually to assess this Mitigation Plan and determine if any updates or changes are required. An annual progress report will be presented to the Village Board as an informational item. FEMA and CRS require all mitigation plans to be updated and re-adopted every five years.

This Mitigation Plan, when used in conjunction with the Lake County ANHMP, allows the Village of Lincolnshire to be more aware of the risks associated with natural hazards, the potential impact of the hazards on the community, and provides a list of actions to better protect property and people from harm.

Chapter 1.

Introduction

The Village of Lincolnshire is located in southeastern Lake County along the Des Plaines River. Lake County, Illinois is located in northeastern Illinois. The Village of Lincolnshire is subject to flooding, severe summer and winter storms, extreme cold and heat, and tornadoes. The Village of Lincolnshire participates in the National Flood Insurance Program and the Community Rating System (CRS).

Lake County worked with the Lake County Local Planning Committee (LPC) to develop the 2012 Lake County All Natural Hazards Mitigation Plan (ANHMP). The Village of Lincolnshire is a member of the LPC and adopted the Lake County ANHMP locally in August 2012. In June 2013, the Village organized its own Mitigation Planning Committee to develop the Village of Lincolnshire Natural Hazards Mitigation Plan.

1.1 Purpose of the Plan

The purpose of the Village of Lincolnshire Natural Hazards Mitigation Plan (Mitigation Plan) is to examine flood mitigation actions that should be considered for the Village of Lincolnshire and to obtain floodplain management planning (FMP) credit in the CRS. The development of this Mitigation Plan included the participation of the Village of Lincolnshire Mitigation Planning Committee. The Mitigation Plan has been adopted by the Village of Lincolnshire Board of Trustees.

The Village's August 2012 adoption of the Lake County ANHMP allows the Village to be eligible for FEMA hazard mitigation grant funding from all of the FEMA Hazard Mitigation Assistance grant programs that fund mitigation activities. While the Lake County ANHMP meets all CRS planning requirements, additional FMP credit is being sought by the Village through this Mitigation Plan to allow the Village to earn a better CRS class rating. An improved CRS class rating will provide additional flood insurance premium discounts to Village of Lincolnshire floodplain residents and property owners.

The Village of Lincolnshire also worked with the Mitigation Planning Committee to develop a "Plan for Public Information" and a "Flood Insurance Coverage Improvement Plan." These plans are public information mitigation action items recommended in the Lake County ANHMP, and the implementation of these plans provide for additional CRS credit.

1.2 Organization of the Village of Lincolnshire Mitigation Plan

This Mitigation Plan is organized into seven chapters, and in the same manner as the Lake County ANHMP, the Village of Lincolnshire Mitigation Plan and the Lake County ANHMP are complimentary plans. Table 1-1 summarizes the contents of the Lake County ANHMP chapter and the Village of Lincolnshire Mitigation Plan. Chapter 2 of this Mitigation Plan describes what additional analysis and work of the Village of Lincolnshire Mitigation

Planning Committee went into this plan beyond the information provided in the Lake County ANHMP.

Table 1-1 Summary of Lake County ANHMP and Village of Lincolnshire Mitigation Plan Contents

	2012 Lake County ANHMP	2013 Village of Lincolnshire Natural Hazards Mitigation Plan	CRS Planning Step(s)
Chapter 1 Introduction	Includes the Lake County ANHMP's purpose and organization, provides an overview of County, a summary of Lake County land use, base maps, and a summary of critical facilities.	Examined the Village's land use and provides a map of critical facilities within the Village.	Step 1 and 2
Chapter 2 Planning Process	Presents the FEMA-recommended 10 step planning process and a summary of the major changes made from the 2006 to the 2012 Lake County ANHMP.	Summarized the planning process undertaken.	Step 1, 2 and 3
Chapter 3 Risk Assessment	Discusses the natural hazards that can impact Lake County.	Relies on the Lake County ANHMP and summarized the flood hazards in Lincolnshire.	Step 4 and 5
Chapter 4 Mitigation Goals	Presents the goals and guidelines of the Lake County ANHMP.	Presents the goals and guidelines tailored to the Village of Lincolnshire.	Step 6
Chapter 5 Mitigation Strategies and Capabilities Assessment	Provides a description of the mitigation activities already underway in Lake County and recommends additional activities for six mitigation strategy categories. Also considers the County and municipal capabilities for implementing measures.	Relies on the Lake County ANHMP and summarized the six mitigation strategies for flood mitigation. Conclusions and recommendations specific to the Village of Lincolnshire are included.	Step 7
Chapter 6 Action Plan and Implementation Strategy	Discusses the consideration of countywide and community-specific mitigation action items to be implemented as staff and funding resources allow.	Presents a Village of Lincolnshire natural hazard mitigation action plan, though the Village is still participating in the implementation of the Lake County ANHMP.	Step 8, 9 and 10
Chapter 7 Plan Maintenance	Discusses plan adoption, outlines the Lake County ANHMP maintenance and monitoring efforts, continued public participation, and evaluating the plan.	Same.	Step 10

1.3 Village of Lincolnshire Overview

The Village of Lincolnshire is located in southeastern Lake County, primarily within Vernon Township, and a small portion of the eastern end of the Village in West Deerfield Township. The Village was incorporated in 1957. The Village of Lincolnshire is bordered by the Villages of Buffalo Grove to the south and west, Vernon Hills to the west, Lake Forest to the north and east, Bannockburn to the east and Riverwoods to the south. Two unincorporated portions of Vernon Township also border the Village of Lincolnshire.

The Des Plaines River flows through the Village of Lincolnshire. Lake County Forest Preserve lands are located to the south and north of the Village of Lincolnshire along the Des Plaines River.

A map of the Village of Lincolnshire is presented in Exhibit 1-1.

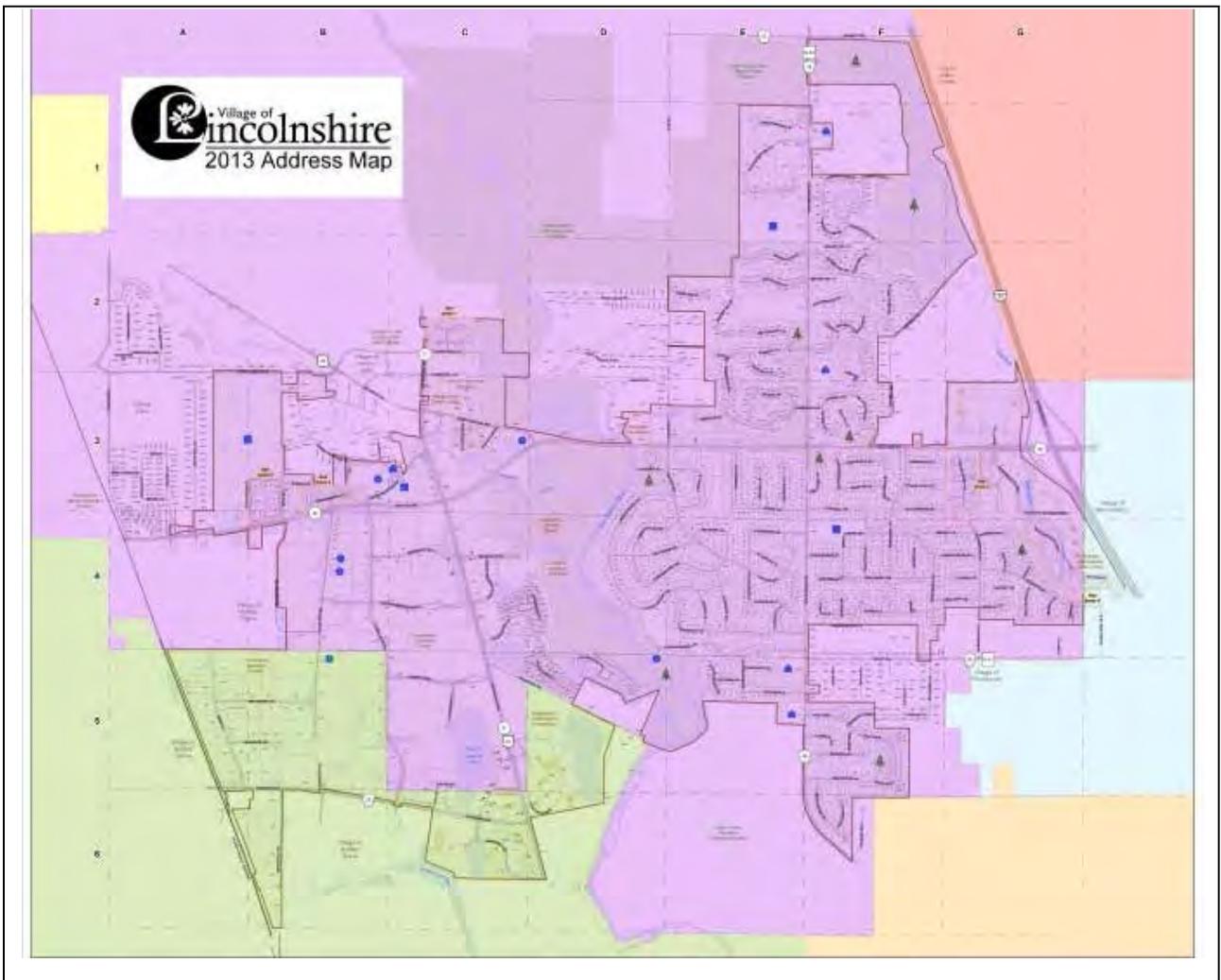


Exhibit 1-1 Village of Lincolnshire Municipal Map

Watersheds: A majority of the Village of Lincolnshire is part of the Des Plaines River watershed. The Des Plaines River originates in Wisconsin, flows south through Lake County and south into Cook County. Indian Creek is a tributary to the Des Plaines River and is located on the western portion of Lincolnshire. The eastern portion of the Village is part of the West Fork of the North Branch of the Chicago River.

There are 480 parcels of land located in the Special Flood Hazard Area (SFHA).

Population: The Village of Lincolnshire has a population of 7,275, according to the 2010 U.S. Census. Lake County has a population of 703,462. There are approximate 3,400 household units in Lincolnshire.

Population of Lincolnshire has grown 19% from 2000 to 2010 as shown in Table 1-2. The Chicago Metropolitan Agency projects population growth to continue for Lake County, with a projected population of over 950,000 by the year 2040.

Table 1-2 Village of Lincolnshire Population Data

Community	Lake County	
	2000 Population	2010 Population
Village of Lincolnshire	6,108	7,275
Total:	644,356	703,462

Employment: Largely due to its office, industrial, hospitality, and commercial/retail sectors, Lincolnshire has a diverse economic base. The Village consists of a number of office and business parks, including the Lincolnshire Corporate Center, Lincolnshire Business Center, Tri-State Office Park, and Millbrook Office Park, which house employers, such as AON Hewitt, Walgreens, HydraForce and Quill. The Village's daytime population totals more than 25,000.

Lincolnshire is home to six hotels including the Lincolnshire Marriott Resort.

Schools: Lincolnshire is part of the Lincolnshire-Prairie View School District 103 Elementary School District and the Adlai E. Stevenson High School District 125.

1.4 Land Use and Development

Current Zoning Map: The current Village of Lincolnshire's zoning map can be viewed at <http://www.village.lincolnshire.il.us/village-maps>.

Future Land Use: Exhibit 1-2 shows the future land use map.

Development Trends: The Village of Lincolnshire's Comprehensive Plan was updated in March 2012. The Village expects continued growth in the community for both housing units and commercial and industrial development. The Comprehensive Plan can be viewed at

<http://www.village.lincolnshire.il.us/departments-services/community-economic-development/comprehensive-plan-update-2012>.

Table 1-3 Village of Lincolnshire Land Use

Land Use	Land Use	
	Acres	Percent
Residential	1,360	46%
Non-residential	573	20%
Open Space and Parkland	395	13%
Other	609	21%
Total	2,938	100%

1.5 Critical Facilities

Critical facilities are buildings and infrastructure whose exposure or damage can affect the well-being of a large group. The continued operation of critical facilities is vital to preparedness, response and recovery from any sort of natural or manmade hazard event. Exhibit 1-3 shows the critical facilities located within the Village of Lincolnshire and those located in the SFHA (100-year floodplain).

Further investigation into critical facility locations, use of critical facility mapping, and protection of critical facilities is discussed in Chapters 3 and 5 of this Mitigation Plan.

Table 1-4 Village of Lincolnshire Critical Facilities

Critical Facility Category	Within Village	Within SFHA
Fire Department	1	0
Police Department	1	0
Riverside Foundation	1	1
Village Hall	1	0
Public Works and Water Facility	1	0
Sanitary Facility	8	2
Schools	4	0
Water Facility	1	0
Total:	18	3

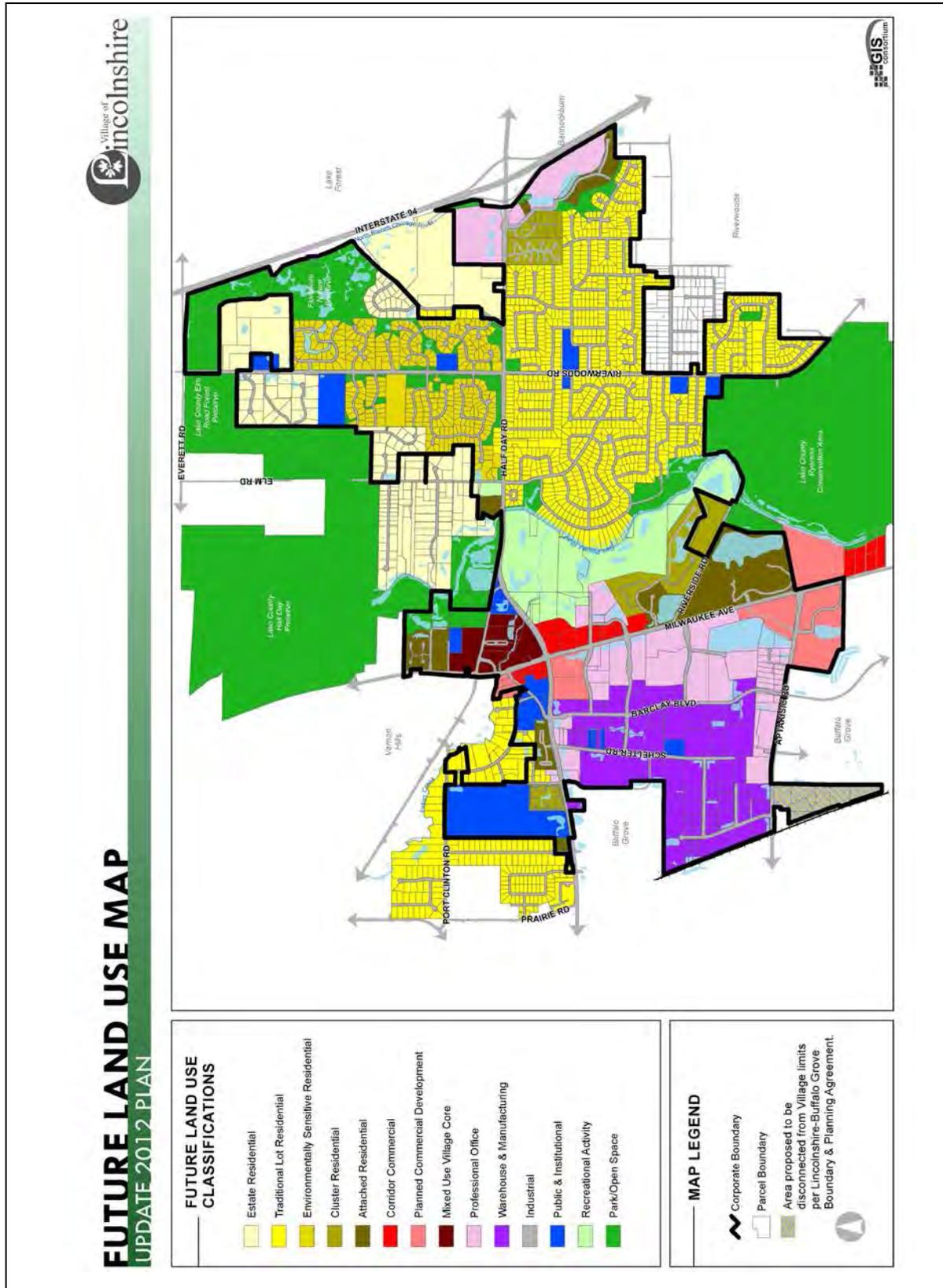
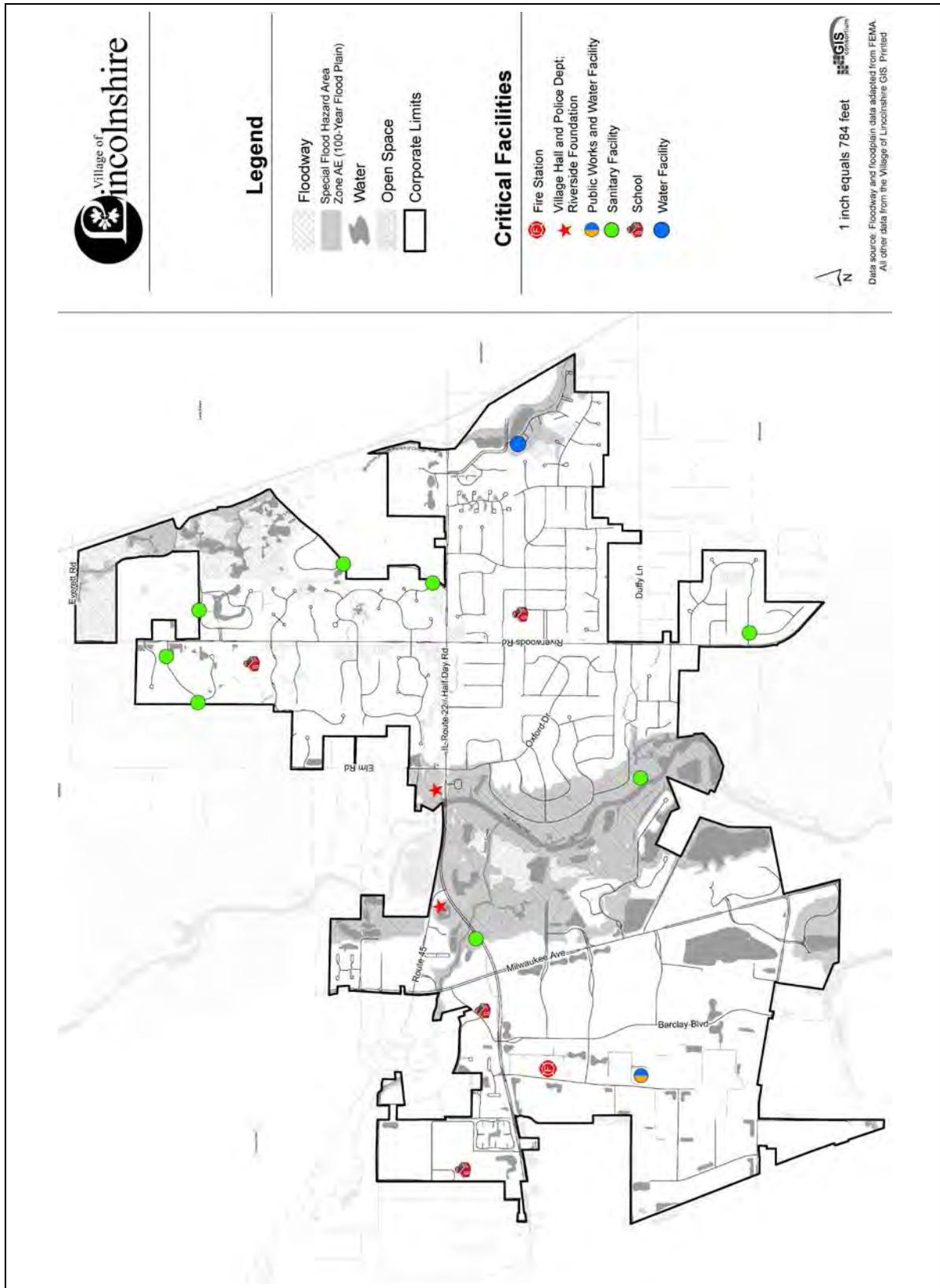


Exhibit 1-2 Village of Lincolnshire Future Land Use Map



Legend

- Floodway
- Special Flood Hazard Area
- Zone AE (100-Year Flood Plain)
- Water
- Open Space
- Corporate Limits

Critical Facilities

- Fire Station
- Village Hall and Police Dept.
- Riverside Foundation
- Public Works and Water Facility
- Sanitary Facility
- School
- Water Facility



1 inch equals 784 feet



Data source: Floodway and floodplain data adapted from FEMA. All other data from the Village of Lincolnshire GIS. Printed

Exhibit 1-3 Village of Lincolnshire Critical Facilities

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Chapter 2. Planning Process

2.1 Plan Approach and Committee Organization

The Village of Lincolnshire Natural Hazards Mitigation Plan utilizes the ten step floodplain management planning approach recommended by FEMA through the Community Rating System (CRS) program (shown to the right). The 10-step planning process was also used with the Lake County ANHMP.



The Village of Lincolnshire Natural Hazards Mitigation Plan was developed with the participation of the Village of Lincolnshire Natural Hazards Mitigation Planning Committee. Participating members of the Planning Committee are shown in Table 2-1. The Committee was established through a resolution passed by the Village of Lincolnshire Board of Trustees on August 6, 2013 (see Appendix A).

The Committee met four times from October 2013 to May 2014. The efforts of the Committee were coordinated by the Village of Lincolnshire Department of Public Works. Technical support was provided by Molly O'Toole & Associates, Ltd. (MO&A). MO&A is an engineering consulting firm specializing in hazard mitigation.

Organization (Step 1) began with the Village and MO&A in May 2013. The effort included other Village departments and individuals, including the Village Manager and the Director of Community Development.

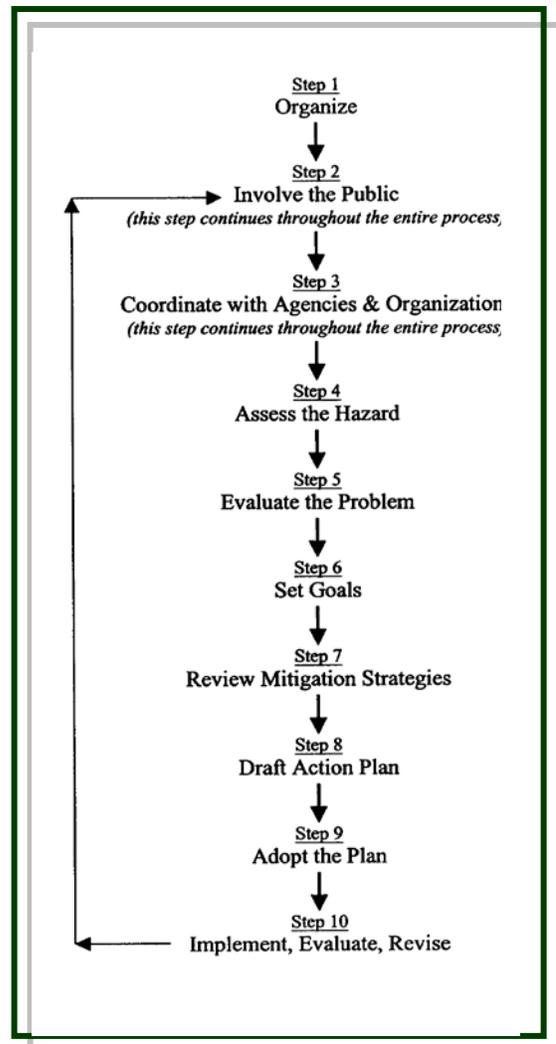


Table 2-1 Village of Lincolnshire Natural Hazards Mitigation Planning Committee

Name	Representing
Ramesh Gulatee	Residents
Jamie Godshalk	Residents
Larry Barnhart	Wood Creek Courts EPA
Mark Cohen	State Farm Insurance
Deann Daniel	Sedgebrook Retirement Community
Wendy Kritt	Residents
Marj Lundy	Residents
Ann Maine	Residents
Judy Mankus	Residents
Jeff Merwin	Residents
Rev. Douglas Meyer	Lutheran Church of the Holy Spirit
Andy Muzik	Residents
Joseph Pratt	Residents
Stan Reznik	Residents
William Rubinstein	Residents
David Schaper	Residents
Rob Sturru	Residents
Rob Weinberg	Westgate HOA
Brett Blomberg	Mayor
Mara Grujanac	Village Trustee
Brad Burke	Village Manager
Rob Horne	Public Works
Steve Robles	Village Planner
Mike Tiemens	Bank Financial
Jennifer Lugo	Residents
Roger Mankus	Residents
Stancia Kalmus	Residents
Craig Parcels	Residents
Molly O'Toole	Planning Consultant

2.2 Public Involvement

Step 2 of the planning process was to obtain input from the public, particularly property owners that have been affected by natural hazards. The public was invited to participate through several concurrent means, including:

- Public meeting held at the beginning of the planning process at the Village Hall on June 20, 2013
- Property owner survey made available online and on paper at the Village Hall
- All meetings made open to the public (provided on Village website)
- Press releases provided to local newspapers
- Public meeting held prior to Mitigation Plan adoption by the Village Board on September 25, 2014



The Village of Lincolnshire meetings were publicized through media and the Village of Lincolnshire website. Examples of public involvement efforts are provided in Appendix A.

June 20, 2013 Public Meeting: This public meeting, held at the beginning of the planning process, kicked off the Village’s mitigation planning effort. Ten families attended the public meeting. The Village used the meeting to explain flood mitigation plans to be developed, to collect input from residents who were flooded in April 2013, and to request volunteers for the Planning Committee. See Appendix B for copy of Village’s website homepage.

Public Input Survey: The Village of Lincolnshire developed a 28 question public input survey for the development of this Mitigation Plan and for the development of the “Village of Lincolnshire Plan for Flood Mitigation Public Information and Flood Insurance Coverage Improvement.”

The survey was available online and printed copies of the survey were also made available at the Village Hall. The survey was open from July to August, 2013. Ten questions were presented and results were used to evaluate and prioritize natural hazards and to develop a sense of citizens’ understanding of their mitigation needs.

Fifty residents participated in the survey. Results of the survey are summarized in Appendix B of this Mitigation Plan.

Public meeting: A public meeting was held regarding the Village of Lincolnshire Natural Hazard Mitigation Plan on September 25, 2014.

2.3 Agency Coordination

Coordination (Step 3) with agencies and organizations was accomplished through meetings, phone conversations, e-mail exchanges, and/or through participation on the Planning Committee. At the end of the planning process, agencies were also sent a notice requesting their review of the draft Mitigation Plan. They were asked to provide any comments in time for the public meeting.

The agencies included the Federal Emergency Management Agency (FEMA) and the Lake County Stormwater Management Commission. Neighboring communities were also informed of the Village's planning efforts. See sample letter in Appendix B.

Existing plans and programs were reviewed throughout the planning process. Plans reviewed and incorporated are discussed further in Chapters 3 - 5.

2.4 Plan Adoption and Implementation

The Village of Lincolnshire Board of Trustees adopted this Mitigation Plan and will implement the action plan. The Village will also continue to implement the applicable action items in the adopted Lake County ANHMP. Maintenance of this Mitigation Plan is discussed in Chapter 7.

Chapter 3. Risk Assessment

Chapter 3 of the Lake County ANHMP presents a natural hazards risk assessment for Lake County. This Mitigation Plan relies on the Lake County ANHMP risk assessment. A summary of the risk assessment, as it applies to the Village of Lincolnshire is presented in this Chapter.

3.1 Natural Hazards in Lake County and Lincolnshire

Table 3-1 presents a list of all disaster and emergency declarations that have occurred in Lake County, according to the FEMA. This list presents the foundation for identifying what hazards pose the greatest risk within Lake County.

Table 3-1 Presidential Disaster (DR) And Emergency Declarations (EM) In Lake County

Declaration Number	Date	Event Details
194-DR	April 25, 1965	Tornadoes, Severe Storms, Flooding
OEP 227-DR	April 25, 1967	Tornadoes
OEP 373-DR	April 26, 1973	Severe Storms, Flooding
FEMA 3068-EM	January 16, 1979	Blizzards and Snowstorms
FEMA 776-DR	October 7, 1986	Severe Storms, Flooding
FEMA 997-DR	July 9, 1993	Severe Storms, Flooding
FEMA 1110-DR	April 23, 1996	Tornadoes, Severe Storms
FEMA 3134-EM	January 8, 1999	Winter Snow Storm
FEMA 3161-EM	January 17, 2001	Severe Winter Storm
FEMA 3230-EM	September 7, 2005	Hurricane Katrina Evacuation
FEMA 1729-DR	September 25, 2007	Severe Storms, Flooding
FEMA 3283-EM	March 13, 2008	Snow
FEMA 1771-DR	June 24, 2008	Severe Storms, Flooding
FEMA 1960-DR	March 17, 2011	Severe Winter Storm and Snowstorm
FEMA 4116-DR	April 13, 2013	Severe Storms, Flooding
(no declaration)	June 2013	Additional Flooding

Also, while Lake County was not included, Cook County to the south of Lake County had two disasters declared: DR 1800 for flooding on September 13, 2008 and DR 1935 for flooding in July-August 2010. Lake County was impacted by these events, but damage did not warrant the county being included in the declaration.

Two additional floods along the Des Plaines River occurred since the Village of Lincolnshire adopted the 2012 Lake County ANHMP in 2013.

Based on the input from the LPC and the record of hazard events in Lake County, the priority hazards for this 2012 Lake County ANHMP update include:

- Flood
- Tornado
- Severe Summer Storms
- Severe Winter Storms
- Dam Failure
- Temperature
- Extreme Drought
- Earthquake

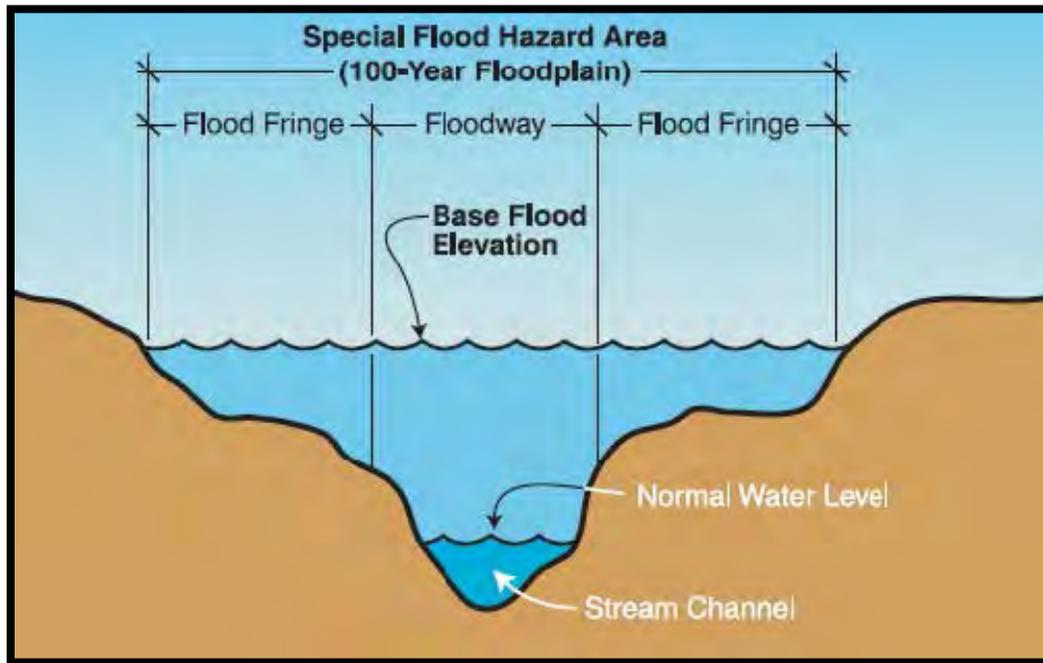
The Village of Lincolnshire Hazard Mitigation Planning Committee reconsidered the hazards and identified the following list:

- Flood
- Severe Summer Storms
- Severe Winter Storms
- Tornado
- Dam Failure
- Erosion
- Extreme Temperatures
- Drought
- Wildfire

Note wildfire was added to the above list, but a risk assessment of the hazard is not included in this Mitigation Plan. It is the intention of the Village to examine wildfire in the next update of this Mitigation Plan.

3.2 Flood

A flood is a natural event for rivers and streams and occurs when a normally dry area is inundated with water. Excess water from snowmelt or rainfall accumulates and overflows onto the stream banks and adjacent floodplains. As illustrated in Figure 3-1, floodplains are lowlands, adjacent to rivers, streams and creeks subject to recurring floods. Flash floods, usually resulting from heavy rains or rapid snowmelt, can flood areas not typically subject to flooding, including urban areas. Extreme cold temperatures can cause streams and rivers to freeze, causing ice jams and creating flood conditions.

Figure 3-1 Description of a Floodplain

Floods are considered hazards when people and property are affected. In Illinois, flooding occurs commonly and can occur during any season of the year from a variety of sources. Pipelines, bridges, and other infrastructure can be damaged when high water combines with flood debris. Basement flooding can cause extensive damage. Flooding can cause extensive damage to crop lands. Several factors determine the severity of floods, including rainfall intensity and duration, topography and ground cover.

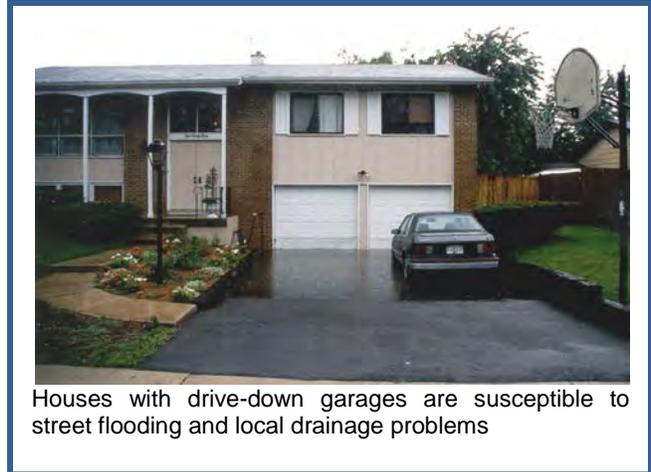
Riverine flooding originates from a body of water, typically a river, creek, or stream, as water levels rise onto normally dry land. Water from snowmelt, rainfall, freezing streams, ice flows, or a combination thereof, causes the river or stream to overflow its banks into adjacent floodplains. Winter flooding usually occurs when ice in the rivers creates dams or streams freeze from the bottom up during extreme cold spells. Spring flooding is usually the direct result of melting winter snow pack, heavy spring rain, or a combination of the two.

Flash floods can occur anywhere when a large volume of water flows or melts over a short time period, usually from slow moving thunderstorms or rapid snowmelt. Because of the localized nature of flash floods, clear definitions of hazard areas do not exist. These types of floods often occur rapidly with significant impacts. Rapidly moving water, only a few inches deep, can lift people off their feet, and only a depth of a foot or two of water, is needed to sweep cars away. Most flood deaths result from flash floods.

Urban flooding or local drainage problems can occur anywhere in Lake County. Most local drainage problems result in shallow flooding on roads, yards and, sometimes in buildings.

In some areas, a development is actually located in a drainageway or in a depressional ponding area. Inadequately maintained drainage ditches, undersized storm sewers, and failing tile drains or storm sewers are common causes of local flooding.

Local drainage problems have the greatest damage impact on homes with drive-down basement garages and split-level homes in low lying areas. In the case of drive-down garages, water accumulating on the street finds a low driveway and fills a home's basement. Split-level homes provide easy access for surface floodwaters to enter through the ground level windows.



Houses with drive-down garages are susceptible to street flooding and local drainage problems

Since much of Lake County was once tiled to provide drainage for farmland, failed or inadequate drain tiles are a large problem in the developing areas of the county. Many tiles are old and were not designed to handle the stormwater loads development produces. The same is also true for older storm sewer systems. Most storm drains and road culverts are not designed to carry more than the 10-year storm.

Depressional flooding is common in Lake County. Lake County has a gently rolling landscape including many depressional areas left from the Wisconsin Glacial Period. The common problem with development in many of these depressional areas is there is no natural outlet for runoff. Some depressions are former wetlands drained with field tiles originally installed to make them farmable. In many cases the tiles are old, in disrepair, and often have limitations for handling the increased volumes of runoff resulting from development. When the drainage system for depressional areas becomes overloaded, runoff simply fills up a depression. Without an adequate outlet, floodwater will remain until it evaporates, seeps into the ground or trickles through a tile.

Sanitary Sewer Backups. There are few combined sewers in Lake County where stormwater and wastewater discharges are transported in the same pipe system. Therefore, most of the sanitary sewer backups are caused by infiltration of stormwater into the sanitary sewer pipes, leaky manholes and inappropriate connections from residential storm drains, roof drains and sump pumps to sanitary sewer lines. In some places excess stormwater in sanitary sewers causes manhole covers to lift off, and sewage finds its way into rivers and lakes via the storm drainage system. The contamination of surface waters with sewage degrades water quality by adding fecal coliform and excess nutrients that reduce dissolved oxygen in the water and can lead to the spread of communicable diseases. Beach closures and swimming bans are a common result.

Erosion and Sedimentation. Areas prone to the most erosion damage are the bluffs and ravines, lake shores, and high energy flow streams. Channelized stream reaches are less stable and more erosive than meandering sections. Erosion will be discussed in Section 3.11.

3.2.1 Lake County-Lincolnshire Watersheds

There are four major watersheds in Lake County, shown in Exhibit 3-1 along with 26 subwatersheds. The Village of Lincolnshire is part of two major watersheds:

The **Upper Des Plaines River** watershed is located in northeastern Illinois, Lake and Cook Counties, and Kenosha and Racine Counties in southeastern Wisconsin. A summary of the watershed is presented in Table 3-2. The Upper Des Plaines is subject to significant flooding caused by lack of channel capacity of the mainstem of the Des Plaines River and tributaries to carry major flows during storms. Historical flooding in 1986 and 1987 resulted in over \$100 million in damages.

The main stems of the Fox and Des Plaines Rivers have flood characteristics very different from the other major watershed of the county. The Fox and Des Plaines Rivers experience their worst floods from rain events lasting a few days, or from a series of small rain events over a longer duration. The greatest flooding along the Fox and Des Plaines Rivers occurs following longer rain events. The floods of 1960 and 1986 resulted from long steady rains which eventually overwhelmed the available floodplain storage and set new flood stage records on the Fox and Des Plaines Rivers respectively.

Table 3-2 Des Plaines River Watershed in Lake County

Des Plaines River Watershed				
Area:	202 mi ²	Municipalities:		
	42% of County	Antioch	Indian Creek	Mundelein
Public Land:	11,730 acres	Beach Park	Kildeer	Old Mill Creek
Wetlands:	20,595 acres	Buffalo Grove	Lake Villa	Riverwoods
		Deer Park	Lake Zurich	Round Lake Beach
		Grayslake	Libertyville	Round Lake Park
		Green Oaks	Lincolnshire	Third Lake
Subwatersheds:	Area (mi²):	Gurnee	Lindenhurst	Vernon Hills
North Mill Creek	21.5	Hainesville	Long Grove	Wadsworth
Newport Drain	8.4	Hawthorn Woods	Mettawa	Wheeling
Mill Creek	31			
Upper Des Plaines	53	Townships:		
Bull Creek/Bull's Brook	12.3	Antioch	Lake Villa	Warren
Indian Creek	37.7	Avon	Libertyville	Waukegan
Lower Des Plaines	18.2	Benton	Newport	West Deerfield
Buffalo Creek	13.7	Ela	Vernon	Zion
Aptakisic Creek	6.3	Freemont		

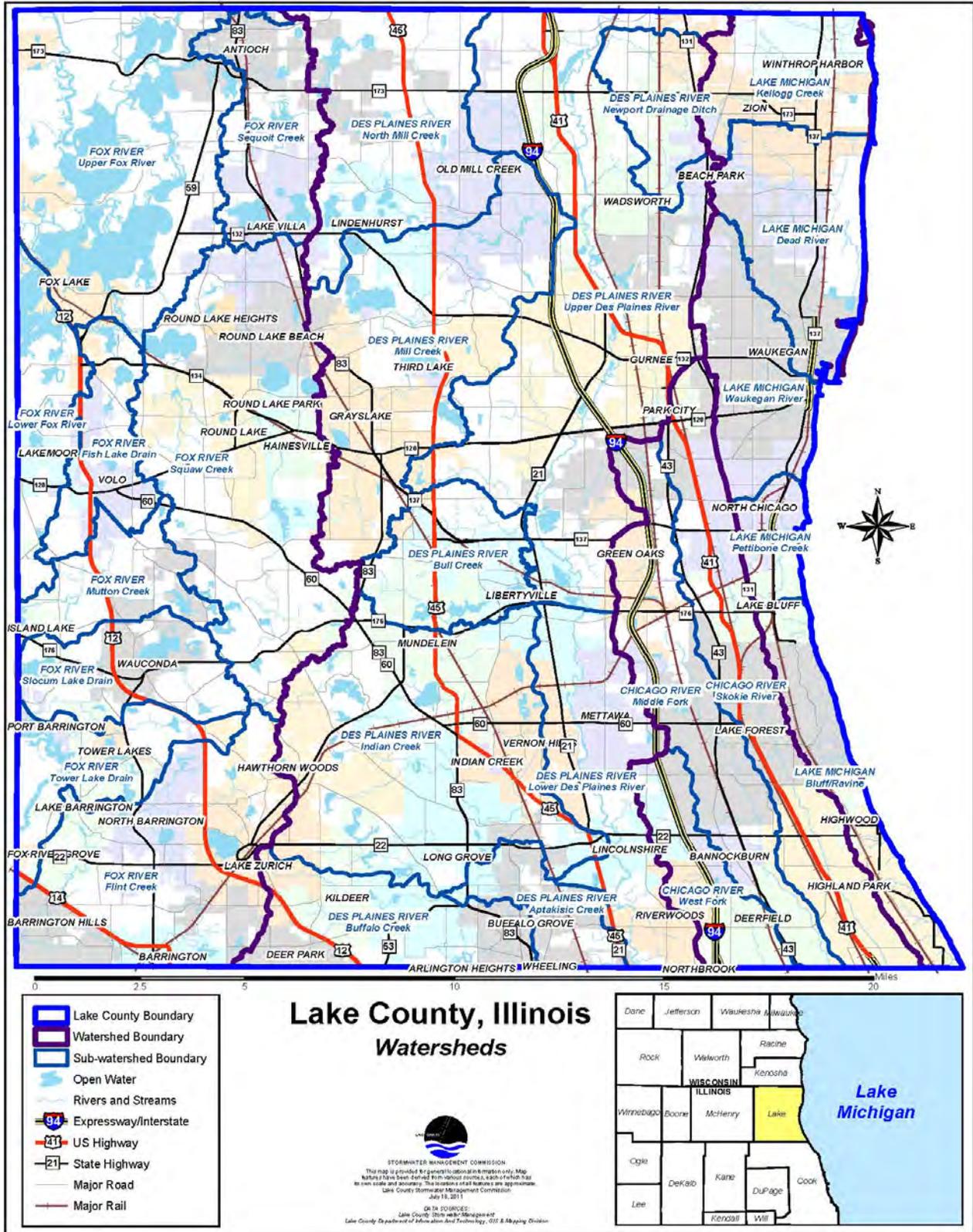


Exhibit 3-1 Lake County Watersheds and Subwatersheds
 This map can be downloaded at the Lake County SMC website

The 1986 event resulted from 10 days of widespread steady rain. It took the Des Plaines 4 weeks to pass this floodwater. For the larger Fox River, the time to pass this flood was 6 weeks. In comparison, the smaller watershed of the Skokie River drained down to normal only a few days after the rains ended. Long-duration rain events or snow pack can also cause major flooding on the larger rivers.

Exhibit 3-1 show the lakes located within the Fox River and Des Plaines River Watersheds. The lakes are a resource and also a concern when the Fox River and Des Plaines Rivers are at flood stage for extended periods and lake levels are elevated as a result.

The **North Branch Chicago River Watershed** is noted for three long and narrow subwatersheds surrounding the 3 forks of the North Branch of the river. A summary of the watershed is presented in Table 3-3. Floods on these long and narrow watersheds are affected by the direction taken by a storm. On the three forks, the worst flooding is caused by storms moving from north to south. The runoff moves under the storm front and concentrates as it goes downstream. Storms passing east to west produce smaller floods, and storms passing south to north produce the smallest floods.

The worst floods are caused by day-long rain events, but, because the watershed is so narrow, short intense rain events can also cause severe local flooding.

For more information on the North Branch Chicago River Watershed, see the “North Branch Chicago River Watershed-Based Plan,” 2008, for Lake and Cook Counties, Illinois, which is available at the Lake County SMC website:
<http://www.lakecountyil.gov/Stormwater/LakeCountyWatersheds/>.

Table 3-3 North Branch of the Chicago River Watershed in Lake County

North Branch Chicago River Watershed				
Area:	202 square miles	Municipalities:		
	11% of County	Bannockburn	Highwood	North Chicago
Public Land:	1,655 acres	Deerfield	Lake Bluff	Park City
Wetlands:	4,390 acres	Green Oaks	Lake Forest	Riverwoods
		Gurnee	Lincolnshire	Waukegan
		Highland Park	Mettawa	
Subwatersheds:	Area (mi²):	Townships:		
West Fork	8.6	Deerfield	Vernon	Waukegan
Middle Fork	19.8	Libertyville	Warren	West Deerfield
Skokie River	21.9	Shields		

3.2.2 Flood Insurance Coverage

An examination of National Flood Insurance Policies and Flood Insurance claims highlights the number of communities impacted by past flooding. Table 3-4 shows the Village of Lincolnshire flood insurance coverage and flood insurance claims since 1978. Policies are shown for an entire community, including portions of communities located in other counties.

Table 3-4 Lake County Flood Insurance Active Policies and Claims, FEMA 2014

Community	Number of Active Policies	Total Premium	Total Coverage	Number of Claims*	Total Paid
Village of Lincolnshire	121	\$ 131,422	\$34,296,300	27	\$ 1,167,989

* Since 1978

3.3.3 Repetitive Flood Loss Properties

FEMA defines a “repetitive loss structure” as a flood-insured structure that has received two or more flood insurance claim payments of more than 25% of the market value within any 10-year period. Lake County currently has 86 repetitive loss structures on the FEMA list. Of the 86 properties, 18 have been mitigated (acquired, elevated or otherwise protected). The remaining 68 properties are located in 14 municipalities and unincorporated Lake County, as presented in Table 3-5.

Table 3-5 Lake County Repetitive Loss Structures

Community	Number of Repetitive Loss Properties as of 6/30/2004*	Number of Repetitive Loss Properties as of 3/31/2011	Mitigated	Mitigation Status	Remaining Repetitive Losses
Village of Lincolnshire	1	1	0	unmitigated	1

The repetitive flood loss structures are located throughout the county, but are more concentrated in the Fox River Watershed. They are nearly all single family residences. Two repetitive loss properties are commercial properties.

The repetitive loss properties were examined and new repetitive flood loss areas were identified for the 2012 Lake County ANHMP. The repetitive loss areas are shown in Exhibit 3-4 of the Lake County ANHMP. Repetitive flood loss areas include 1 or more repetitive loss properties and the neighboring or nearby properties subject to similar flood damage. The repetitive loss area for the Village of Lincolnshire in the Lake County ANHMP is Repetitive Loss Area 27.

3.2.4 Past Floods and Future Flood Frequency

The National Climate Data Center (NCDC), maintained by the National Oceanic and Atmospheric Administration, records weather events as they are submitted. The NCDC has a record of flooding in Lake County from 1996 to 2010, and this data is shown in Table 3-18 of the Lake County ANHMP. Other small floods most likely occurred but did not get recorded. The NCDC data recorded no injuries or deaths with these events.

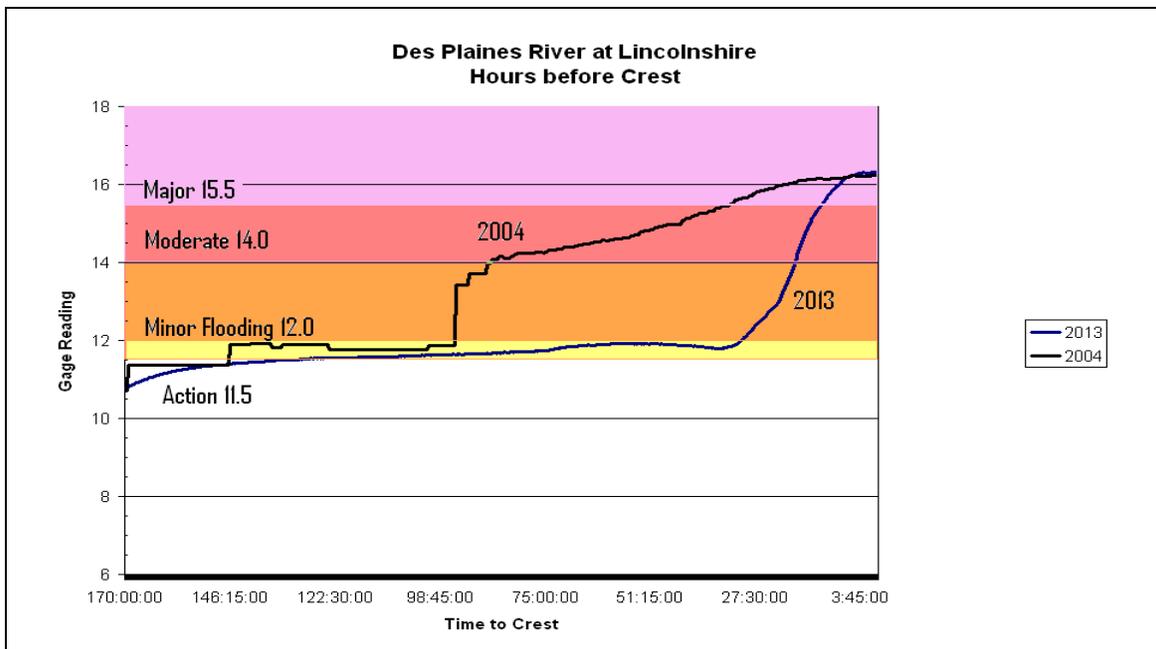
2004 Flood: The May 2004 event attracted national attention and was destructive on a wide scale. River flooding was recorded across Lake County and portions of Cook County and Lake County, as well as local flash flooding from individual storms that occurred during this month. River flooding, mainly on the Des Plaines River, had some of its origin in southern Wisconsin, but affected the river channel through Lake County and into Cook County. Monthly rainfall totals peaked over 10 inches across Lake and Cook Counties, while 6 inches or more were common further south including northwest Indiana.

Throughout Lake County, overbank flooding is most extensive along the Des Plaines River with the highest historical floods occurring in 1938, 1960, 1979, 1986 and 2004.

1986 Flood: Northeastern Illinois received almost one inch of rain daily from September 21 through October 4, 1986. On some days, there was as much as three inches. Over this two-week period, the Des Plaines watershed received up to 12.9 inches of rain compared to the normal monthly amount of 3 inches. The flooding in Lake County killed four people. One person drowned when his boat capsized and three people had heart attacks fighting the flood.

On September 25, 1986 the Des Plaines River was two feet over flood stage and high enough to reach buildings. This flooding, along with flooding in the Fox River/Chain of Lakes watershed, resulted in a disaster declaration by the President on October 7, 1986 for Cook, Kane, and Lake Counties. The worst flooding in Lake County was in the Village of Gurnee, where approximately 100 buildings were flooded. Based on the flood insurance claims, they suffered an average of \$10,000 in damage.

April 2013: Very heavy rains in the early morning hours on April 18, 2013 brought flooding to much of northeastern Illinois. The Des Plaines River rapidly rose, exceeded the 12.8 foot stage predicted by the National Weather Service to 16.33 feet. As show on the chart below, major flood damage begins at 15.5 feet on the Des Plaines River at Lincolnshire river gage.



In the Village of Lincolnshire ten houses were evacuated. Six of those houses had water over the first floor. Over 30 homes were not accessible by vehicle. Exhibit 3-2 shows a map compiled by the Village of Lincolnshire of known flood issues from the April 2013

Reported flood events over the past 25 years provide an acceptable framework for determining future occurrences in terms of frequency for such events. The probability of the County and its municipalities experiencing a flood event can be difficult to quantify, but based on historical record of 28 flood events since 1986, it can reasonably be assumed this type of event has occurred once every 1.12 years from 1986 through 2011.

[(Current Year) 2011] subtracted by [(Historical Year) 1986] = 25 Years on Record

[(Years on Record) 25] divided by [(Number of Historical Events) 28] = 1.12

Furthermore, the historic frequency calculates there is an 89% chance of this type of event occurring each year.

3.2.5 Vulnerability - Impacts of Flooding

Lake County's population is expected to continue to grow and development will continue. Lake County is currently susceptible to flooding, and it should be anticipated flood risk will continue to grow. Lake County has been implementing a number of mitigation actions to abate this potential increase in flood risk, including the enforcement of the Lake County Watershed Development Ordinance and comprehensive watershed planning to protect against new flood damages (these efforts are summarized in Chapter 4). However, Lake County is part of two large watersheds and cannot regulate development in Wisconsin. Life, health and safety, buildings, critical facilities, infrastructure and the economy are all affected by flooding in Lake County.

Health and safety: Safety during a flood, whether from overbank flooding or groundwater flooding (basements), is a concern. If clean-up after a flood is not properly done, then health problems can develop due to mold. Flooding roads and viaducts are dangerous. People continue to be at risk when driving through floodwaters; fast moving waters are a hazard to people in and out of cars. The highest flood depths are at the Fox River, but stormwater flooding away from the floodplain in Lake County can also threaten lives, as emphasized in the death during the 1986 flood event.

Impact to health and safety due to flooding is considered **moderate**.

Damage to Buildings: The Lake County estimate of structures located in the floodplain and floodway is shown in Table 3-6. These numbers are from the 2006 Lake County ANHMP and are based on earlier FEMA maps. These numbers will be updated for the new FEMA flood maps that became effective for Lake County on September 18, 2013.

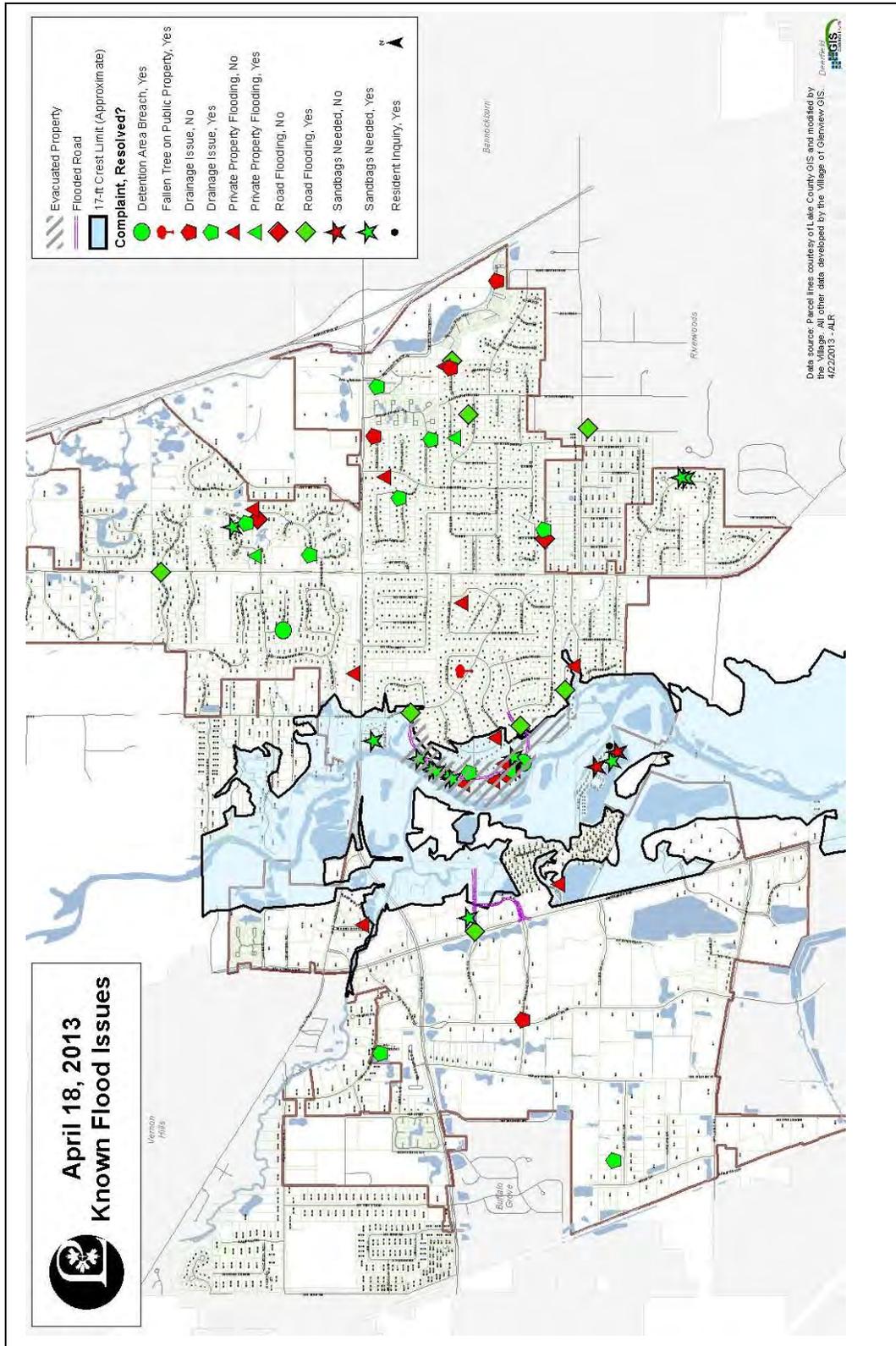


Exhibit 3-2 Village of Lincolnshire April 2013 Known Flood Issues

Table 3-6 Structures Located in Lake County Floodplains

Watershed	Number of Structures in Floodplain	Number of Structures in Floodway
Fox River	6,420	219
Des Plaines River	2,547	695
North Branch Chicago River	1,332	431
Lake Michigan	604	103
Total:	10,903	1,448

* Source: SMC GIS

Among the 10,903 structures located in the floodplain are at least 60 of the 68 FEMA repetitive flood properties in Lake County that have not been mitigated. The value of these structures is estimated in Table 3-7.

Table 3-7 Estimated Market Value of Structures Located in Lake County Floodplains

Land Use	Estimated Market Value
Residential	\$1,072 million
Commercial	\$494 million
Industrial	\$137 million
Agricultural	\$6 million
Total Estimated Value:	\$1,709 million

The range of flood damage to buildings is likely to be 5% to 50%, or a range \$85 million to \$850 million. Impact to buildings due to flooding is considered high.

Critical Facilities and Infrastructure: SMC data shows approximately 20 critical facilities could be closed or subject to flooding. As the County’s GIS is expanded, a more accurate count of critical facilities in the floodplain will be developed.

Impact to critical facilities due to flooding is considered moderate.

Economic Impact: Flood damage to businesses is difficult to estimate. Businesses disrupted by floods often have to be closed. They lose inventories, customers cannot reach them, and employees are often busy protecting or cleaning up flooded homes. Business can be disrupted, regardless of whether or not the business is located in the floodplain, when customers and clients cannot reach their location. As with flooded roads, public expenditures on flood fighting, sandbags, fire department calls, clean-up and repairs to damaged public property affect all residents of the County, not just those in the floodplain.

Therefore, overall economic impact to businesses is high.

3.2.6 Flood Focus Areas

The Village of Lincolnshire Natural Hazard Mitigation Planning Committee identified several areas from past floods they recommend be focus areas of flood mitigation. The focus areas are shown in Exhibit 3-3, and they include:

Area 1 – Lincolnshire - Londonderry

Area 2 – Rivershire

Area 3 – Westminster – Sutton Place

Area 4 – Indian Creek

These areas may be referred to within this Mitigation Plan and CRS plans developed by the Village.

3.3 Summary of Natural Hazards Risk Assessment

This risk assessment examines natural hazards that could impact Lake County. Section 3.12 in the 2012 Lake County ANHMP summarized the impact of the hazards on Lake County and presents conclusions drawn from the assessment. That section is repeated here.

3.3.1 Impact of the Hazards

The impacts of the hazards are summarized according to the four major concerns:

- Health and safety,
- Damage to buildings,
- Damage to critical facilities and infrastructure, and
- Economic impact.

After the conclusion of the hazard assessments and vulnerability assessments of the priority hazards, the LPC discussed findings to determine overall impact the hazard has on the County and the municipalities. The hazards and their impact are shown in Table 3-8, “Lake County Summary of the Hazards.” The different columns in the table represent the following:

Annual Chance or Frequency: The annual chance column in the table shows the likelihood of occurrence in any given year. These numbers are discussed in the “Frequency” section of each hazard.

Impact Location: The location and area affected by a single occurrence is shown.

Square Miles Impacted: The portion of the County vulnerable to the hazard.

Value of vulnerable property: The property damage exposure computed in Section 3.2 of this Chapter.

[To be updated.]

Exhibit 3-3 Village of Lincolnshire Flood Focus Area

NATURAL HAZARDS MITIGATION PLAN

FLOOD INSURANCE ACTIVE POLICY HOLDERS MAP Legend

-  Storm Improvement
-  Water Improvement
-  Sanitary Improvement
-  Other Improvement
-  Floodway
-  Special Flood Hazard Area
Zone AE (100-Year Flood Plain)
-  Water
-  Open Space
-  Corporate Limits
-  Secondary Areas

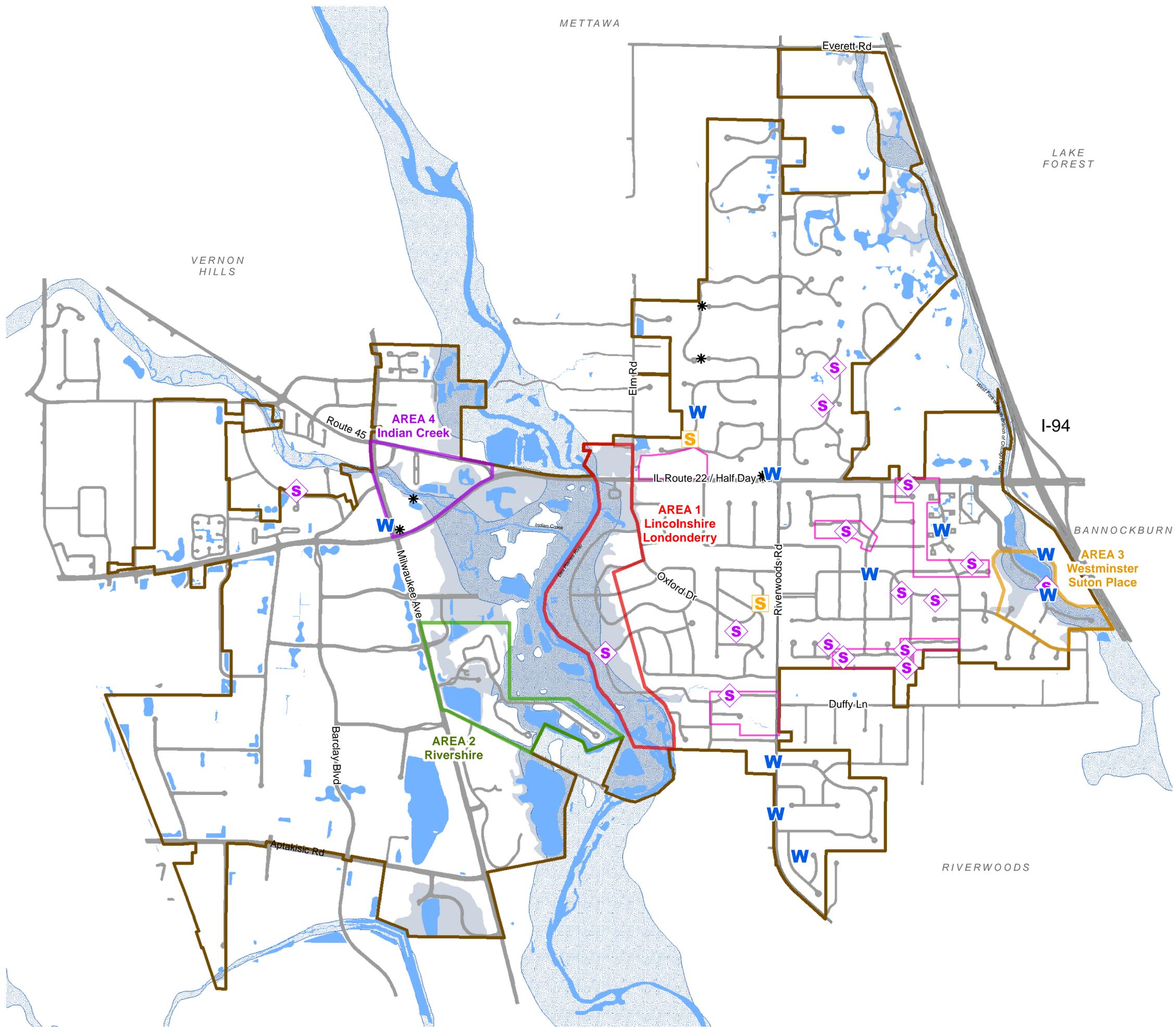
Parcels in the SFHA	479
Parcels in the SFHA with structures*	207
Policies in Area 1	59
Policies in Area 2	18
Policies in Area 3	10
Policies in Area 4	1

Data source: Floodway and floodplain data adapted from FEMA. All other data from the Village of Lincolnshire GIS. Printed 6/16/2014 - JVD

* Count reflects structures in the SFHA, as recorded in the 2011 Cycle Verification Follow-up memo, section 7, Activity 530, by Jennifer Hughes. Actual parcel count may be slightly lower.



1 inch equals 800 feet



Potential Damage: The range of potential damage related to the square miles impacted and the value of exposed property.

Impact on Health and Safety: This category relates to health and safety hazards. Ratings of high, medium, or low are shown.

Impact on Buildings: The vulnerability of structural damage to buildings or other property damage.

Critical Facilities: The types of critical facilities and infrastructure affected are listed.

Economic Impact: Typical impacts on businesses and utilities are listed in this column.

The County, all municipalities, other agencies and institutions involved in this Lake County ANHMP are exposed to all identified hazards. This is due to the relatively flat topography of the County. While much of the County is still in agricultural use, the residents and business are equally impacted by the identified natural hazards as the urban areas. Flooding in the floodplain has been considered but it is understood flooding is not limited to floodplain areas. Community impact does vary by degree between larger and smaller communities based on population and number of buildings.

Table 3-8 Summary of Lake County Natural Hazards from the Lake County ANHMP

Hazard	Annual Chance	Impact Location	Square miles Affected	Value of Vulnerable Property	Potential Damage	Impact on Health and Safety	Impact on Buildings	Impact on Critical Facilities	Economic Impact
Floods	1%	Floodplains	80	\$1.7 billion	\$85-\$850 million	Moderate	High	Moderate	High
Floods	10%	(Local Drainage)	448	---	---	Moderate	Moderate	Moderate	Moderate
Tornado	0.01%	Countywide	10	\$58 billion	\$872 million	High	High	Moderate	Moderate
Tornado	30.00%	Community	5	\$58 billion	\$419 million	High	High	Moderate	Moderate
Severe Summer Storms	100%	Communities	448	\$58 billion	---	Moderate	Moderate	Moderate	Low
Severe Winter Storms	100%	Countywide	448	\$58 billion	---	Moderate	Moderate	Moderate	Low
Drought	1%	Countywide	448	\$58 billion	---	High	Moderate	Low	Moderate
Earthquake	100%	Countywide	448	\$58 billion		Low	Low	Moderate	Low
Dam Failure	0%	Countywide	448	\$58 billion		--	--	--	--
Extreme Temperatures	18%	Countywide	448	\$58 billion	---	High	Low	Low	Low
Erosion	--	Countywide	448	\$58 billion		--	--	--	--

As mentioned earlier, the Village of Lincolnshire Natural Hazard Mitigation Planning Committee added wildfire to their list.

3.3.2 Comparison to State of Illinois 2013 Natural Hazard Mitigation Plan

The 2013 Illinois Natural Hazard Mitigation Plan prepared by the Illinois Emergency Management Agency (IEMA) hazard rating system has five levels: low, guarded, elevated, high and severe. Lake County’s hazard ratings for identified natural hazards are in the 2013 Plan are shown in Table 3-9.

Table 3-9 IEMA Hazard Ratings for Lake County

Hazard	IEMA Rating
Floods	Elevated
Tornado	High
Severe Summer Storms	Severe
Severe Winter Storms	Severe
Drought	Guarded
Earthquake	Guarded
Extreme Heat	Elevated

Chapter 4.

Mitigation Goals

Chapter 4 of the Lake County ANHMP established hazard mitigation goals and objectives for the County. The County went through an exercise to examine priorities and other factors for establishing the goals. At the October 17, 2013 meeting, the Lincolnshire Mitigation Planning Committee went through the same exercise. Planning Committee members then modified the Lake County goals and guidelines to reflect the Village's needs and priorities.

4.1 Community Priorities and Plan Direction

To better understand, community priorities, Planning Committee members selected their top five choices for a list of potential priorities. For community priorities, the top four selected responses were:

- Provide a safe place to live and work
- Improve schools and education programs
- Improve/ get more business
- Improve/get more open space

Other responses included improve employment opportunities, water quality habitat, roads and highways and public transportation opportunities. and preserve historic and cultural resources.

For the exercise "What to Focus On," the Planning Committee was asked what the Village's hazard mitigation effort should focus on. The top five responses included:

- Protecting people's lives
- Protecting public health
- Protecting public services
- Protecting critical facilities
- Protecting wetlands, Illinois Nature Preserve area and other special areas

Other choices included giving attention to the elderly and special populations, and protecting future development.

For the exercise "How to Fund and Implement," the Planning Committee chose from a list of funding and implementation options for accomplishing hazard mitigation efforts. The top six responses included:

- Inform people of how they can protect themselves
- Make people aware of the hazards they face
- Help people protect themselves
- Develop public/private partnerships

- Protect life/safety regardless of cost
- Use county/municipal agencies to implement mitigation activities

Other choices included, only fund projects where it's proven the benefits exceed the costs, new developments should pay full cost of protection measures, and protect critical facilities regardless of the cost.

4.2 Goals and Guidelines

From the above responses, the goals and guidelines for the Village of Lincolnshire's hazard mitigation efforts are:

Goal 1. Protect the lives, health, and safety of the people of the Village of Lincolnshire from the impact and effects of natural hazards.

Goal 2. Protect public services, utilities and critical facilities from potential damage from natural hazard events.

Goal 3: Mitigate existing buildings to protect against damage from natural hazard events.

Goal 4. Ensure new developments do not create new exposures of people and property to damage from natural hazards.

Goal 5. Mitigate to protect against economic and transportation losses, including the loss of wetlands and other natural resources due to natural hazards.

The following guidelines are for the purpose of achieving the goals and to facilitate the development of hazard mitigation action items:

Guideline 1. Focus natural hazards mitigation efforts on floods, severe summer and winter storms, tornadoes, erosion, extreme temperatures, drought, and wildfires.

Guideline 2. Make people aware of the hazards they face, and focus mitigation efforts on measures allowing property owners and service providers to help themselves.

Guideline 3. Identify specific projects to protect lives

Guideline 4 Identify specific projects to mitigate damage where cost-effective and affordable.

Guideline 5. Use available local funds, when necessary, to protect public services, critical facilities, lives, health and safety from natural hazards.

Guideline 6. Develop and foster public agency and private property owner partnerships to fund and implement mitigation measures, and examine equitable approaches for local mitigation costs, such as user fees.

Guideline 7. Strive to improve and expand business, transportation and education opportunities in the Village of Lincolnshire in conjunction with planned mitigation efforts.

4.3 Consistent with Other Plans

The developed goals and guidelines were compared to the goals included in the Village of Lincolnshire's Comprehensive Land Use Plan and the Village of Lincolnshire Emergency Operations Plan. At the November 2013 meeting the Planning Committee had an opportunity to review these plans and other plans adopted by the Village.

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Chapter 5. Mitigation Strategies and Capability Assessment

Chapter 5 of the Lake County ANHMP examines hazard mitigation activities currently being implemented by Lake County and the Lake County municipalities, and examines various hazard mitigation strategies that can be undertaken in the future. The Village of Lincolnshire will use Chapter 5 of the Lake County ANHMP as a resource to understand various hazard mitigation strategies for the priority natural hazards identified in Chapter 3 of the Village of Lincolnshire Mitigation Plan.

- | Mitigation Strategies |
|-------------------------------|
| • Preventative Measures |
| • Property Protection |
| • Natural Resource Protection |
| • Emergency Services |
| • Structural Measures |
| • Public Information |

This Chapter presents a list of hazard mitigation recommendations for the Village of Lincolnshire with a focus on flood hazards. The recommendations in this chapter and in the Lake County ANHMP provide a menu of options for the development of the action plan presented in Chapter 6 of this Mitigation Plan. The recommendations are consistent with the Village of Lincolnshire’s mitigation goals and guidelines presented in Chapter 4.

Six basic strategies, shown in the box above and in Table 5-1, may be applied to mitigate potential damage to property and impact to health and safety from natural hazards. Each strategy includes mitigation measures appropriate for different conditions, as shown in Table 5-1. For instance, planning and regulation measures, as a preventative strategy, are more appropriate for developing areas, while property protection strategies are approaches for existing development and buildings.

Table 5-1 Natural Hazard Mitigation Activities

Natural Hazards:	Preventive	Property Protection	Emergency	Resource Protection	Structural Measures	Public Information
Floods (100-year/10-year)	X	X	X	X	X	X
Tornado/High Wind	X	X	X			X
Severe Summer Storms/Hail	X	X	X	X	X	X
Severe Winter Storms	X		X			X
Dam Failure	X		X	X	X	X
Wildfire	X	X	X	X		X
Erosion	X	X		X	X	X
Extreme Heat						X
Extreme Cold		X	X			X
Sewer Backup	X			X		X
Drought	X			X		X
Groundwater	X			X		X

A significant number of hazard mitigation measures are already being implemented by the Village of Lincolnshire. For example, the administration and enforcement of building codes provides protection of buildings from wind, flood and earthquake events, higher watershed standards through the Lake County Watershed Development Ordinance, and the Village drainage system maintenance efforts.

The following sections provide a brief summary of the six hazard mitigation strategies applicable to flood hazards, and recommendations made by the Mitigation Planning Committee for the Village of Lincolnshire. Mitigation strategies pertaining to the Village's other priority hazards are contained in the Lake County ANHMP. Note future updates of the Village of Lincolnshire Mitigation Plan can be expanded to further examine natural hazards other than floods. The recommendations from the Lake County ANHMP are also shown within each section. As mentioned above, the Chapter 5 of the Lake County ANHMP should be used as a resource document to further explain strategies and recommendations discussed here.

5.1 Preventive Measures

Preventive measures are intended to keep flooding problems from getting worse. They help insure future development does not increase flood damage, and include actions that maintain the drainage system's capacity to carry away floodwaters. The cost of implementing most prevention measures is relatively low in comparison to most remedial measures to reduce future damage. Preventive measures include activities such as:

- Planning and Zoning
- Watershed Regulations
- Building Codes
- Standards for Manufactured Homes
- Critical Facility Construction Requirements

Planning and Zoning: "Planning" can cover a variety of community plans including, but not limited to, comprehensive plans, land use plans, transportation plans, capital improvement plans, and economic development plans. While plans generally have limited authority, they reflect what the community would like to see happen in the future. Plans also guide other local measures such as capital improvements and the development of ordinances.

The 2002 *Lake County Comprehensive Stormwater Management Plan* adopted by the Lake County Stormwater Management Commissions (SMC) was developed to address county-wide stormwater planning needs and watershed regulations. The first countywide *County Comprehensive Stormwater Management Plan* was adopted in 1990 in response to worsening flooding, drainage and water quality problems. SMC has developed a number of watershed-based plans for four major watersheds of the county including North Mill Creek, Bull Creek and Indian Creek within the Des Plaines River Watershed.

A number of Lake County communities have incorporated floodplain development restrictions into their zoning ordinance.

Watershed Regulations: The Lake County Watershed Development Ordinance (WDO) has been in place in Lake County since 1992. The goal of the WDO is to ensure new development does not increase existing stormwater problems or create new ones. The WDO establishes minimum countywide standards for stormwater management, including floodplains, detention, soil erosion/sediment control, water quality treatment, and wetlands.

The National Flood Insurance Program (NFIP) sets the minimum floodplain regulation requirements for local floodplain ordinances. The State of Illinois enforces floodway standards exceeding NFIP minimum standards. Standards in the WDO reflect state and federal requirements for floodplain regulation and address specific Lake County flooding problems occurring in depressional storage areas and in unmapped floodplains/floodways.

To address flooding in unmapped floodplains, the WDO definition of a regulatory floodplain includes smaller tributaries subject to more than one square mile of drainage, and depressional areas, not associated with streams, having a storage volume of .75 acre feet or more when inundated by the base flood.

Building Codes: The administration and enforcement of building codes is one of the most effective approaches for addressing natural hazard mitigation. Current building codes protect new structures from damage by tornadoes, high winds, floods, snow storms, and earthquakes.

Other Preventive Measures: Many times after a flood, victims say they would have taken steps to protect themselves if only they had known they had a floodprone property. Three regulations, one federal and two state, require potential buyers of a parcel be told of any flood hazard.

Federal law: Federally regulated lending institutions must advise applicants for a mortgage or other loan to be secured by an insurable building that the property is in a floodplain as shown on the Flood Insurance Rate Map (FIRM). Flood insurance is required for buildings located within the 100-year floodplain if the mortgage or loan is federally insured. This program does not apply to flood prone areas not mapped on the FIRMs. Floodprone areas that are frequently not mapped include the floodplains of smaller channels and many depressional areas. Depressional area flooding is significant. The use of older flood studies in rapidly developing areas also results in outdated floodplain maps that do not reflect the actual flood risk.

Illinois Compiled Statutes: Chapter 55, Section 5/3-5029 requires subdivision plats must show whether any part of the subdivision is located in a Special Flood Hazard Area.

Illinois Residential Real Property Disclosure Act: This law, which went into effect on October 1, 1994, requires a seller to tell a potential buyer if the seller is aware of any flooding or basement leakage problem, if the property is located in a floodplain, or if the seller has flood insurance. The law is not wholly reliable because the seller must be aware of a problem and willing to state it on the disclosure form. Due to the sporadic occurrence of

flood events, a property owner may legitimately not be aware of potential flooding problems with a property being sold or purchased.

Lincolnshire Preventive Measure Conclusions and Recommendations

1. Current Village of Lincolnshire regulations for construction in the floodplain and stormwater management are effective.
2. The Village of Lincolnshire should continue to administer and enforce regulations and building codes to protect property from damage due to natural hazards (flood, tornado, severe storms and wind).
3. The Village should continue to coordinate with ComEd and other utility providers for the protection of utility service during and after extreme weather events.

Lake County ANHMP Preventive Measure Recommendations

1. Complete current and accurate floodplain maps for all Lake County watersheds and submit to FEMA for adoption.
2. The County and municipalities that participation in the NFIP should ensure that they fully and properly administer and enforce the requirements of the NFIP.
3. Complete current and accurate floodplain maps for all Lake County watersheds and submit to FEMA for adoption.
4. The County and municipalities that participation in the NFIP should ensure that they fully and properly administer and enforce the requirements of the NFIP.
5. The County and municipalities should ensure that they fully enforce all provisions of the WDO and the forthcoming amendments.
6. Communities that have not adopted the International Series of Codes should do so, and on a regional basis, municipal and County code enforcement staffs should work together to develop building code language to strengthen new buildings against damage by high winds, tornadoes and hail,
7. All communities should work to improve code administration and enforcement, and should also be trained on implementing the codes that are applicable to hazard mitigation.
8. The adequacy or current requirements for manufactured home and recreational vehicle parks for protection from natural hazards should be examined, especially concerns pertaining to placement in flood prone areas, tie downs and sheltering.
9. On a regional basis, municipal and county planning and engineering staff should develop example subdivision ordinance language that requires new infrastructure to have hazard mitigation provisions, such as secondary access to subdivisions.
10. Offices responsible for design, construction or permitting critical facilities should ensure that the design accounts for natural hazards and adjacent land uses.
11. Communities (certified and non-certified) need to understand and consistently enforce the WDO, the TAC should continue their efforts in these areas.
12. Communities should consider joining the NFIP's CRS program. For the municipalities already involved in CRS, they should work to improve their CRS class.

5.2 Property Protection

Property protection measures are used to modify or remove buildings subject to flood damage rather than to keep floodwaters away. Because of the widespread extent of flood damage caused by shallow, low velocity flooding in Lake County, traditional flood control structures such as levees and reservoirs are generally not economically justifiable in most areas. Individual property protection measures are usually the most preferred and cost-effective flood mitigation measures in these circumstances. Many property protection measures do not affect a building's appearance or uses, making them particularly appropriate for historical sites and landmarks.

Although most property protection measures are paid for and implemented by individual property owners, there is increasing government interest and cost-share funding available for building relocation and acquisition, which are seen as permanent solutions to flood damage. While property protection is viewed as the property owner's responsibility, local governments can actively support and promote private efforts by providing technical assistance and incentives. Property protection measures include activities such as:

- Building Acquisition/Relocation
- Building Elevation, Floodproofing or Barriers
- Building Structural Retrofitting
- Insurance

Building Acquisition/Relocation: Acquisition ensures buildings in a floodprone area will cease to be subject to damage. The major difference is acquisition is undertaken by a government agency, so the cost is not borne by the property owner, and the land is converted to an appropriate public use such as a park. Acquiring and clearing buildings from the floodplain is not only the best long-term flood protection measure, it also is a way to convert a problem area into a community asset providing environmental and recreational benefits.



This home was acquired by the SMC and the site was cleared for open space.

Moving a building to higher ground is the surest and safest way to protect it from flooding. While almost any building can be moved, the cost goes up for heavier structures, such as those made of brick, and for large or irregularly shaped buildings. Building relocation is generally cost-effective where flooding is relatively severe and/or frequent. Buildings that have suffered structural damage or contamination from frequent or long duration flooding should not be considered for relocation.

Elevation: Raising or elevating a house above the flood level protects the structure and contents from flood damage. When flooding occurs, water levels stay below the main floor, causing no damage to the structure or its contents. Raising a building above the flood level is less expensive than acquiring it or moving it, and can be less disruptive to a neighborhood. Commonly practiced in floodprone areas nationwide, this protection technique is required by law for new and substantially damaged residences located in a 100-year floodplain.



Although flood damage can be reduced significantly or eliminated through building elevation, there are some limitations to remaining in a flood prone location. While the building itself is elevated sufficiently to be protected from flood damage, flooding may isolate the building making it inaccessible. In addition, flood waters can result in a loss of utility service in flooded areas making the building uninhabitable even though it isn't damaged, and pollutant contamination in floodwaters will still threaten health and safety.

Barriers: Constructing barriers, such as floodwalls and berms, can keep floodwaters from reaching a building. Berms are commonly used in areas subject to shallow flooding. Not considered engineered structures, berms are made by regrading or filling an area. Low floodwalls may be built around stairwells to protect the basement and lower floor of a split-level home.

By keeping water away from the building walls, the problems of seepage and hydrostatic pressure are reduced.

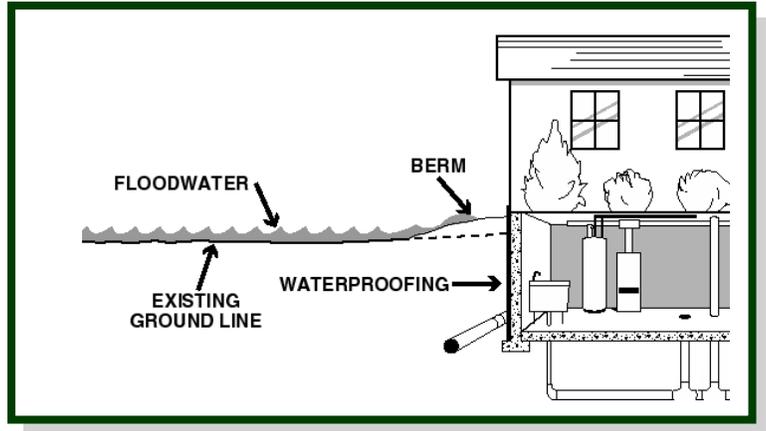


Use of floodwalls and berms must also include a plan to install drain pipes and/or sump pumps to handle leaks and water seepage through or under the barrier, and to get rid of water that may collect inside the barrier. Care must be taken in the design, location and installation of berms or floodwalls to insure floodwaters are not inadvertently pushed onto an adjacent property.

Floodproofing: Floodproofing covers measures that provide either wet floodproofing or dry floodproofing. In areas where there is shallow flooding, dry floodproofing measures can be used to prevent water from entering some buildings. A wet floodproofing strategy will allow

water to enter the building, but moves damageable belongings, appliances and utilities out of harm's way

Dry Floodproofing: Dry floodproofing is a combination of practices used to seal a building against floodwaters. Walls, floors and all openings must be sealed and made watertight. Buildings with crawlspaces generally cannot be dry floodproofed because water can seep under walls into the crawlspace.



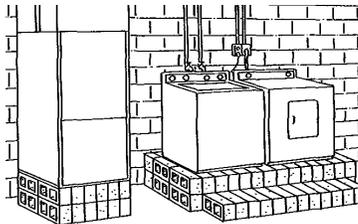
Dry Floodproofing - Buildings on slab

- Walls are coated with waterproofing compounds or plastic sheeting.
- Openings, such as doors, windows, sewer lines and vents, are closed either permanently, with removable shields, or with sandbags.

Dry Floodproofing - Buildings with basements

- Waterproofing compound is applied to the walls before fill is placed against the side of the house.
- Installation of a subsurface drain tile and sump pumps is a must to handle water that will naturally seep through the fill.
- Surface water is kept away from the walls with backfill (see illustration).

- Wet Floodproofing
- Everything subject to damage by water or sediment is moved to a higher level or out of the building. For example, the electrical panel and the furnace should be relocated to an upper floor.
- Where flooding is not expected to be deep, items needing protection may be placed on platforms or blocks.



- Lighter items, such as lawn furniture or bicycles, are evacuated after a flood warning is issued.

However, buildings on slabs and buildings with basements can benefit from dry floodproofing.

A structural engineer should be consulted to design the dry floodproofing measures due to the need to address hydrostatic pressure against foundation walls that occur during floods.

Wet Floodproofing: Wet floodproofing provides damage protection from floodwaters that cannot be kept out of a building. It is a relatively simple means of making sure nothing gets damaged when floodwaters enter the building. Wet floodproofing includes some of the least expensive and easiest mitigation practices to install.

Wet floodproofing approaches range from moving valuable items to a higher floor; to rebuilding the floodable area. At the very least, several low-cost steps can be taken to wet floodproof a structure. Simply moving furniture and electrical appliances out of the floodprone area of the building can prevent

thousands of dollars in damage.

Wet floodproofing measures work wherever there is a level above the flood zone to which items can be relocated; in general wet floodproofing does not work for one-story houses where living areas get flooded.

Sewer backup protection: Basement flooding can occur when the sanitary system overloads with stormwater and backs sewage up into the basement through the sanitary line. Even when sanitary and storm waters are carried in separate pipes, and they are through nearly all of Lake County, sewer backup can occur when cross connections between the storm and sanitary sewers exist, or if there are infiltration or inflow problems into the lines.



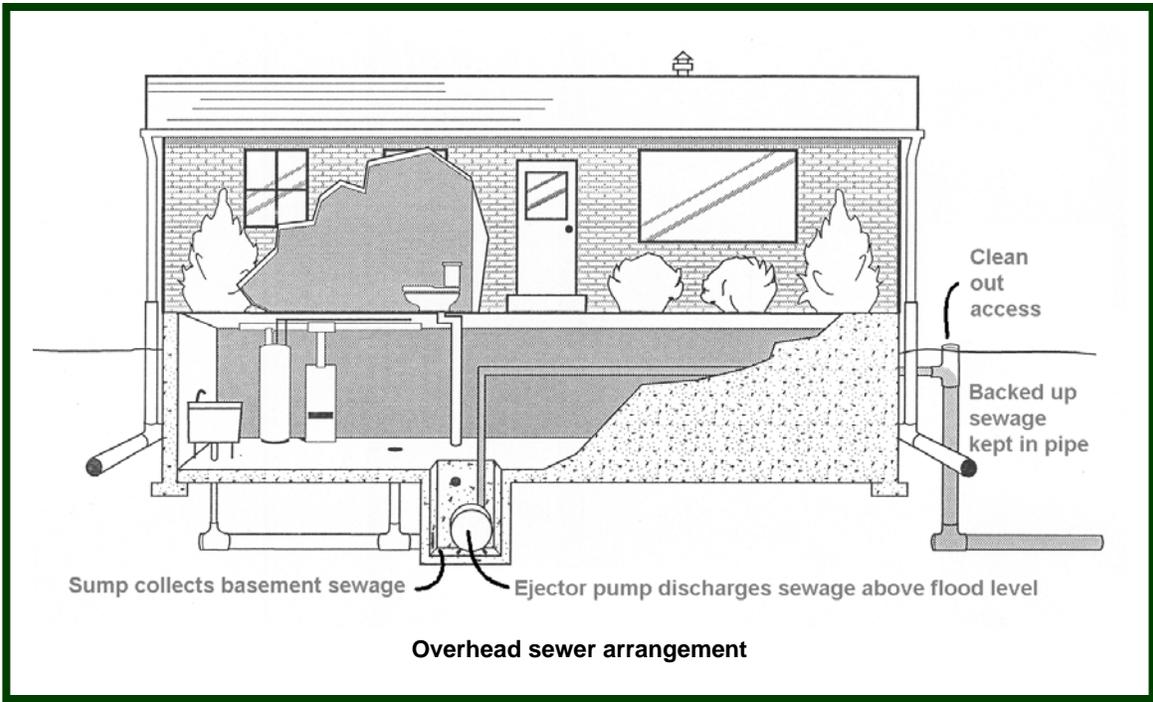
Houses which have downspouts, footing drain tile, and/or a sump pump connected to the sanitary sewer service may be inundated when heavy rains overload the system. In addition to these sources, sanitary lines can also be inundated by stormwater by way of runoff infiltration into old leaky pipes or where the sanitary manholes are not properly sealed. Several Lake County communities experience very high sewage flows following heavy rain events. As in the case of Wauconda, some wastewater treatment plants cannot adequately treat the heavy volume

of combined stormwater and sewage, so the plant is by-passed and sewage is discharged directly to surface waters untreated.

If allowed by the local code, sump pumps, downspouts and footing drains should be disconnected from the sanitary sewer line and the rain and groundwater directed out onto the ground, away from the building. The solution to stormwater overload of the sanitary system also includes the need for timely maintenance of sanitary lines, repairing or replacing pipe where it leaks, and upgrading old waste water treatment facilities that are inadequate for the existing level of use.

Until sanitary infiltration is fixed, a property owner may use four approaches to protect sanitary sewer openings from backup. Floor drain plugs or floor drain standpipes can be installed to keep water from flowing out of the floor drain into the building. However, these may not be effective if water gets deep enough in the sewer system to flow out of the next lowest opening, which is likely to be a toilet or utility sink.

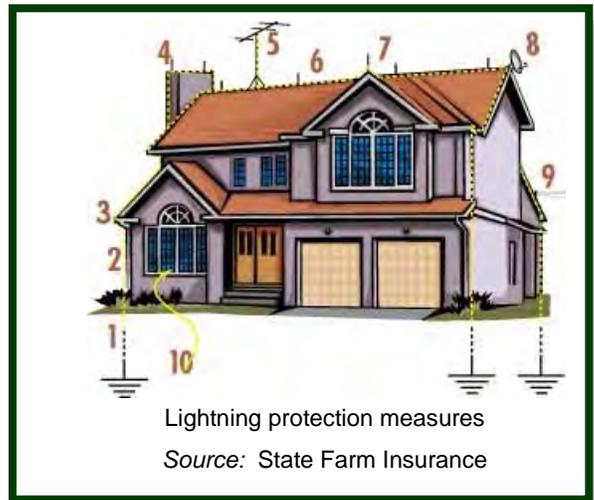
Overhead sewers and backup valves are more expensive, but more secure for this circumstance. An overhead sewer keeps water in the sewer line during a backup. A backup valve allows sewage to flow out, while preventing backups from entering the building.



Severe Storm Retrofitting: Retrofitting approaches to protect private or public buildings from the effects of **thunderstorms** include:

- Shelters
- Storm shutters
- Lightning rods
- Strengthening connections and tie-downs (similar to tornado retrofitting)
- Impact-resistant glass in window panes
- Surge protectors at electrical outlets

Also, roofs can be replaced with materials less susceptible to damage by hail, such as modified asphalt or formed steel shingles.



Winter Storm Retrofitting: Winter storm retrofitting measures include improving insulation on older buildings and relocating water lines from outside walls to interior spaces. Windows can be sealed or covered with an extra layer of glass (storm windows) or plastic sheeting. Roofs can be retrofitted to shed heavy loads of snow and prevent ice dams that form when snow melts.

Insurance: Insurance does not prevent flooding or flood damage; it helps an owner protect his/her property investment by paying for repairs and replacement of items damaged in a flood. While a typical homeowner's insurance policy does not cover a property for flood

damage, flood insurance coverage is available through the National Flood Insurance Program (NFIP). The NFIP will cover flooding above the first floor of buildings. Flood insurance also covers basement flooding provided there is a general condition of flooding in the area that was the proximate cause of the basement getting wet. Several insurance companies offer coverage for damage incurred should a sump pump fail or sewer line back up. Most exclude damage from surface flooding covered by the NFIP. Insurance is also available for earthquakes and other hazards such as sinkholes. Most of these coverages are included to a property policy as a policy rider.

Community Rating System (CRS): FEMA created the NFIP’s CRS program in 1990. It is designed to recognize floodplain management and other watershed management activities exceeding NFIP minimum requirements. Communities participating in the NFIP can apply for the CRS. When appropriate applications and reviews are completed, a community is awarded a CRS class rating. Residents and property owners of that community then qualify for a flood insurance premium rate reduction ranging from 5 to 45 percent. CRS credit is provided for 19 creditable activities, organized under four categories:

- Public Information
- Mapping and Regulations
- Flood Damage Reduction
- Flood Preparedness

The CRS is a voluntary program and is modeled after the fire insurance rating system. Insurance premiums are adjusted based on the rating of the community. The Village of Lincolnshire is currently a CRS Class 5 community.

The CRS class rating and insurance premium reductions are shown in the table below. Properties in the FEMA Special Flood Hazard Areas (SFHAs), or the 100-year floodplain, receive a 5 percent premium reduction for every improvement in the CRS class. Properties outside the SFHA already have a reduced premium (since they are outside the floodplain), and therefore have a lower premium reduction than properties in the SFHA.

CRS Class	Credit Points	Premium Reduction	
		SFHA*	Non-SFHA
1	4,500+	45%	10%
2	4,000 – 4,499	40%	10%
3	3,500 – 3,999	35%	10%
4	3,000 – 3,499	30%	10%
5	2,500 – 2,999	25%	10%
6	2,000 – 2,499	20%	10%
7	1,500 – 1,999	15%	5%
8	1,000 – 1,499	10%	5%
9	500 – 999	5%	5%
10	0 – 499	0	0

*SFHA = Special Flood Hazard Area

Credit points are then earned from the following categories, listed by activity number:

Public Information

- 310 Elevation Certificates
- 320 Map Information
- 330 Outreach Projects
- 340 Hazard Disclosure
- 350 Flood Protection Library
- 360 Flood Protection Assistance
- 370 Flood Insurance Promotion

Mapping and Regulations

- 410 Floodplain Mapping
- 420 Open Space Preservation
- 430 Higher Regulatory Standards
- 440 Flood Data Maintenance
- 450 Stormwater Management

Flood Damage Reduction

- 510 Floodplain Management Planning
- 520 Acquisition and Relocation
- 530 Flood Protection
- 540 Drainage System Maintenance

Warning and Response

- 610 Flood Warning and Response
- 620 Levees
- 630 Dams

The Village currently receives credit in Activities 310, 320, 330, 340, 350 and 360; Activities 410, 420, 430, 440 and 450; Activities 510, 530 and 540 and Activity 610.

Repetitive Flood Loss Properties: Chapter 3 and Chapter 5 of the Lake County ANHMP discuss the Lake County and Lake County community repetitive loss properties (properties with two federal flood insurance claims of at least \$1,000 in any ten year period) designated by FEMA. Currently, FEMA has identified one repetitive loss property within the Village of Lincolnshire.

Lincolnshire Property Protection Conclusions and Recommendations

1. Properties of Concern:
 - Lincolnshire/Londonderry
 - Rivershire
 - Sedgebrook Community
 - Stonegate Circle
 - Marriott
2. Information and resources should be provided to residents for potential property flood damage protection measures.
3. Technical advice is needed to assist property owners in determining appropriate alternatives.
4. Obtain technical advice from agencies such as the U.S. Army Corps of Engineers.
5. Investigate sewer back-up prevention measures.
6. The treatment plant has been floodproofed.
7. The Village should consider acquisition of properties in the floodplain, as opportunities arise, to convert to floodplain open space.

Lake County ANHMP Property Protection Recommendations

1. All buildings and critical facilities in the floodplain, SMC problem areas and depressional storage areas, with priority given to buildings or facilities in the floodway, should be mitigated, to the extent that the measures are cost effective and feasible.
2. Identified repetitive flood loss areas should be further investigated through flood audits, and flood prone structures should be mitigated.
3. SMC should continue to conduct flood audits and to pursue hazard mitigation grants for the acquisition of properties that are cost effective and have interested property owners.
4. Investigate property-owner incentives for elevations, barriers and floodproofing.
5. Establish and disseminate guidelines for local officials for determining what mitigation measures are appropriate to protect property for various circumstances for floods, severe storms, tornadoes and other priority hazards in Lake County.
6. Available property protection public education materials for all priority hazards should be consolidated and tailored for Lake County. Materials should address measures that can help owners reduce their exposure to damage by natural hazards and the various types of insurance coverage that are available.
7. Critical facilities should be audited to determine their vulnerability and hazard mitigation needs.
8. Mitigation projects should be pursued for vulnerable critical facilities, including public facilities and health-care related facilities. Each public entity should protect its own publicly-owned facilities with appropriate mitigation measure(s), except where efficiencies allow for joint funding and joint projects.
9. The availability of tornado shelters or safe rooms in Lake County should be investigated
10. Safe rooms should be constructed wherever needed in Lake County with priority given to schools and critical faculties.
11. Develop action plan to identify and remedy illicit hook ups and sewer infiltration that maps and prioritizes problem areas for remediation. This can be done as county coordinated community program in conjunction with NPDES Phase 2 requirements.
12. Encourage business recovery plans.
13. Feasible mitigation projects should be funded through grants or through capital funding.
14. All property owners should be encouraged to determine if they are adequately insured for natural hazards.
15. Each public entity (county, community, schools and other agencies) should evaluate its own properties, with a priority given to critical facilities, to determine vulnerabilities to damage from natural hazards.

5.3 Resource Protection

Natural resource protection measures serve to restore or preserve the natural functions of the floodplain and other components of the watershed storage and drainage system. These measures are implemented by a variety of public and private parties ranging from forest preserves and regulatory agencies to land developers and farmers. Resource protection measures include activities such as:

- Open space preservation
- Wetland protection
- Erosion and sediment control
- Streambank restoration
- Groundwater protection
- Urban forestry
- Historic and natural area protection

Open Space Preservation: Open space preservation throughout a watershed is important for a variety of natural hazard and environmental reasons. Preserving floodplains and natural sites of water storage, such as wetlands and low-lying areas maintains the existing stormwater storage capacities of an area. These sites can also serve as recreational areas, greenway corridors, provide habitat for local flora and fauna, and improve water quality. Open space may also be maintained as a park, golf course, or in agricultural use.

Upland areas within a watershed may be key to limiting runoff that will worsen flooding problems, important for water quality and groundwater recharge. Purchase of land is the most common approach to open space preservations; however, other methods can be considered in addition. Several more affordable examples of open space preservation practices include the purchase or dedication of easements limiting use of the parcel in exchange for a tax abatement or as a condition of development approval, and the purchase of development rights for a property.

Wetland Protection Regulations & Soil Erosion and Sediment Control: Wetlands are usually found in floodplains or depressional areas. They provide numerous natural and beneficial functions warranting protection. Wetlands located in the Waters of the U.S.

Wetlands
<ul style="list-style-type: none"> • Store large amounts of floodwater • Reduce downstream flood peaks • Reduce flood velocities • Protect shorelines from erosion • Filter water making it cleaner • Are groundwater recharge and discharge sites • Provide habitat for species that cannot live or breed anywhere else

(WOUS) are regulated by the U.S. Army Corps of Engineers (Corps). Local wetland programs are important for addressing gaps in the federal regulations, particularly for smaller wetlands, unregulated activities, and indirect hydrologic impacts. Local wetland programs can require undisturbed buffers be maintained around wetlands.

The WDO provides standards for the isolated wetlands no longer under the jurisdiction of the Corps.

Stream Restoration: Our understanding of the need for stream, streambank and riparian environment protection has grown significantly in past decades. Eroding streambanks negatively impact our infrastructure (bridges and culvert blockages), impact property, and degrade the water quality. Terminology for “stream restoration” can differ, but the objective is to return streams, streambanks and adjacent land to a more natural condition, including the natural meanders. Terms such as “ecological restoration” encourage the restoration of native indigenous plants and animals to an area.

A key component of these efforts is to use appropriate native plantings along the banks that resist erosion. This may involve retrofitting the shoreline with willow cuttings, wetland plants, and/or rolls of landscape material covered with a natural fabric that decomposes after the banks are stabilized with plant roots.

Groundwater Protection: Groundwater concerns in Lake County pertain to both groundwater quantity (or groundwater availability) and groundwater quality. The quantity of groundwater and groundwater recharge, depends on the ability of runoff to reach a pervious surface where it can become seepage. Urban runoff reaching a storm sewer, for example, which discharges into a stream is effectively lost from the groundwater system.

All groundwater was at one time surface water. Rain and snow melt seeps or infiltrates into the ground. The quantity and the rate water seeps into the ground, and becomes stored groundwater, varies based on land use, soils, season, temperature, and more. Water infiltrating through the soil can eventually reach aquifers where groundwater is stored.

Urban Forestry: The majority of damage caused by wind, ice and snow storms is to trees. Downed trees and branches break utility lines and damage buildings, parked vehicles and anything else that was under them. A forestry program (urban or rural) can reduce the damage potential of trees.

Urban foresters or arborists can select hardier trees which can better withstand high wind and ice accumulation. Only trees attaining a height less than the utility lines should be allowed along the power and telephone line rights-of-way

By having stronger trees, programs of proper pruning, and ongoing evaluation of the trees, communities can prevent serious damage to their tree population. A properly written and enforced urban forestry plan can reduce liability, alleviate the extent of fallen trees and limbs caused by wind and ice build-up, and provide guidance on repairs and pruning after a storm. Such a plan helps a community qualify to be a Tree City USA. The Village of Lincolnshire participates in Tree City USA.

To qualify as a Tree City USA, a community must meet four standards established by The Arbor Day Foundation and the National Association of State Foresters:

1. A Tree Board or Department
2. A Tree Care Ordinance
3. A Community Forestry Program With an Annual Budget of at Least \$2 Per Capita
4. An Arbor Day Observance and Proclamation

Historic and Natural Area Protection: Lake County has over 90 homes, hotels, other buildings and districts included on the National Register of Historic Places. Additional sites are maintained by the Lake Forest/Lake Bluff Historical Society, the Fox Lake-Grant Township Historical Society, the Grayslake Historical Society and the Waukegan Historical Museum. The historic sites are vulnerable to hazards. It is difficult to protect the structures from hazards due to their historic nature, but it is important to consider should any mitigation opportunities be presented.

There are also ten historic bridges in Lake County listed in the “Historic Bridges of the U.S.” list.

Lincolnshire Resource Protection Conclusions and Recommendations

1. The Village does a good job towards natural resource protection within the Village.
2. Look for opportunities to preserve flood storage.
3. Encourage activities such as rain gardens.

Lake County ANHMP Resource Protection Recommendations

1. Municipal comprehensive plans, land use plans and zoning ordinances should incorporate open space provisions protecting properties from flooding and preserve wetlands, groundwater quality and recharge, and farmland.
2. An open space network should be designated and mapped based on the information collected in data layers for the area-wide conservation and development map. Soils, historic, archeological or cultural sites and recreation potential should also be added as considerations for designation of land in the open space network.
3. Communities should implement an urban forestry program that qualifies them to become a Tree City, USA.
4. The public and decision makers should be informed about the hazard mitigation benefits of restoring rivers, wetlands and other natural areas.
5. Better monitoring and enforcement of best management practice performance.
6. Complete watershed assessments and plans that incorporate specific BMPs based on watershed conditions for all 26 of Lake County’s subwatersheds.

5.4 Emergency Services

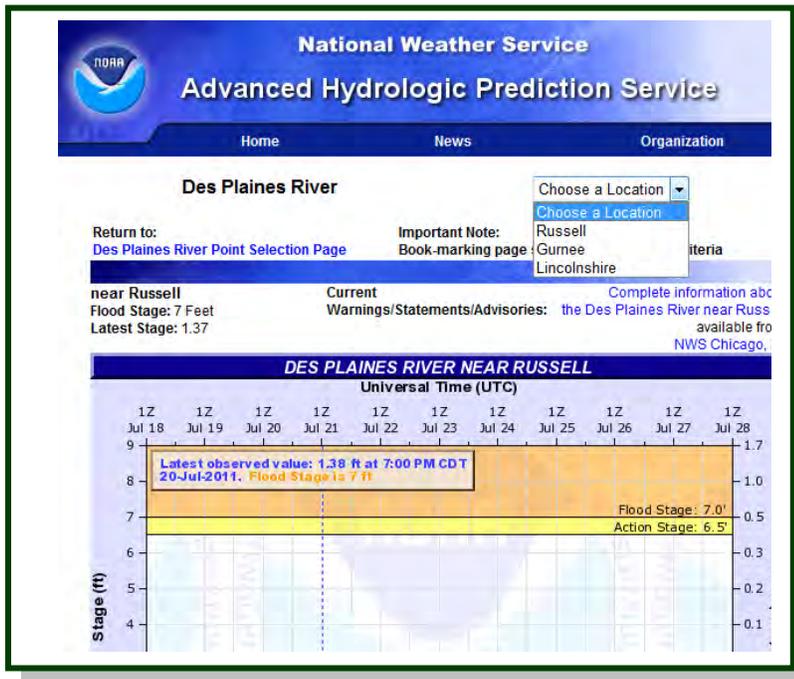
Emergency services measures protect people during and after a flood. Emergency management programs include activities such as:

- Emergency Planning
- Threat recognition
- Warning
- Response
- Recovery and mitigation
- Critical facility protection

Emergency Planning: An emergency operations plan (EOP) ensures all response needs are addressed and all response activities are appropriate for the expected threat. EOPs require frequent reviews to keep contact names and telephone numbers current and to make sure supplies and equipment needed are still available. EOPs should be critiqued and revised after disasters and exercises to take advantage of the lessons learned and changing conditions. The end result is a coordinated effort implemented by people who have experience working together so available resources will be used in the most efficient manner.

Threat Recognition: The first step in responding to a flood, tornado, storm or other natural hazard is to know when weather conditions are such an event could occur. With a proper and timely threat recognition system, adequate warnings can be disseminated. Effective threat recognition is key for emergency managers and local officials in order to protect life, health, safety and property from the impact of natural hazards.

Floods: A complete flood threat recognition system measures rainfall, snow conditions, soil moisture, and stream flows upstream in order to calculate the time and height of the flood crest downstream.



The National Weather Service (NWS) tracks precipitation, monitors river stages and issues flood crest forecasts during potential flood situations. The NWS continuously relays weather information through radio transmissions, and flood forecasts are also available via the Internet. A system of stream and rain gages jointly operated by the United States Geological Survey (USGS) and the SMC supplement data available to the NWS.

Table 5-2 shows NWS prediction locations for the Des Plaines and Fox Rivers. Stages are unique to a particular location and sometime difficult to relate to

Table 5-2 NWS Flood Forecast Points

River/Location	Action Stage	Flood Stage
Des Plaines River		
Russell	6.5 feet	7.0 feet
Gurnee	6.5 feet	7.0 feet
Lincolnshire	11.5 feet	12.5 feet
Des Plaines	4.5 feet	5.0 feet
Fox River		
Antioch	--	739 feet
Stratton L&D	3.5 feet	4.0 feet
Algonquin	2.5 feet	3.0 feet

Figure 5-1 Flood Forecast and Rain and Stream Gage Links

Illinois Department of Natural Resources (IDNR)

<http://dnr.state.il.us/owr/surveillance.htm>

National Weather Service (NWS)

<http://www.crh.noaa.gov/crh/>

United States Geological Service (USGS)

<http://waterdata.usgs.gov/il/nwis/rt>

upstream or downstream locations. The creation of flood stage maps is one alternative to understanding a predicted flood stage and the extent of a flood inundation area.

Warning: Earlier and accurate warning leads to better response. Warning notifications may be

disseminated by the community in a variety of ways, and multiple or redundant systems are most effective. Systems include:

- Outdoor warning sirens
- Sirens on public safety vehicles
- Commercial or public radio or TV stations
- The Weather Channel
- Cable TV emergency news inserts
- Reverse 911 or telephone trees/mass telephone notification
- NOAA Weather Radio
- Tone-activated receivers in key facilities
- Door-to-door contact
- Mobile public address systems
- Cellular phone text messages
- E-mail or social media notifications

StormReady: The National Weather Service established the StormReady program to help local governments improve the timeliness and effectiveness of hazardous weather-related warnings for the public. To be officially StormReady, a community must:

- Establish a 24-hour warning point and emergency operations center (EOC)

- Have more than one way to receive severe weather warnings and forecasts and to alert the public
- Create a system monitoring weather conditions locally
- Promote the importance of public readiness through community seminars
- Develop a formal hazardous weather plan, which includes training severe weather spotters and holding emergency exercises.

Being designated as a StormReady community by the NWS is a good measure of a community's emergency warning program for weather hazards.

Response: The protection of life and property is the goal of effective emergency response. Concurrent with threat recognition and issuing warnings, a community should respond with actions to prevent or reduce damage and injuries. Typical actions and responding parties include the following:

- Activating the emergency operations center (emergency management)
- Closing streets or bridges (police or public works)
- Shutting off power to threatened areas (utility company)
- Passing out sand and sandbags (public works)
- Ordering an evacuation (chief elected official)
- Holding children at school/releasing children from school (school district)
- Opening evacuation shelters (Red Cross)
- Monitoring water levels (engineering)
- Security and other protection measures (police)

Once a threat is recognized, the first priority is to alert others through the warning system. The second priority is to respond with actions to prevent or reduce damage or injury.

Critical Facility Protection: Protecting critical facilities during a hazard event is a vital part of any emergency service effort. If a critical facility is flooded, for example, workers and resources may be unnecessarily drawn away from protecting the rest of the community. If such a facility is prepared, it will be better able to support the community's flood response efforts.

Lincolnshire critical facilities are shown in Exhibit 1-[x]. All Lincolnshire critical facilities have backup power sources, and the Londonderry Lane lift station has been elevated and fitted with backup power.

Recovery and Mitigation: Preventing dangers to health and safety is critical after a hazard event. Recovery plans should identify appropriate measures various community departments should undertake.

Appropriate post-disaster mitigation actions include, but are not limited to:

- Conducting a public information effort to advise residents about mitigation measures they can incorporate into their reconstruction work
- Evaluating damaged public facilities to identify mitigation measures that can be included during repairs
- Evaluating substantially or repeatedly damaged buildings
- Post-disaster debrief to determine response improvements
- Planning for long-term mitigation activities
- Applying for post-disaster mitigation funds

Lincolnshire Emergency Services Conclusions and Recommendations

1. All Village-owned critical facilities have back-up power for storm events.
2. Additional work can be done for preparation and staging of berm sandbag effort.
3. Post-event communication from the Village to property owners can be improved.

Lake County ANHMP Emergency Services Recommendations

1. All communities should strive to obtain a StormReady designation.
2. Continue to update emergency operations plans for the County, and continue to develop municipal emergency operations plans with a NIMS compliant template.
3. Continue work for NIMS compliance for the County and all municipalities, and provide training on NIMS and ICS for all first responders and other identified personnel for compliance.
4. Improve information sharing between Lake County, municipal/township agencies and services providers, such as ComEd, during and after natural hazard events. Systems should be put in place to help ensure that response and recovery efforts are coordinating and well communicated.
5. Add a “Flood Annex” to the *Lake County Emergency Operations & Preparedness Plan*.
6. Establish an emergency response assessment teams, including a mitigation team and a health department team.
7. Response procedures for severe storm and high wind hazards should be incorporated in all emergency operations planning and response where appropriate.
8. Incorporate more proactive flood response activities in emergency plans. (i.e. identify and closely monitor known problem constrictions in drainage system; system of monitoring lake levels by lake associations for lakes with associated flood problem areas; guidance to property owners on when and how to turn off utilities during flood)
9. Standardize and improve system of flood damage reporting by the county, townships and municipalities in computerized database format.
10. The County and communities should ensure that alternative power sources are available at critical structures and shelters.

11. Establish a You are not alone program for seniors and the handicapped.
12. Install and maintain lightning detection systems for population and/or active sites.
13. Emergency operations centers at the County and in municipalities should be evaluated for effectiveness and functionality, and modified appropriately. The County and all municipalities should have a fully operational emergency operations center and a secondary location.
14. Conduct annual emergency response training exercises and table-top exercises. Look for multi-jurisdiction training opportunities.
15. Develop a disaster recovery strategy for the County and municipalities that includes the identification of mitigation efforts.
16. Investigate adequacy and research funding opportunities for emergency warning and response equipment, including outdoor weather warning sirens, generators for critical facilities, and other warning systems.
17. Develop flood stage maps for the County's major streams to make use of gaging networks, warning systems and GIS mapping capabilities.
18. Research funding for additional rainfall and river gages. Also the County and community should look to expand the National Weather Service observer's network.
19. Continue use and funding of the County's Reverse-911 system and utilize other applications of that system for natural hazard warning and response.
20. Develop emergency transportation plans that allow for emergency coordination and evacuation (routing).
21. Maintain and update snow removal plans

5.5 Structural Measures

Structural projects are projects constructed to protect people, buildings and infrastructure from damage due to natural hazards. Preventing damage due to flooding is the primary focus of structural projects. Structural projects are usually funded by public agencies. Structural measures include activities such as:

- Watershed Planning
- Regional Flood Control
- Management Of Existing Dams
- Improving Crossings/Roadways
- Drainage And Storm Sewer Improvements

Watershed Planning: A watershed is an area of land draining to a river or stream. It includes rivers, streams, lakes and wetlands. Everyone lives in a watershed and everyone contributes to the health of the watershed. Communities are often situated in more than one watershed. In the 1970s and 1980s the watersheds were studied by state and federal agencies (IDNR-OWR, the Corps and NRCS) for purposes of FEMA floodplain mapping and for purposes of identifying flood control projects to address existing flooding. Watershed

studies are based on hydrologic (rainfall-runoff) models and hydraulic (extent and depth of flooding) models. As development expands throughout Lake County, these models have become less and less reliable for depicting full extent of the 100-year flood, for example.

As funds become available, SMC has been remodeling watershed subbasins and developing watershed plans. Completed and underway watershed studies in Lake County include:

- Indian Creek Watershed-Based Plan (Des Plaines River) (*Adopted March 2009*)

Watershed studies conducted in the 1970s and 1980s did not examine wetlands, critical environmental areas or water quality. Current watershed plans examine these issues as well as flood issues.

Regional Flood Control: Structural flood control measures are used to prevent floodwaters from reaching properties, thus preventing damage. These measures generally involve construction of man-made structures to control water flows. Because of their size and cost, structural projects typically are implemented with the help of state or federal flood control agencies such as the IDNR-OWR, the Corps, and the NRCS.

Since structural flood control is generally the most expensive type of mitigation measure in terms of installation costs, maintenance requirements and environmental impacts, a thorough alternative assessment should be conducted before choosing a structural flood control measure. In some circumstances smaller structural flood control measures may be included in a package of several recommended measures for a project area where non-structural measures would not be practical or effective.

Because larger structural flood control projects have regional or watershed-wide implications, they are often planned at a regional level by the state and federal agencies that provide the majority of project funding. Nonetheless, communities should participate in and coordinate with regional flood control studies to insure they are practical, effective and have community acceptance.



Flood control studies have been done by federal and state agencies on the North Branch of the Chicago and Des Plaines Rivers. Some recommendations from these studies for reservoirs and levees have been constructed, others have not.

Drainage System Maintenance and Improving Crossings and Roadways: The drainage system may include detention ponds, stream channels, swales, ditches and culverts. Drainage system maintenance is an ongoing program to clean out blockages caused by an accumulation of sediment or overgrowth of weedy, non-native vegetation or debris, and remediation of streambank erosion sites.

“Debris” refers to a wide range of blockage materials including tree limbs and branches that accumulate naturally, or large items of trash or lawn waste accidentally or intentionally dumped into channels, drainage swales or detention basins. In addition to sediment, debris and weedy vegetation removal, drainage maintenance can also involve using best management practices (BMPs) to stabilize eroding shorelines or streambanks. Maintenance of detention ponds may also require revegetation or repairs of the restrictor pipe, berm or overflow structure.

There is currently no coordinated program or maintenance standards established at the county level to consistently perform on-going drainage maintenance. Maintenance is typically done on an as-needed basis in response to problems or complaints about blockages or erosion. In many cases, property owners must consent to the maintenance program. This may require legal negotiations to obtain maintenance easements.

In Illinois, the responsibility for drainageway maintenance on private property, when no easements have been granted, is with the individual private property owner. This generally results in very little maintenance being accomplished.

The Lake County Stormwater Management Commission (SMC) has developed “A Citizen’s Guide for Riparian Area Management” educating landowners about debris removal and riparian landscaping. SMC anticipates adopting stream maintenance standards in the future to provide guidance and consistency for maintenance in Lake County.

In some cases buildings may be elevated above floodwaters but access to the building is lost when floodwaters overtop local roadways, driveways, and culverts or ditches. Depending on the recurrence interval between floods, the availability of alternative access, and the level of need for access, it may be economically justifiable to elevate some roadways and improve crossing points.

For example, if there is sufficient downstream channel capacity, a too small culvert serving as a constrictor creating backwater and causing localized flooding may be replaced with a larger culvert to eliminate flooding at the waterway crossing point. The potential for worsening adjacent or downstream flooding needs to be considered before implementing any crossing or roadway drainage improvements.

Lincolnshire Structural Measure Conclusions and Recommendations

1. Examine berm maintenance issues.
2. Londonderry Lift Station has been elevated and includes a backup generator.
3. The Village should continue to work with Lake County and other agencies to identify additional structural measures (regional approaches) to protect homes from flood damage.
4. The Village should look for any opportunities to provide additional flood storage in the Des Plaines River or North Branch watersheds.

Lake County ANHMP Structural Measure Recommendations

1. Develop, adopt and implement protocol for drainage system maintenance standards countywide (waterways, swales, detention basins, levees, reservoirs).
2. Study the feasibility of structural flood control projects within Lake County watersheds and pursue funding from IDNR-OWR and the Corps for feasible projects.
3. SMC and communities should investigate the need and ability to improve the capacity of drainage systems.
4. Communities should undertake steps to reduce inflow and infiltration into sewer system to reduce sewer backups
5. Provide preventative maintenance for susceptible landslide areas.

5.6 Public Information

Mitigation of all natural hazards can be accomplished through effective public information activities. This is also true for addressing health issues and pandemics. Public information activities advise property owners, renters, businesses, and local officials about hazards and ways to protect people and property. A successful hazard mitigation program involves a public information strategy and involves both the public and private sectors. Public information includes activities such as:

- Library and website resources
- Outreach projects
- Technical assistance

Individual property owners usually implement property protection measures; therefore, a community mitigation program should include measures to encourage and assist owners in protecting their property from flood damage.

A community has passive and active ways to inform residents about flood hazards and damage mitigation. Passive ways to provide information include providing reference materials and map information in the public library, at government agency offices and on a web page. Active approaches include outreach projects and providing technical assistance. Developing a Village of Lincolnshire Plan for Public Information is considered in this Mitigation Plan.

In one-on-one sessions with property owners, community officials such as code enforcement staff or building inspectors can provide technical advice and information on identifying flood hazards at the site, correcting local drainage problems, floodproofing, dealing with contractors, and funding.

Lincolnshire Public Information Conclusions and Recommendations

1. The Village utilizes a number of ways to communicate with residents, yet Village's public information efforts can be improved before, during and after natural hazard events.

2. Public information efforts should be expanded for resources information to property owner for activities such as building rain gardens.
3. The Village should develop a CRS Plan for Public Information and a Flood Insurance Coverage Improvement Plan.

Lake County ANHMP Public Information Recommendations

1. LCEMA, SMC and other county agencies should build a county-wide partnership for coordinated delivery of public information materials and activities.
2. Communities in the NFIP should provide floodplain information for property owners.
3. Develop and implement a system to coordinate the distribution of flood mitigation and response guidance materials for pre-flood outreach to at risk property owners.
4. Increase outreach to community plan departments and commissions to strengthen local understanding and review of development proposals and their compliance with WDO standards.
5. Educate property owners on safe rooms. Prepare informational material how to construct safe rooms in homes and other buildings
6. Develop a method that helps identifies safe rooms and encourages their use.
7. Education property owners and residents about safety during severe summer and winter storms .
8. Provide information to property owners and residents about safe use of generators and safe cooking during power outages.
9. Provide information that identifies location of cooling and warming shelters.

5.7 Capability Assessment Summary

Village of Lincolnshire has existing capabilities to minimize future vulnerabilities to hazards. Section 5.1 discusses the plans, ordinances, and programs to help prevent or minimize possible future impacts of hazards. The Lake County WDO addressed new development, but also strives to mitigate the impact of existing development.

Apparent to the development of this Mitigation Plan is the Village of Lincolnshire has the capability to bring together citizens and local officials to work closely together in crafting a better future for the community. That same cooperative effort, if joined with the appropriate technical and financial assistance from regional, state and federal resources, can be harnessed to implement the priority hazard mitigation actions described in Section 6 of this Mitigation Plan. A sustained effort by the citizens, staff, and local officials can create a more sustainable and disaster resistant future for the Village of Lincolnshire.

Chapter 6.

Action Plan

The Village of Lincolnshire action items presented in this Chapter were developed by the Village of Lincolnshire Hazard Mitigation Planning Committee.

6.1 Development of Action Plan

The Planning Committee used its prioritization of natural hazards, review of goals and guidelines and a review of possible mitigation approaches to develop the action items. The action items included in the 2012 Lake County ANHMP were also reviewed for the development of this Action Plan.

Prioritization: Action items are prioritized within this Chapter in the order presented. The prioritization was established based on the Planning Committee's discussion at the December 2013 meeting and review at the May 2014 meeting. The action items have been formulated around the priority hazards discussed in Chapter 3 and the goals and guidelines presented in the Chapter 4.

Action item format: Action items assign responsibilities and deadlines to the appropriate agencies. Each action item contains a short description and a section for the responsible agency, the deadline for accomplishing the action item, the costs (and potential funding sources), and the benefits. Potential funding sources include the FEMA Hazard Mitigation Assistance programs: the Hazard Mitigation Grant Program (HMGP), the Pre-Disaster Mitigation Grant Program (PDM), and the Flood Mitigation Assistance Program (FMA).

The action items are summarized in Table 6-1. While this Chapter provides action items in a priority order, any and all action items should be implemented if staff time and/or funding becomes available ahead of other action times. The relationship between action items and the goals and guidelines are shown in Table 6-2.

Please note, the Village of Lincolnshire may choose to implement a lower priority action prior to a higher priority action, or implement a recommendation included in Chapter 5 of this Mitigation Plan or the Lake County ANHMP not included in this action plan, based on a hazard event, opportunity, property owner interest or available funding. All mitigation opportunities should be considered.

6.2 Village of Lincolnshire Action Items

The Village of Lincolnshire will work to implement the following action items in the next five years as staff and funding resources allow:

Action Item 1: Plan Adoption

The Village of Lincolnshire will adopt this Natural Hazards Mitigation Plan (Mitigation Plan) by resolution.

Responsible Board or Department: Village Board.

Deadline: 6 months.

Cost: Staff time.

Benefits: Adoption of this Mitigation Plan is required for the CRS program.

Plan Reference: Chapters 2 and 7 of this Mitigation Plan.

Action Item 2: Plan Monitoring and Maintenance

The Village of Lincolnshire Natural Hazard Mitigation Planning Committee will continue to be an advisory group to the Village Board. The Planning Committee will meet at least once a year to evaluate and monitor progress on implementation of this Mitigation Plan, and to organize for the next update of this Mitigation Plan. An annual report should be submitted to the Village Board as an information item.

Responsible Board or Department: Public Works, CRS Coordinator and Planning.

Deadline: Planning Committee to meet each year. A five-year update is required for FEMA's mitigation funding programs.

Cost: Staff time.

Benefits: The Mitigation Plan should be evaluated in light of progress, changed conditions, and new opportunities. The annual report is a requirement of the CRS.

Plan Reference: Chapters 2 and 7 of this Mitigation Plan.

Action Item 3: Improve Natural Hazards Public Information Efforts

Education regarding natural hazards is important for protecting people and property. Messages need to be simple and repeated, and the information should tell the reader 'what to do.' A number of public information efforts (website and mailings) have been implemented by the Village, but these efforts can be improved to more effectively reach people and to provide effective messages regarding life, health and safety and property protection. Public information and education efforts should focus on severe summer and winter storms, floods and tornadoes and materials should be developed specifically for the Village of Lincolnshire's needs.

Responsible Board or Department: Administration, Public Works and Emergency Management.

Deadline: Ongoing.

Cost: Staff time and publication costs.

Benefits: Public information efforts can address nearly every natural hazard and more than on hazard can be discussed with an audience at one time.

Plan Reference: Chapter 5, Section 5.6 of the Lake County ANHMP, and Chapter 5 of this Mitigation Plan.

Action Item 4: Improve Village Communications Before, During and After Hazard Events

The Village should continue to improve communication to residents and other stakeholders of Lincolnshire. Village departments should work to ensure messages are consistent, provide the needed and correct information, and work to assist each other with dissemination. All forms of communication (written, website, social media) should continue to be used.

Responsible Board or Department: All departments.

Deadline: Ongoing.

Cost: Staff time and publication costs.

Benefits: These efforts serve to protect people and property.

Plan Reference: Chapter 5 of this Mitigation Plan.

Action Item 5: Property Protection Projects

Properties exposed to flood damage and severe storms throughout the Village of Lincolnshire can be protected through property protection measures where regional structural projects are not feasible. Property protection measures should include, but not be limited to elevation, floodproofing, or retrofitting. All flood prone properties (floodplain, depressional storage or SMC problem areas) including critical facilities should be included. The Village should also seek technical advice from available federal, state and regional agencies, such as the U.S. Army Corps of Engineers, the Illinois Department of Natural Resources, Office of Water Resources and the SMC.

Responsible Board or Department: Public Works and Building Department

Deadline: 5 years.

Cost: Identified per project. Potential grant funding sources may be available.

Benefits: Properties will be better protected from future flooding. Also the exposure of the NFIP will be reduced. There will also be a reduction in emergency response as structures are protected or removed from flood prone areas.

Plan Reference: Chapter 5 of this Mitigation Plan.

Action Item 6: Continue to Address Concerns with the Lincolnshire-Londonderry Berm

The earthen berm near the Des Plaines River along/following Lincolnshire Drive extends across a number of private residential properties. The Village has worked closely in the past with residents for flood fighting purposes, and has examined alternatives to improve the effectiveness of the berm. This action item does not call for any specific action, but recommends the Village continue to monitor the condition of the berm and to explore options for protecting the berm, as they arise.

Responsible Board or Department: Public Works.

Deadline: Annually.

Cost: Project specific.

Benefits: The berm protects the Lincolnshire-Londonderry neighborhood from smaller floods on the Des Plaines River.

Plan Reference: Chapter 5 of this Mitigation Plan.

Action Item 7: Continue Maintenance Programs for Drainage Systems

The Village should continue with its formal and regular drainage system maintenance programs. These efforts should include inspection of privately maintained drainage facilities. Streambank and shoreline stabilization efforts should also be evaluated and implemented. Public information should be provided to property owners on how best to protect streambanks and shorelines.

Responsible Board or Department: Public Works.

Deadline: 36 months.

Cost: Staff time and equipment.

Benefits: Regular maintenance can protect both structures and property. Regular maintenance can also be more cost effective than major maintenance efforts that are done on an as-needed basis.

Plan Reference: Chapter 5, Section 5.5 of the Lake County ANHMP.

Action Item 8: Continue Participation in the Community Rating System

The Village of Lincolnshire should continue to participate in the Community Rating System (CRS). Required for CRS participation is full compliance with the minimum requirements of the National Flood Insurance Program.

Responsible Board or Department: Lincolnshire CRS Coordinator and all departments.

Deadline: Ongoing.

Cost: Staff time.

Benefits: The CRS program saves property owners money on flood insurance premiums and it has been shown to be effective for both comprehensive watershed management and emergency response planning.

Plan Reference: Chapter 5 of this Mitigation Plan.

Action Item 9: Continue to Participate in Tree City USA

The Village of Lincolnshire should maintain its status in Tree City USA to enhance the community but to also monitor the health of the trees in the Village and protect property from downed trees or utility interruption during or after storms.

Responsible Board or Department: Public Works Department and Community and Economic Development Department.

Deadline: Annual.

Cost: \$2 per capita, staff time.

Benefits: Urban forestry programs provide mitigation against severe winter and summer storms, and high wind events. The loss of trees is prevented along with the protection of

power, telephone and cable services. Damage to vehicles and buildings from falling limbs is also prevented.

Plan Reference: Chapter 5, Section 5.3 of the Lake County ANHMP.

Action Item 10: Participation in StormReady

The Village of Lincolnshire should consider joining the National Weather Service's StormReady program. The StormReady program has been developed to provide communities guidelines to improve the timeliness and effectiveness of hazardous weather-related warnings for the public.

Responsible Board or Department: Emergency Management.

Deadline: 24 months.

Cost: Staff time, and equipment purchases for some communities.

Benefits: By meeting StormReady requirements, the Village will be better able to detect impending weather hazards and disseminate warnings as quickly as possible. All efforts to prevent injury, save lives, and protect property are of high value.

Plan Reference: Chapter 5, Section 5.4 of the Lake County ANHMP.

Action Item 11: Continue to Implement Action Items in the Lake County ANHMP

Implementation of the action items listed in Chapter 6 of the Lake County ANHMP should continue by the Village of Lincolnshire.

Responsible Board or Department: Lincolnshire's representative to the Lake County LPC.

Deadline: Ongoing.

Cost: Staff time and any project costs.

Benefits: This effort supports the Village's adoption of the Lake County ANHMP in August 2012.

Plan Reference: Chapter 6 of the Lake County ANHMP.

Action Item 12: Encourage Homeowner Projects That Enhance the Village and Reduce Storm Runoff

Small efforts to reduce stormwater runoff and improve water quality by one property owner have a cumulative effect when they are done by many property owners. Rain gardens help to reduce flood runoff and they also enhance the environment. The Village should distribute information on activities such as rain gardens providing property owners an idea of what they can do to help address flood issues throughout Lincolnshire.

Responsible Board or Department: Planning

Deadline: Ongoing.

Cost: Identified per project.

Benefits: Small efforts may protect basements and crawl spaces, and all efforts contribute to the reduction of runoff.

Plan Reference: Chapter 5 of this Mitigation Plan.

Action Item 13: Provide Additional Stormwater and Floodwater Storage

The Lake County SMC continues to work with other agencies to consider regional approaches (large detention sites) to provide flood damage reduction. Small detention or storage sites may be all that is available, and when small sites or small opportunities for stormwater storage become available, the Village of Lincolnshire should consider exploring funding, design and construction.

Responsible Board or Department: Public Works Department and Community and Economic Development Department.

Deadline: Ongoing.

Cost: Identified per project. Potential funding sources include HMGP, PDM, and FMA.

Benefits: Smaller flood events may have less impact on the Village of Lincolnshire residents and property.

Plan Reference: Chapter 5 of this Mitigation Plan

Action Item 14: Consider Opportunities to Acquire Available Properties in the Floodplain

When properties located in the Village of Lincolnshire floodplains become available for purchase, the Village should consider whether acquisition of that property would be a benefit to the Village.

Responsible Board or Department: Public Works and Planning.

Deadline: Ongoing.

Cost: Identified per project. Potential funding sources include FEMA Hazard Mitigation Assistance grant programs.

Benefits: Property protection measures include the acquisition of floodplain properties, and floodplain properties that are kept as open space or returned to open space allow the floodplain to do its job of storing flood waters.

Plan Reference: Chapter 5 of this Mitigation Plan and Chapter 5, Section 5.2 of the Lake County ANHMP.

Action Item 15: Seek Mitigation Grant Funding for Cost Beneficial Projects

When appropriate for a mitigation project, the Village of Lincolnshire should apply for mitigation grant funding through available IEMA and FEMA programs for mitigation planning and mitigation projects. As required by IEMA and FEMA programs, projects must be cost beneficial. FEMA Hazard Mitigation Assistance program funding and Section 406 of the Stafford Act (for facilities and infrastructure damaged from an event which received a presidentially disaster declaration) should be considered.

Responsible Board or Department: Public Works, Planning, Administrator's Office.

Deadline: As needed.

Cost: 25% of plan or project cost (non-federal share). Potential funding sources include HMGP, PDM, and FMA.

Benefits: The Village of Lincolnshire, along with residents and property owners, would benefit from the available grant funding.

Plan Reference: Chapter 5 of this Mitigation Plan.

6.3 Implementation Strategy

The Village of Lincolnshire will pursue the action items listed in this Chapter as staff and funding resources allow. The Village of Lincolnshire will also continue to implement action items pertaining to municipalities in Chapter 6 of the Lake County ANHMP. However, as mentioned in Section 6.1, the other recommendations included in this Mitigation Plan and the Lake County ANHMP (i.e., in Chapter 5) are no less important and should be implemented as opportunities arise. Plan monitoring and maintenance are discussed in Chapter 7 of this Plan.

Table 6-1 Summary of Village of Lincolnshire Mitigation Plan Action Items

Action Item:	Action Item To Be Implemented By:						
	Village Board	Village Manager	Econ. Development	Public Works	Emerg. Mgmt.	Other Dept.	Property Owners/ Stakeholders
1. Plan Adoption	✓	✓					
2. Plan Monitoring and Maintenance			✓	✓			
3. Improve Natural Hazards Public Information Efforts		✓		✓	✓		
4. Improve Village Communications Before, During and After Hazard Events		✓	✓	✓	✓	✓	
5. Property Protection Projects				✓			✓
6. Concerns with the Lincolnshire-Londonderry Berm	✓	✓		✓			✓
7. Maintenance Programs for Drainage Systems				✓			
8. Community Rating System Participation		✓	✓	✓	✓	✓	
9. Participation in Tree City USA				✓			
10. Participation in StormReady					✓		
11. Lake County ANHMP Action Items				✓	✓		
12. Homeowner Projects to Reduce Runoff				✓			✓
13. Provide Additional Stormwater and Floodwater Storage			✓	✓			
14. Opportunities to Acquire Available Properties in the Floodplain	✓	✓	✓	✓			
15. Seek Mitigation Grant Funding	✓		✓				

Table 6-2 Summary of Village of Lincolnshire Mitigation Plan Goals

Action Item:	Goals (Chapter 4)				
	Goal 1.	Goal 2.	Goal 3:	Goal 4.	Goal 5.
	Protect the lives, health, and safety of people	Protect public services, utilities and critical facilities	Mitigate existing buildings	Ensure that new developments do not create new exposures	Mitigate to protect against economic and transportation losses
1. Plan Adoption	✓	✓	✓	✓	✓
2. Plan Monitoring and Maintenance	✓	✓	✓	✓	✓
3. Improve Natural Hazards Public Information Efforts	✓	✓	✓	✓	✓
4. Improve Village Communications Before, During and After Hazard Events	✓	✓	✓	✓	✓
5. Property Protection Projects	✓	✓	✓		✓
6. Concerns with the Lincolnshire-Londonderry Berm	✓	✓	✓		✓
7. Maintenance Programs for Drainage Systems	✓	✓	✓	✓	✓
8. Community Rating System Participation	✓	✓	✓	✓	✓
9. Participation in Tree City USA	✓	✓	✓	✓	✓
10. Participation in StormReady	✓	✓	✓	✓	✓
11. Lake County ANHMP Action Items	✓	✓	✓	✓	✓
12. Homeowner Projects to Reduce Runoff	✓	✓	✓	✓	✓
13. Provide Additional Stormwater and Floodwater Storage	✓	✓	✓	✓	✓
14. Opportunities to Acquire Available Properties in the Floodplain	✓	✓	✓		✓
15. Seek Mitigation Grant Funding	✓	✓	✓		✓

Table 6-3 Summary of Lake County ANHMP Action Items

Action Item:	Action Item To Be Implemented By:						
	Village Board	Lake County SMC	Lake County EMA	Lake County PB&D	Municipal Boards & Councils	Village Staff	Other Stakeholders
1. Plan Adoption	✓				✓		
2. Plan Monitoring and Maintenance		✓	✓			✓	
3. Improve Natural Hazards Public Information Efforts		✓	✓	✓		✓	✓
4. SMC Flood Mitigation Projects		✓				✓	
5. Development of Flood Stage Maps		✓				✓	
6. Property Protection Checklist		✓	✓				
7. Improve Emergency Response and Develop Assessment Teams		✓	✓			✓	
8. Incorporate Lake County ANHMP into Other County and Municipal Plans	✓	✓	✓	✓	✓	✓	✓
9. Property Protection Projects		✓	✓			✓	✓
10. Continue to map natural hazard impacts and continue vulnerability assessments		✓	✓				
11. Review and Mitigation of Critical Facilities		✓	✓			✓	✓
12. Seek Mitigation Grant Funding for Additional Mitigation Planning and Cost Beneficial Projects		✓				✓	
13. Continued Implementation of the WDO and NFIP Requirements		✓		✓		✓	
14. Improve Capacity of Drainage Systems		✓				✓	
15. Implement Maintenance Programs for Drainage Systems		✓				✓	
16. Improve Response & Recovery Information Sharing and Collaboration	✓		✓			✓	✓
17. Continue Work for NIMS Compliance	✓		✓			✓	✓
18. Alternate Power Sources for Critical Facilities and Shelters			✓			✓	✓
19. Improve Building Codes and Building Code Enforcement				✓		✓	
20. Community Rating System Participation				✓		✓	
21. Reduce Inflow and Infiltration to Protect Against Sewer Backups						✓	
22. Urban Forestry - Participation in Tree City USA						✓	
23. Participation in StormReady			✓			✓	

Chapter 7.

Plan Maintenance

Maintenance of the Village of Lincolnshire Natural Hazard Mitigation Plan and the monitoring of its implementation will follow the same approach outlined in the Lake County ANHMP, and outlined in this Chapter.

The Lake County Local Planning Committee is responsible for the monitoring and maintenance of the 2012 Lake County ANHMP and the Village is responsible for implementing action items from the Lake County ANHMP and participating in the annual LPC meeting and providing needed information pertaining to the Village for the Lake County ANHMP annual reports. The membership of the LPC includes representatives from the participating communities. The LPC is coordinated by the Lake County SMC and the LCEMA.

7.1 Plan Adoption

Action Item 1 calls for the Village Board to adopt this Mitigation Plan. Adoption of the Mitigation Plan is required for the National Flood Insurance Program's Community Rating System. The adopted 2012 Lake County ANHMP will continue to be the plan that allows the Village to remain eligible for FEMA mitigation grants.

7.2 Maintenance and Monitoring

Maintenance and monitoring of the *Village of Lincolnshire Natural Hazards Mitigation Plan* are addressed in Action Item 2. This action item explains how and when this Mitigation Plan will be reviewed, revised, and updated. Action Item 2 calls for the Village of Lincolnshire Mitigation Planning Committee to meet at least once a year to prepare an annual progress report for this Mitigation Plan for the CRS. Annual meeting should:

- Act as a forum for hazard mitigation issues
- Allow for continued public participation in the implementation and future revisions
- Investigate mitigation opportunities.
- Report on progress and recommended changes to the Village Board

Written annual reports on progress should be presented to the Village Board and made available to the public. The annual reports will facilitate the 5-year update of this Mitigation Plan. Mitigation plans, and CRS floodplain management plans, are required by FEMA to be updated every five years

7.3 Continued Public Participation

The adopted Village of Lincolnshire Mitigation Plan and annual reports will be posted on the Village's website. Public input and participation will be welcome at the Mitigation Committee annual meetings. Other public information materials will be distributed and posted on the website to support this Mitigation Plan, and for the various outreach projects developed for the CRS. Also, a public meeting will precede any amendments or updates to this Mitigation Plan.

7.4 Evaluating the Plan's Success

Evaluation of the Village of Lincolnshire Mitigation Plan will include checking whether mitigation actions are implemented or not, and assessing their degree of effectiveness. The costs to the Village will also be evaluated. The Village staff and the Mitigation Committee will also evaluate whether mitigation actions need to be discontinued, or modified in any way in light of new developments in the community.

Appendix A.

Village of Lincolnshire Resolutions

This Appendix include the Village of Lincolnshire's resolution to create the Village of Lincolnshire Hazard Mitigation Planning Committee, and the resolution adopting this Mitigation Plan.

VILLAGE OF LINCOLNSHIRE

**A RESOLUTION APPROVING THE
ESTABLISHMENT OF THE VILLAGE OF LINCOLNSHIRE
ALL-NATURAL HAZARDS MITIGATION PLANNING COMMITTEE**

Passed by the Board of Trustees, August 5, 2013

VILLAGE OF LINCOLNSHIRE
LAKE COUNTY, ILLINOIS

RESOLUTION #732
Approving the Establishment of the Village of Lincolnshire
All-Natural Hazards Mitigation Planning Committee

Whereas the Village of Lincolnshire participates in the National Flood Insurance Program's Community Rating System (CRS) and is striving to improve the Village's CRS rating to provide additional flood insurance discounts to residents and property owners; and

Whereas the Village of Lincolnshire participated with Lake County, Illinois in the development of the Lake County All-Natural Hazards Mitigation Plan (ANHMP) and adopted the ANHMP on August 13, 2012; and

Whereas the adopted ANHMP allows the Village to be eligible for grants under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended by the Disaster Mitigation Act of 2000, Public Law 106-39, and provides the Village with certain CRS credit; and

Whereas the Village of Lincolnshire desires earn additional CRS credit by developing a flood and other natural hazard mitigation plan specific to the needs of the Village, particularly with a focus of reducing potential flood damage; and

Whereas the Village of Lincolnshire also desires to pursue a plan for public information relating to floods and desires to do so with the involvement of residents and businesses.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND BOARD OF TRUSTEES OF LINCOLNSHIRE, LAKE COUNTY, ILLINOIS, as follows:

Section 1 The Village of Lincolnshire All-Natural Hazards Mitigation Planning Committee (the "COMMITTEE") is hereby established as an advisory body of Village of Lincolnshire for the purpose of developing a Village of Lincolnshire flood and natural hazard mitigation plan and other plans for the CRS;

Section 2 The COMMITTEE will be comprised of Village staff, Village residents and business owners and representatives of other interested agencies, organizations and associations.

Section 3 The following persons are appointed to the COMMITTEE:

Larry Barnhart	4 Court of Connecticut River Valley (Wood Creek Courts EPA)
Mark Cohen	State Farm Insurance, 275 Parkway Dr., Suite 213
Deann Daniel	Sedgebrook, 960 Audubon Way
Jamie Godshalk	57 Lincolnshire Drive
Ramesh Gulatee	4 Dukes Lane
Wendy Kritt	58 Lincolnshire Drive
Marj Lundy	57 Lincolnshire Drive
Ann Maine	23 Berkshire Lane
Judy Mankus	95 Lincolnshire Drive

Jeff Merwin	14826 W. Mayland Villa Road
Rev. Douglas Meyer	30 Riverwoods Road
	Lutheran Church of the Holy Spirit
Andy Muzik	8 Stonegate Circle
Joseph Pratt	5 Exeter Court
Stan Reznik	79 Lincolnshire Drive
William Rubinstein	211 Rivershire Lane
David Schaper	11 Oxford Drive
Rob Sturuss	1 Stonegate Circle
Rob Weinberg	10 Sommerset Lane (Westgate HOA)
Brett Blomberg	Mayor
Mara Grujanac	Trustee
Jennifer Hughes	Village Engineer, Chair
Steve Robles	Village Planner

Other persons may be added to the COMMITTEE as necessary and as recognized by the COMMITTEE Chair.

Section 4 The COMMITTEE shall meet as often as necessary to prepare the CRS-related plan. The schedule of Committee meetings shall be posted in appropriate places. All meetings of the COMMITTEE shall be open to the public

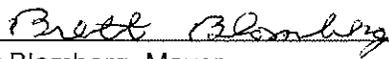
Section 5 When the COMMITTEE has completed its work and presents its recommended CRS-related plan, this Board will review them with the intention of adopting all or parts of the plan. It is understood that this resolution of commitment to participate in the planning process does not constitute a commitment to enact the recommended plan.

Section 6: This Resolution shall be in full force and effect from and after its adoption as provided by law.

SO RESOLVED this 6th day of August, 2013, at Lincolnshire, Lake County, Illinois.

AYES: Feldman, Grujanac, McAllister, McDonough, Servi
 NAYS: None
 ABSENT: Brandt

APPROVED:


 Brett Blomberg, Mayor

ATTEST:


 Barbara Mastandrea, Village Clerk

[To be inserted: The Village of Lincolnshire's resolution to resolution adopt this Mitigation Plan.]

Appendix B.

Public Involvement

This Appendix includes the public involvement and agency coordination efforts for the development of the Village of Lincolnshire Natural Hazard Mitigation Plan.



Lincolnshire Flood Mitigation Planning Committee

Thursday, June 20, 2013, 7:00 p.m.

Village Hall Board Room

Public Meeting Agenda

1. Welcome and Introductions
2. Why Are We Here? Flooding in Lincolnshire
3. What is Flood Mitigation and What is CRS?
4. What is the Purpose of the Planning Committee?
 - a. Flood Mitigation Plan
 - b. Program for Public Information
 - c. Flood Insurance Promotion
5. Planning Step 1 – Organize
 - a. Committee Role and Participation
 - b. Expected Meetings
6. Planning Step 2 – Involve the Community and Public Information Needs
 - a. Lincolnshire’s Current Efforts
 - b. Other Methods To Encourage Input
 - c. Community Survey
7. Planning Step 3 – Agency & Organization Coordination
8. Public Comment
9. Next Steps
10. Adjourn

Notes:



*Lincolnshire is a village with winding roads and luxurious homes.
The community was planned around its mature trees giving it a distinct rural charm.*



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- Employment
- Flood Protection Information
- Freedom of Information Act
- Lincolnshire Community Guide
- Meeting Agendas and Minutes
- News and Tips



Click on the photo to get details for the June 20, 2013 Flood Hazard Mitigation Meeting

Village News/Information

Volunteers Needed to Develop Flood Hazard Mitigation Plan

The Village is seeking volunteers to assist in developing a plan to prepare for and respond to fu... [Read on](#)

- Lincolnshire Implements New Water Meter Reading System
- ComEd System Improvements
- National Night Out
- Flood Recovery Resources
- Village Updates Economic Development Plan



*Lincolnshire is a village with winding roads and luxurious homes.
The community was planned around its mature trees
giving it a distinct rural charm.*



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Village Emergency Notification



Volunteers Needed to Develop Flood Hazard Mitigation Plan

The Village is seeking volunteers to assist in developing a plan to prepare for and respond to future floods. If you have experienced a flood, whether related to the Des Plaines River, Indian Creek, Lincolnshire Creek, Chicago River, or just backyard flooding, this is your chance to shape the way the Village addresses these issues.

The kickoff meeting for the flood mitigation and planning effort will be held on June 20, 2013 at 7:00 p.m. at the Village Hall Board Room, One Olde Half Day Road, Lincolnshire. This public meeting is open to all Lincolnshire residents and business owners. A planning committee will be formed and future meetings will be planned. All meeting will be open to the public.

The Village of Lincolnshire will be developing a flood hazard mitigation plan that will incorporate the Lake County All Natural Hazards Mitigation Plan. The Lincolnshire flood mitigation plan will focus on flood issues specific to Village residents and business owners. This plan will identify activities that can be undertaken by the Village and property owners to reduce property damage that result from flooding and to increase the safety of the community for all natural hazards.

In conjunction with the flood mitigation plan, the Village will also develop a program for public information to better inform people of steps they can take to protect themselves before during and after a flood, and a flood insurance promotion strategy to protect homes and businesses.

These efforts will contribute to the Village's Community Rating System (CRS) rating. Owner's of property located in the Special Flood Hazard Area already receive 25% discounts on their flood insurance premiums through the National Flood Insurance Program. One of the goals of these meetings is to identify areas where the Village can improve its service to the residents and become eligible for even greater discounts.

Last Updated on Friday, May 17, 2013



Lincolnshire Flood and Other Hazards Survey

The floods in mid-April and June impacted residents in many different ways. For Village officials, the events lead us to evaluate the Village's past performance and seek ways to improve service. One way the Village can help is by taking steps which reduce flood insurance costs. The Village participates in a voluntary program, the Community Rating System, administered by the Federal Emergency Management Agency. This program rewards property owners with discounts on flood insurance premiums based upon efforts by the Village which exceed FEMA's minimum requirements. In an effort to increase the amount of the discount, the Village is developing an All-Natural Hazards Mitigation Plan. This plan will address natural hazards likely to impact the Village including floods, tornadoes, and winter storms. The plan will identify areas susceptible to these hazards and explore measures to minimize the impacts of future natural disasters. The Village has developed the attached survey to gather community input to help shape the plan.

This survey is only 28 questions long and should take only 5 to 10 minutes to complete. Your feedback is important to the Village in working to assist the Village with planning and responding to potential disasters. The deadline to complete this survey is July 31, 2013.

This survey can be completed online at the Village's website: www.village.lincolnshire.il.us or you may answer the questions below.

1. Please tell us a little about you.

- Property owner
- Renter
- Business owner

2. How long have you lived or operated a business at your current location?

- < 1 year
- 1 year but less than 5 years
- 5 years but less than 10 years
- 10 years +

3. What river or stream in Lincolnshire is closest to your property?

- Des Plaines River
- Indian Creek
- Lincolnshire Creek
- West Branch of North Fork of Chicago River
- Other
- I Do not know

4. In the past 10 years, have you or someone in your household or business experienced flood problems at your current location? (Check all that apply.)

- | | |
|---|---|
| <input type="checkbox"/> Flooding On or Above First Floor of House or Building (above the basement or crawlspace) | <input type="checkbox"/> Yard Flooding |
| <input type="checkbox"/> Flooding in Basement | <input type="checkbox"/> Street Flooding |
| <input type="checkbox"/> Sewer Backup | <input type="checkbox"/> No Problems (If no problems, proceed to Question # 10) |
| | <input type="checkbox"/> Other |

If other, please explain: _____

5. If you have had flood problems, please indicate what you think may be the source or cause of the flood water (Check all that apply.)

- | | |
|--|--|
| <input type="checkbox"/> The river or creek level rising and coming onto my property | <input type="checkbox"/> Debris in the street or stream that created a problem |
| <input type="checkbox"/> Heavy rain that can't drain away | <input type="checkbox"/> A levee or earthen berm failed |
| <input type="checkbox"/> The sewer backing up | <input type="checkbox"/> A detention basin or lake overflowed |
| | <input type="checkbox"/> Other |

If other, please describe: _____

6. Did you need assistance to deal with the flood?

- Yes
- No

7. If you answered yes to Question # 6, please indicate the type of assistance you received (Check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Hired a private contractor for restoration | <input type="checkbox"/> Contacted the Village for advice/assistance |
| <input type="checkbox"/> Hired a private contractor to make drainage improvements | <input type="checkbox"/> Other |
| <input type="checkbox"/> Contacted my insurance agent | |

If other, please describe: _____

8. During a disaster, where do you go for information updates? (Check all that apply.)

- | | |
|--|--|
| <input type="checkbox"/> Television news | <input type="checkbox"/> Fire Department/Law Enforcement |
| <input type="checkbox"/> Radio | <input type="checkbox"/> Public Health Department (Not Village) |
| <input type="checkbox"/> Newspapers | <input type="checkbox"/> Lake County Government |
| <input type="checkbox"/> Village Websites | <input type="checkbox"/> Village E-newsletter |
| <input type="checkbox"/> Lincolnshire Twitter/Facebook Page | <input type="checkbox"/> Village Blackboard Connect Emergency Notification Service (for more info: http://www.village.lincolnshire.il.us/news-updates/connect-cty) |
| <input type="checkbox"/> Local School Districts | <input type="checkbox"/> Other |
| <input type="checkbox"/> Direct Mail Correspondence from Village | |
| <input type="checkbox"/> Village Fact Sheet/Brochure | |
| <input type="checkbox"/> Public Workshops/Meetings | |

If other, please describe: _____

9. Did you receive communications from the Village during recent flood events?

- Yes
- No

10. If you answered yes to Question # 9, how did you keep informed of the Village's flood response activities during the recent flood events?

- Emergency Telephone System – Blackboard Connect
- Checked Village Website for Updates
- Received Village Electronic Newsletters
- Called the Village Directly to Inquire About Situation

11. Prior to a disaster, what are the best ways for you to receive information from the Village about how to protect your family, home or business from damage due to floods or other natural hazards? (Check all that apply.)

- | | |
|--|--|
| <input type="checkbox"/> Village Websites | <input type="checkbox"/> Public Health Department (Not Village) |
| <input type="checkbox"/> Lincolnshire Twitter/Facebook Page | <input type="checkbox"/> Lake County Government |
| <input type="checkbox"/> Local School Districts | <input type="checkbox"/> Village E-newsletter |
| <input type="checkbox"/> Direct Mail Correspondence from Village | <input type="checkbox"/> Village quarterly print newsletter |
| <input type="checkbox"/> Village Fact Sheet/Brochure | <input type="checkbox"/> Village Blackboard Connect Emergency Notification Service |
| <input type="checkbox"/> Public Workshops/Meetings | <input type="checkbox"/> Other |
| <input type="checkbox"/> Fire Department/Law Enforcement | |

If other, please describe: _____

12. During the April 2013 flood, the Village received inquiries from families seeking information about loved ones evacuated from their homes. Do you know someone in Lincolnshire who evacuated?

- Yes, someone in my immediate family
- Yes, my neighbor
- Yes, someone I know
- No

13. Do you have flood insurance?

- Yes, I was required to purchase flood insurance
- Yes, I am not required to have insurance but have experienced flood damage previously
- Yes, I am not required to have insurance and **have not** experienced flood damage
- No, I am not required to have flood insurance
- No, I do not think flood insurance is a good investment for me
- No, I do not understand why I might need flood insurance
- I do not know

14. If you do not have flood insurance, would you like the Village to send you information about it?

- Yes. If yes, please provide your email or mailing address in Question 25.
- No

15. Do you think the Village should maintain a list of evacuees and their intended temporary location?

- Yes
- No

16. Based upon your recent experience with flood events in Lincolnshire, what do you think the Village could do to improve its response and service to residents during such a disaster?

17. What hazards, besides floods, concern your family or business? (Check all that apply.)

- | | |
|---|---|
| <input type="checkbox"/> Dam Failure | <input type="checkbox"/> Lightning |
| <input type="checkbox"/> Drought | <input type="checkbox"/> Severe shoreline erosion |
| <input type="checkbox"/> Earthquake | <input type="checkbox"/> Sewer backup |
| <input type="checkbox"/> Extreme cold | <input type="checkbox"/> Snow storm |
| <input type="checkbox"/> Extreme heat | <input type="checkbox"/> Thunderstorm |
| <input type="checkbox"/> Groundwater | <input type="checkbox"/> Tornado |
| <input type="checkbox"/> Hail | <input type="checkbox"/> Wildfire |
| <input type="checkbox"/> Ice storm | <input type="checkbox"/> Other |
| <input type="checkbox"/> High wind/microburst | |

If other, please describe: _____

18. How prepared are you for natural hazards likely to occur within our community?

- Not at all prepared
- Somewhat prepared
- Adequately prepared
- Well prepared
- Very well prepared

19. What steps have you taken to prepare your home or business for natural hazards? (Check all that apply.)

- | | |
|--|--|
| <input type="checkbox"/> Created a family/business disaster plan and discussed it with my family/co-workers | <input type="checkbox"/> Received First Aid/CPR training |
| <input type="checkbox"/> Established a family/business communication plan | <input type="checkbox"/> Practiced a fire escape plan |
| <input type="checkbox"/> Constructed a family/business disaster kit which includes water, food, flashlight and batteries | <input type="checkbox"/> Installed a fire extinguisher in my house or business |
| <input type="checkbox"/> Purchased a battery-powered emergency radio | <input type="checkbox"/> Installed smoke/Carbon Monoxide detectors |
| <input type="checkbox"/> Created a First Aid Kit | <input type="checkbox"/> Discussed utility shutoffs |
| | <input type="checkbox"/> Purchased flood insurance |
| | <input type="checkbox"/> Purchased sewer backup rider on insurance policy |
| | <input type="checkbox"/> Other |

If other, please describe: _____

20. How do you feel Lincolnshire is doing in creating awareness of the natural hazards faced by residents and businesses?

- Excellent
- Good
- Fair
- Poor

21. Please list any suggestions you have for Lincolnshire to improve its service to you when dealing with natural hazards:

If your property abuts the Des Plaines River, please answer the following questions. Otherwise, proceed to Question # 24 on the next page.

22. Does the berm on your property require any maintenance work?

- Yes
- No

If yes, please describe the work required. _____

23. Are you willing to grant easement to the Village for future maintenance?

- Yes
- No

Comments: _____

24. Lincolnshire is establishing a Hazards Mitigation Committee to review how the community responds to natural hazards, including flooding. Members will review the Village's communication plan, insurance plan, and suggest projects to deal with problem areas. This committee will meet approximately 3 times in the evenings for a few hours over the next few months. Please indicate your willingness to serve on such a committee.

- Yes
- No
- Maybe

25. If you are willing to serve on a committee, please provide your name, address, telephone number and email address below:

26. Please indicate if you would like to receive follow-up information regarding this survey from the Village.

- Yes
- No

27. Please provide any other information you think the Village should know about hazards, including flooding, that may impact your family or business.

28. Please provide your name, street address and e-mail address below (Optional). The Village may utilize this information for the following purposes: to contact you in the event of future floods; to contact you if you volunteer to serve on the Hazards Mitigation Committee; to provide you information regarding flood insurance, or to ask you questions about your responses to this survey.

Please return your completed survey by July 31, 2013 to:

Public Works Department
Village of Lincolnshire
One Olde Half Day Road
Lincolnshire, IL 60069

Thank you for taking this survey!

Lincolnshire Flood and Other Hazards Survey

[Design Survey](#) [Collect Responses](#) [Analyze Results](#)

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+ Filter + Compare + Show

- Filter by Question and Answer >
- Filter by Collector >
- Filter by Completeness >
- Filter by Time Period >
- Filter by Respondent Metadata >

Cancel

FILTER BY QUESTION AND ANSWER

Choose...

Cancel

< Back

< Back

COMPARE BY QUESTION AND ANSWER

Choose...

Cancel

< Back

No rules applied

Rules allow you to FILTER, COMPARE and SHOW results to see trends and patterns. [Learn more](#)

Saved Views (1)

Original View (No rules applied)

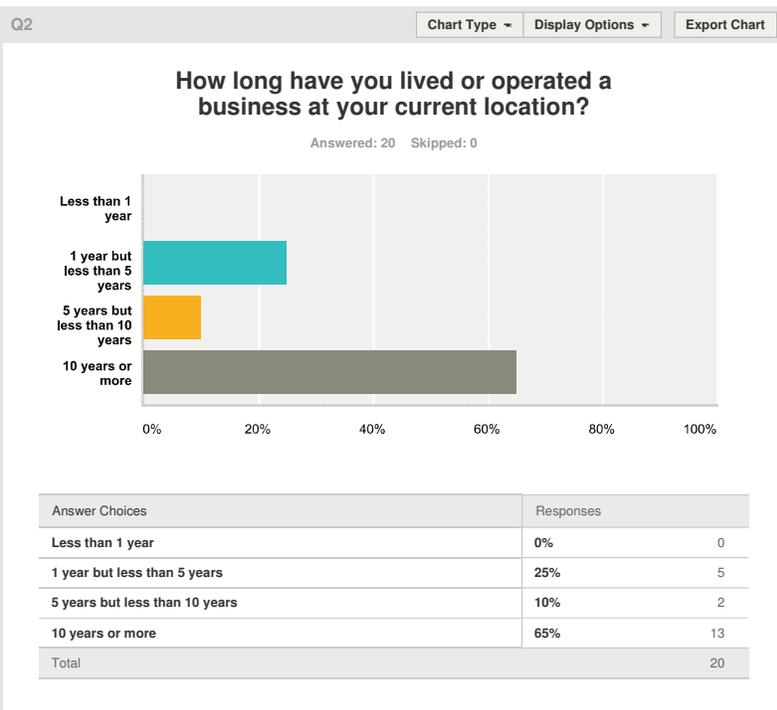
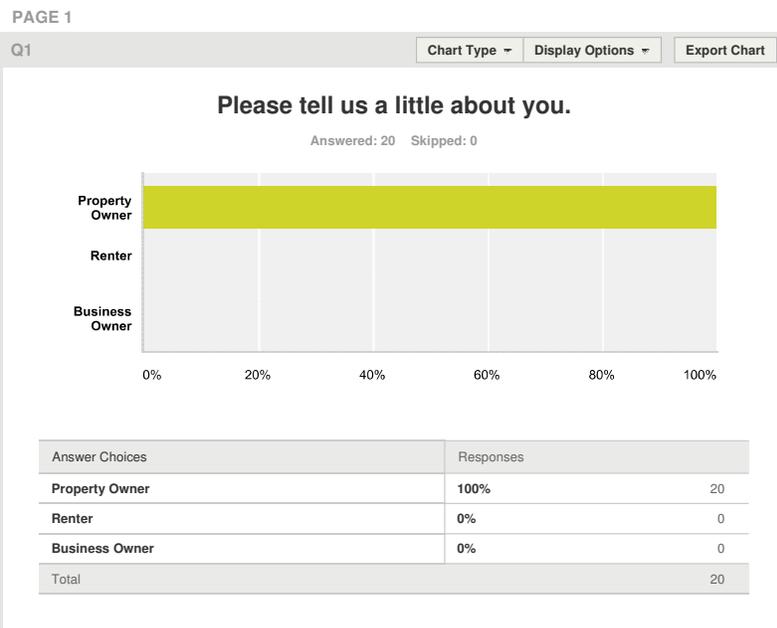
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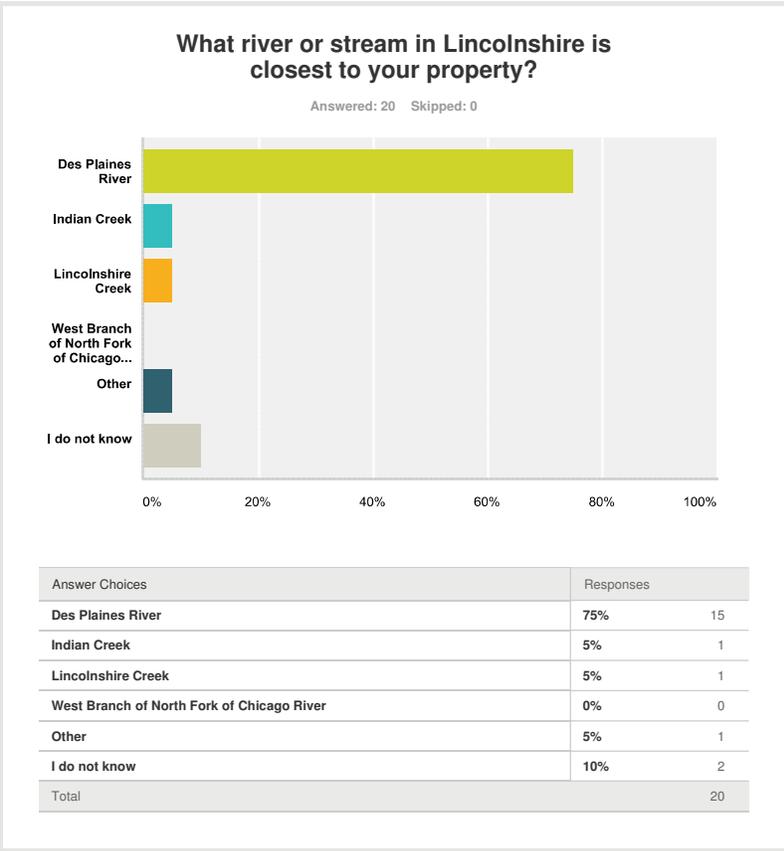
RESPONDENTS: 20 of 20 Export All

Question Summaries
Individual Responses

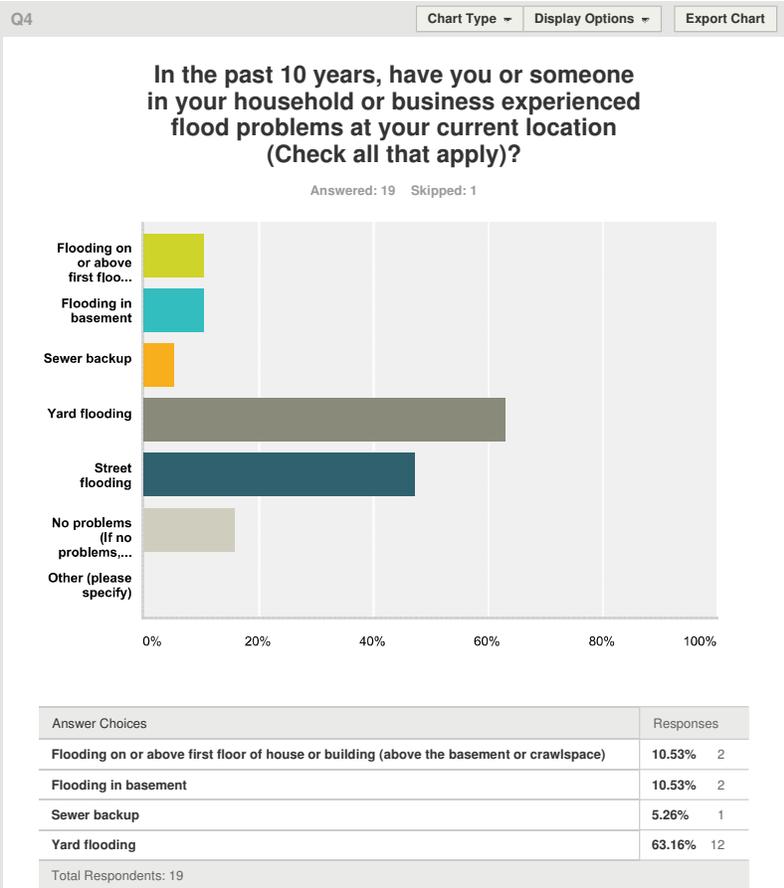
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Q3 Chart Type Display Options Export Chart



PAGE 2

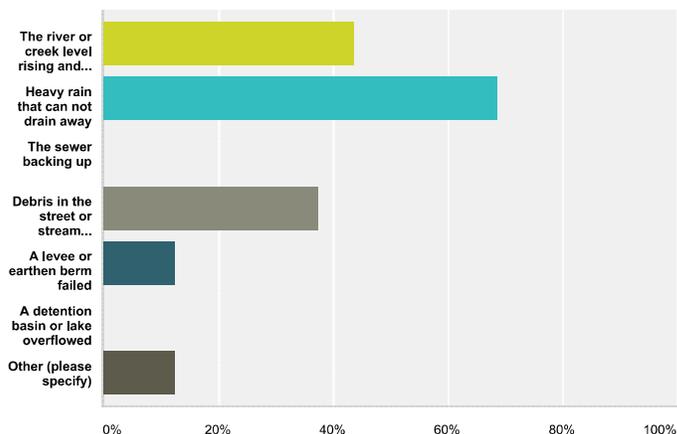


Answer Choices	Responses
Street flooding	47.37% 9
No problems (If no problems, proceed to Question #10)	15.79% 3
Other (please specify)	0% 0
Total Respondents: 19	

Q5 Chart Type ▾ Display Options ▾ Export Chart

If you have had flood problems, please indicate what you think may be the source or cause of the flood water (Check all that apply)?

Answered: 16 Skipped: 4

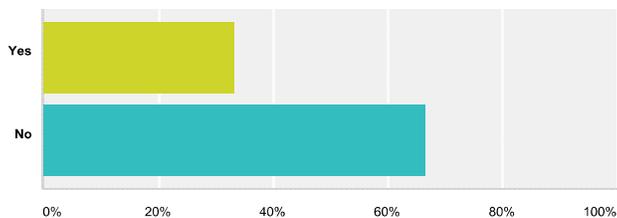


Answer Choices	Responses
The river or creek level rising and coming onto my property	43.75% 7
Heavy rain that can not drain away	68.75% 11
The sewer backing up	0% 0
Debris in the street or stream created the problem	37.50% 6
A levee or earthen berm failed	12.50% 2
A detention basin or lake overflowed	0% 0
Other (please specify) Responses	12.50% 2
Total Respondents: 16	

Q6 Chart Type ▾ Display Options ▾ Export Chart

Did you need assistance to deal with the flood?

Answered: 15 Skipped: 5



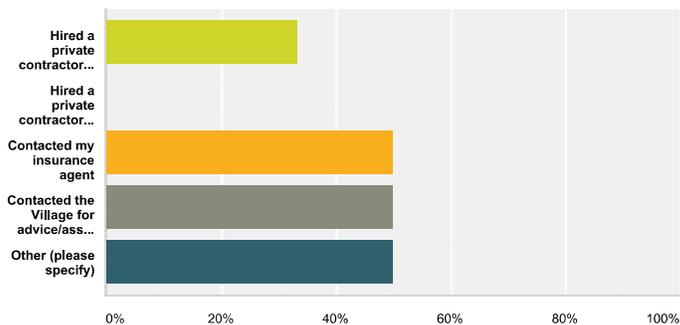
Answer Choices	Responses
Yes	33.33% 5
Total	15

Answer Choices	Responses
No	66.67% 10
Total	15

Q7 Chart Type ▾ Display Options ▾ Export Chart

If you answered yes to Question #6, please indicate the type of assistance you received (Check all that apply)?

Answered: 6 Skipped: 14



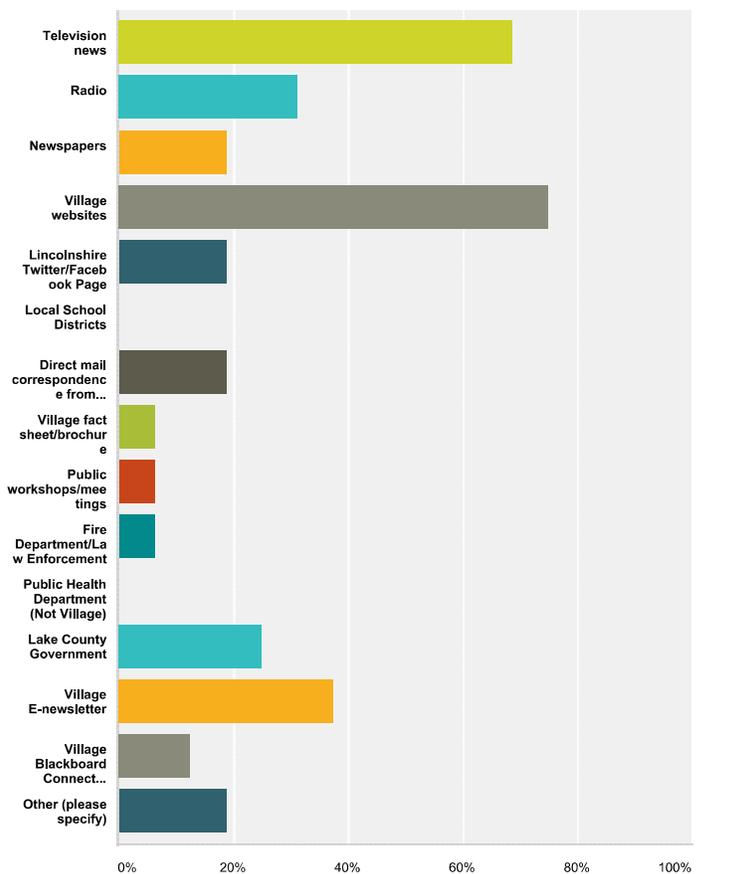
Answer Choices	Responses
Hired a private contractor for restoration	33.33% 2
Hired a private contractor to make drainage improvements	0% 0
Contacted my insurance agent	50% 3
Contacted the Village for advice/assistance	50% 3
Other (please specify) Responses	50% 3
Total Respondents: 6	

PAGE 3

Q8 Chart Type ▾ Display Options ▾ Export Chart

During a disaster, where do you go for information updates (Check all that apply)?

Answered: 16 Skipped: 4



Answer Choices	Responses
Television news	68.75% 11
Radio	31.25% 5
Newspapers	18.75% 3
Village websites	75% 12
Lincolnshire Twitter/Facebook Page	18.75% 3
Local School Districts	0% 0
Direct mail correspondence from Village	18.75% 3
Village fact sheet/brochure	6.25% 1
Public workshops/meetings	6.25% 1
Fire Department/Law Enforcement	6.25% 1
Public Health Department (Not Village)	0% 0
Lake County Government	25% 4
Village E-newsletter	37.50% 6
Village Blackboard Connect Emergency Notification Service	12.50% 2
Other (please specify) Responses	18.75% 3
Total Respondents: 16	

Q9

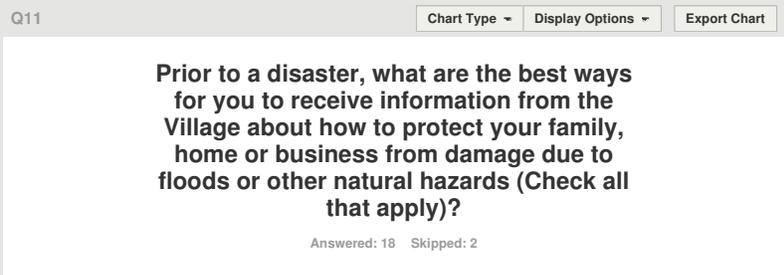
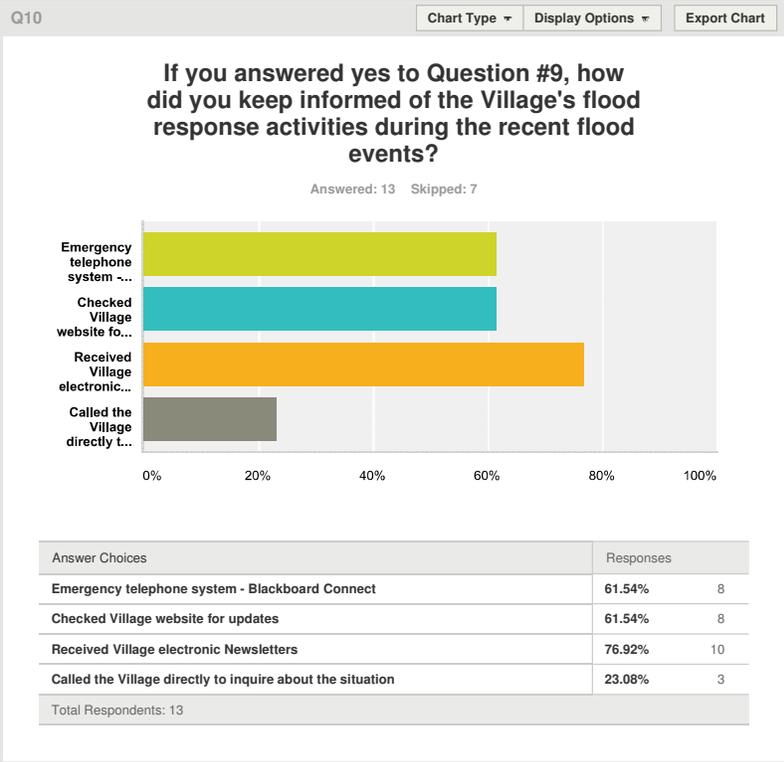
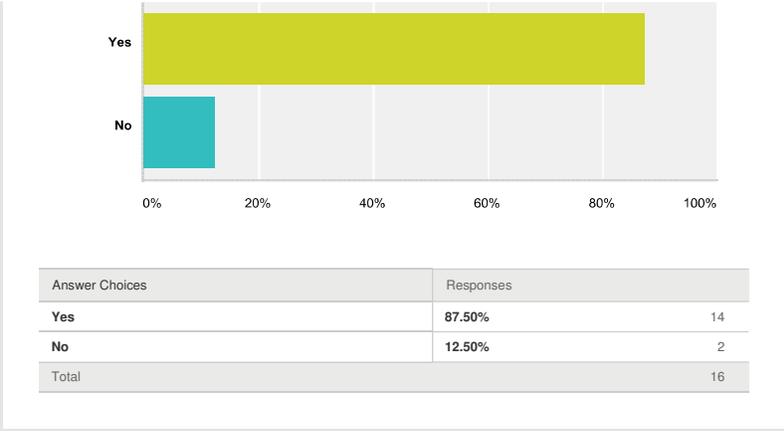
Chart Type ▾

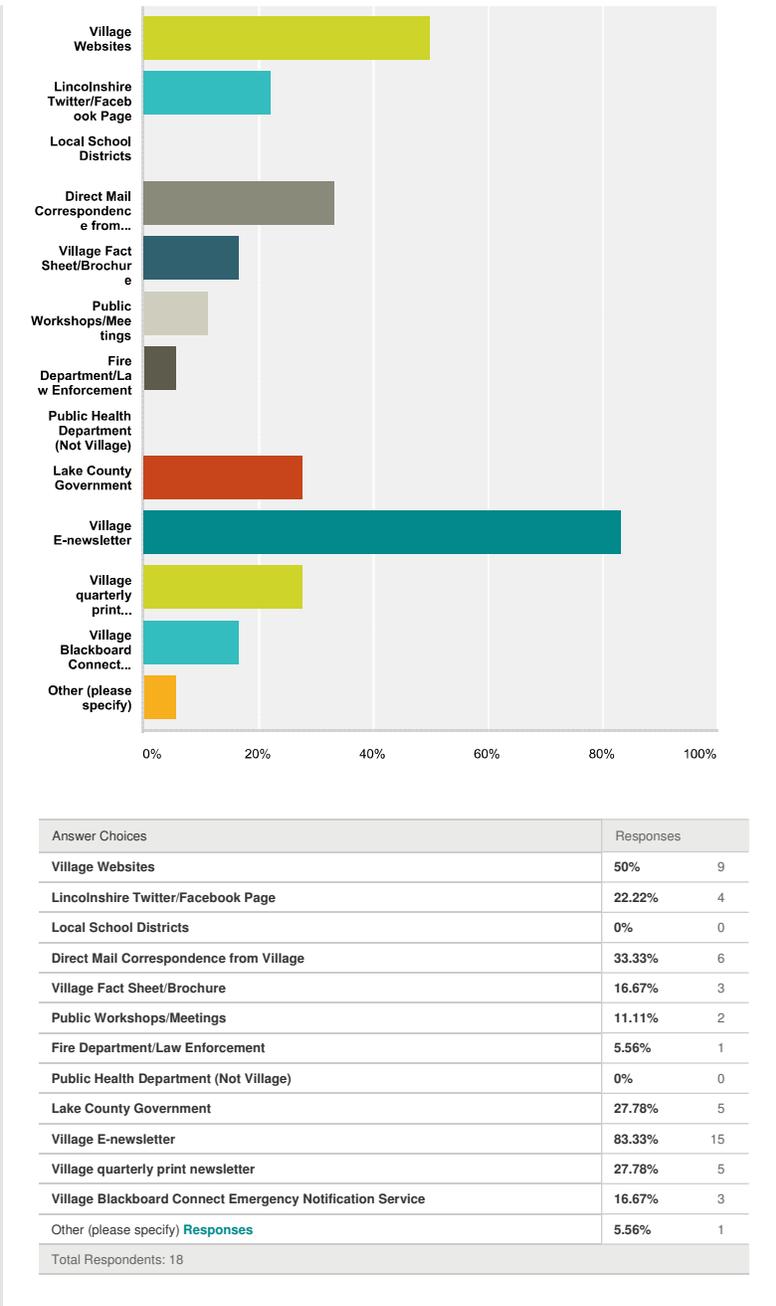
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Export Chart

Did you receive communications from the Village during recent flood events?

Answered: 16 Skipped: 4

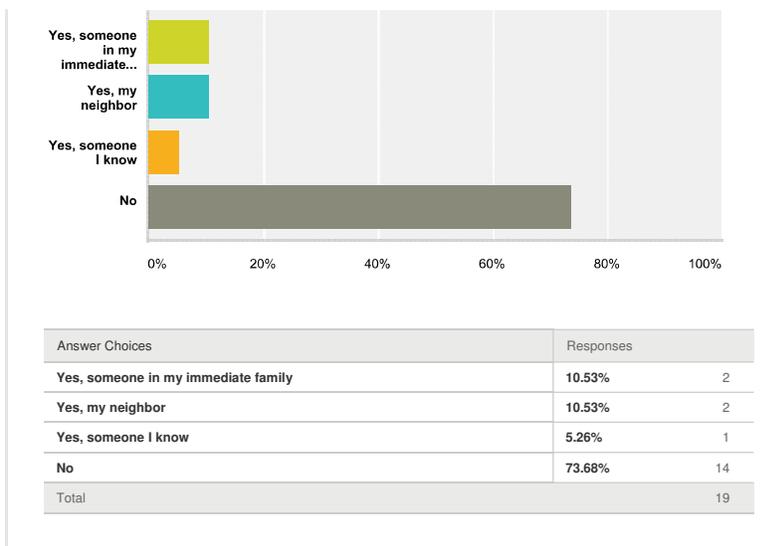




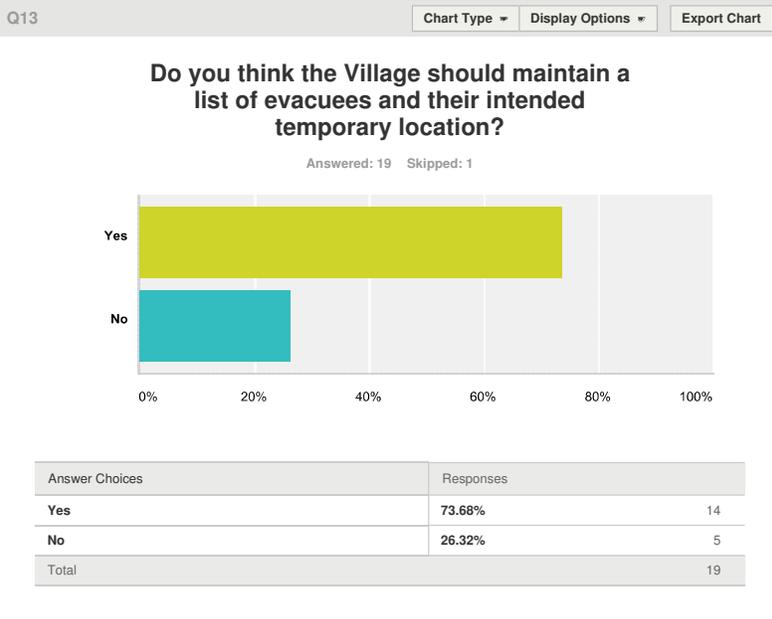
Q12 Chart Type ▾ Display Options ▾ Export Chart

During the April 2013 flood, the Village received inquiries from families seeking information about loved ones evacuated from their homes. Do you know someone in Lincolnshire who evacuated?

Answered: 19 Skipped: 1



PAGE 4



Lincolnshire Letterhead

Mailing List – See “CRS Coordination Agencies_10-1-2013.xlsx”:

County: Lake County SMC

Villages: Buffalo Grove, Riverwoods, Vernon Hills, Lake Forest and Bannockburn

Vernon Township (optional)

Agencies: IDNR/OWR, Lake County Forest Preserve,

[Date]

[Address Block]

Dear []:

The purpose of this letter is to let you know that the Village of Lincolnshire has established the All-Hazards Mitigation Planning Committee (Planning Committee) for the purpose of developing a Village of Lincolnshire flood and natural hazard mitigation plan and other plans for the Community Rating System (CRS). The CRS provides the Village with flood insurance premium discounts and the work of the Planning Committee will help the Village improve their CRS rating.

The Planning Committee will meet on the following dates for the purpose of drafting the Village’s CRS plans:

Thursday, October 17, 2013 at 7:00 p.m.

Thursday, November 14, 2013 at 7:00 p.m.

Thursday, December 5, 2013 at 7:00 p.m.

The meetings are open to the public. The meetings will be at the Village Hall at One Olde Half Day Road. At the meetings we will work to develop hazard mitigation actions and public information strategies, and to conduct a flood insurance assessment.

We would be happy to share draft copies of the plans that we are developing and would welcome your comments.

If you would like to attend a meeting, please let us know, and if you have any questions please feel free to contact Rob Horne of the Public Works Department at Rhone@village.lincolnshire.il.us or at 847-883-8600.

Sincerely,

[signature block]

Attachment

July 2014

“Public Meeting to Be Held on the Village of Lincolnshire Natural Hazards Mitigation Plan”

The Village of Lincolnshire Natural Hazards Mitigation Planning Committee has completed the development of the Village of Lincolnshire Natural Hazards Mitigation Plan. A public meeting will be held on Monday, August 25, 2014 at _____ at the Village Hall to review the Plan.

The public is invited to attend this meeting and to provide comments on the Plan. The Plan will identify activities that can be undertaken by both the government and the residents and property owners to reduce the safety hazards, health hazards, and property damage caused by floods, severe summer and winter storms, tornadoes, and other natural hazards.

The Village of Lincolnshire Natural Hazards Mitigation Plan will be considered by the Village Board for adoption. The Plan will assist the Village in improving its CRS class rating for the Federal Emergency Management Agency’s Community Rating System (CRS) Program. The Village is currently a CRS Class 5 and residents and property owners purchasing flood insurance receive a 25% flood insurance premium discount.

Written comments on the Plan will be accepted through _____. A copy of the Plan can be downloaded at the Village’s website _____.

For more information, contact _____.

Village of Lincolnshire Natural Hazards Mitigation Plan

Frequently Asked Questions (Mitigation Plan FAQs)

July 2014

1. What is the Village of Lincolnshire Natural Hazards Mitigation Plan?

The Village of Lincolnshire Natural Hazards Mitigation Plan (Mitigation Plan) is a plan that addresses natural hazards that may impact the Village, such as floods, severe summer storms, winter storms and tornadoes, by identifying activities to be considered by the community, residents or property owners to protect life and safety hazards and reduce property damage caused by natural hazards. The Mitigation Plan is currently a draft plan that will be recommended to the Village Board for adoption.

2. Why was the Mitigation Plan developed?

There are two purpose to the Village of Lincolnshire Natural Hazards Mitigation Plan. The first is to examine the Villages specific flood concerns and to recommend flood mitigation actions to be considered by the Village Board and recommended for residents and property owners. The second purpose is for the Village to receive additional credits provided by Federal Emergency Management Agency's (FEMA) Community Rating System (CRS). The Village participates in the CRS and people purchasing flood insurance through FEMA receive a 25% discount. The Village is striving to increase the CRS discount to 30% through efforts such as the development of the Mitigation Plan.

3. Who developed the Mitigation Plan?

The Village's Mitigation Plan was developed through a Village of Lincolnshire Natural Hazard Mitigation Planning Committee (Planning Committee), which was created through a resolution passed by the Village Board in August 2013. The Planning Committee includes Village Board members, Village Staff, residents and other community stakeholders. The Planning Committee met in 2013 and 2014 to create the Mitigation Plan with assistance from a planning consultant.

4. The Village's Mitigation Plan references the Lake County ANHMP. What is the Lake County ANHMP?

The Lake County All Natural Hazards Mitigation Plan (Lake County ANHMP) was developed the Lake County Local Planning Committee (LPC) in 2012 to meet FEMA planning requirements for hazard mitigation grant eligibility. The LPC included Lake County and most all Lake County municipalities including the Village of Lincolnshire. The Village adopted the Lake County ANHMP in August 2012, and the hazard risk assessment and examination of hazard mitigation strategies are used within the Village's Mitigation Plan.

5. Is the Village required to have both mitigation plans?

No, only the Lake County ANHMP is required. The Village's Mitigation Plan is an additional effort undertaken but the Village. To be eligible for FEMA mitigation grants, the Village adopted the Lake County ANHMP. The Lake County ANHMP was reviewed and approved by FEMA and adoption by the County and municipalities was required. The Village of Lincolnshire Natural Hazards Mitigation Plan is a not required

plan and was developed to benefit the Village in flood loss reduction and for Village's CRS class rating for flood insurance discounts.

6. What are the next steps for the Village's Mitigation Plan?

Village of Lincolnshire residents are encouraged to comment on the Mitigation Plan. Comments will be accepted through _____, 2014. Written comments may be mailed, faxed or e-mailed to _____. All comments will be considered by the Planning Committee and the Village Board, then the Village Board will adopt the Mitigation Plan as an official plan of the Village.

7. How can I learn more about the flood insurance or the CRS?

Information on the flood insurance and CRS can be found at www.FloodSmart.gov.

8. How do I get a copy of the draft Village of Lincolnshire Natural Hazards Mitigation Plan?

Visit the home page of the Village's website. [Could promote the Facebook and twitter efforts of the Village.]

Appendix C.

Planning Committee Materials

Included in this Appendix are copies of the Village of Lincolnshire Hazard Mitigation Planning Committee meeting agendas and sign in sheets.



Lincolnshire Flood Mitigation Planning Committee

Thursday, October 17, 2013, 7:00 p.m.

Village Hall Board Room

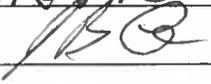
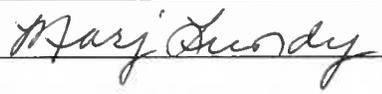
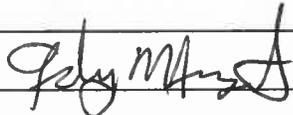
Agenda

1. Welcome and Introductions
2. Lincolnshire Flood Mitigation Plan
 - a. Outline/Chapters
 - b. Review of Lincolnshire Hazards from Lake County Plan
 - c. Review of Goals and Guidelines from Lake County Plan
3. Lincolnshire Problem Areas
4. Lincolnshire Public Information Needs
 - a. What are we doing well?
 - b. What should we be doing?
5. Flood Insurance Assessment
 - a. Coverage Map
 - b. Structure and Contents Coverage/Claims
 - c. Assessment
6. Public Comment
7. Next Steps/Next Meeting
8. Adjourn

Notes:

<https://www.surveymonkey.com/s/FC9YW2P>

Meeting Sign-In Sheet

Meeting: Flood Mitigation Planning Committee		Meeting Date: October 17, 2013
Place/Room: Village Hall Meeting Room		
Name	Organization or Resident Address	Signature if present
Larry Barnhart	Wood Creek Courts Homeowners	
Mark Cohen	State Farm Insurance	
Deann Daniel	Sedgebrook of Lincolnshire	
Jamie Godshalk	57 Lincolnshire Dr	
Ramesh Gulatee	4 Dukes Ln	
Stancia Kalmus	10 Anglican Ln	
Wendy Kritt	58 Lincolnshire Dr	
Marj Lundy	57 Lincolnshire Dr	
Jennifer Lugo	38 Plymouth Ct	
Ann Maine	Lake Country Board	
Judy Mankus	95 Lincolnshire Dr	
Roger Mankus	95 Lincolnshire Dr	
Jeff Merwin	14826 W Mayland Villa Rd	
Rev. Douglas Meyer	Lutheran Church of the Holy Spirit	
Andy Muzik	8 Stonegate Circle	
Craig Parcels	65 Lincolnshire Dr	
Joseph Pratt	Westgate Homeowners	
Stan Reznik	79 Lincolnshire Dr	
William Rubinstein	Rivershire Homeowners Assoc.	
David Schaper	11 Oxford Dr	
Rob Sturuss	1 Stonegate Circle	
Mike Tiemens	Bank Financial, Lincolnshire	
Rob Weinberg	Sutton Place Homeowners	



Lincolnshire Natural Hazards Mitigation Planning Committee

Thursday, November 14, 2013, 7:00 p.m.

Village Hall Board Room

Agenda

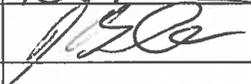
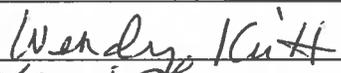
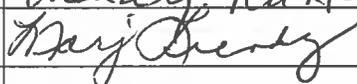
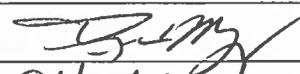
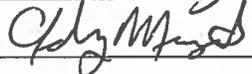
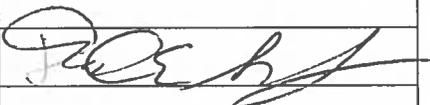
1. Welcome and Introductions
2. Review of Last Meeting & Purpose of Tonight's Meeting
3. Lincolnshire Natural Hazards Mitigation Plan
 - a. Review of Lincolnshire Goals and Guidelines*
 - b. Examination of Mitigation Strategies
Preventive, Property Protection, Structural Measures, Resource Protection, Emergency Services and Public Information
 - c. Review of Drafted Chapters
4. Lincolnshire Plan for Public Information
Identifying Topics, Formulating Messages and Possible Projects
5. Flood Insurance Assessment – Report on Progress
6. Public Comment
7. Next Steps/Next Meeting
8. Adjourn

* And homework assignment for next meeting.

Notes:



Meeting Sign-In Sheet

Meeting: Natural Hazards Mitigation Planning Committee		Meeting Date: November 14, 2013
Place/Room: Village Hall Meeting Room		
Name	Organization or Resident Address	Signature if present
Larry Barnhart	Wood Creek Courts Homeowners	
Mark Cohen	State Farm Insurance	
Deann Daniel	Sedgebrook of Lincolnshire	
Jamie Godshalk	57 Lincolnshire Dr	
Ramesh Gulatee	4 Dukes Ln	
Stancia Kalmus	10 Anglican Ln	
Wendy Kritt	58 Lincolnshire Dr	
Marj Lundy	57 Lincolnshire Dr	
Jennifer Lugo	38 Plymouth Ct	
Ann Maine	Lake Country Board	
Judy Mankus	95 Lincolnshire Dr	
Roger Mankus	95 Lincolnshire Dr	
Jeff Merwin	14826 W Mayland Villa Rd	
Rev. Douglas Meyer	Lutheran Church of the Holy Spirit	
Andy Muzik	8 Stonegate Circle	
Craig Parcels	65 Lincolnshire Dr	
Joseph Pratt	Westgate Homeowners	
Stan Reznik	79 Lincolnshire Dr	
William Rubinstein	Rivershire Homeowners Assoc.	
David Schaper	11 Oxford Dr	
Rob Sturuss	1 Stonegate Circle	
Mike Tiemens	Bank Financial, Lincolnshire	



Lincolnshire Natural Hazards Mitigation Planning Committee

Thursday, December 5, 2013, 7:00 p.m.

Village Hall Board Room

Agenda

1. Welcome and Introductions
2. Review of Last Meeting & Purpose of Tonight's Meeting
3. Lincolnshire Natural Hazards Mitigation Plan
 - a. Review of "Homework"
 - b. Mitigation Strategies – Conclusions and Recommendations
 - From November Meeting
 - Additional Strategies
 - c. Development of Action Items
 - Continued Actions by the Village
 - New Actions or Projects
4. Lincolnshire Plan for Public Information and Flood Insurance Coverage Improvement
 - a. Review of Focus Areas
 - b. Exercise - Identifying Topics and Messages
 - c. Possible Projects
5. Public Comment
6. Next Steps/Next Meeting
7. Adjourn

Notes:



Meeting Sign-In Sheet

Meeting: Flood Mitigation Planning Committee		Meeting Date: December 5, 2013
Place/Room: Village Hall Community Room		
Name	Organization or Resident Address	Signature if present
Larry Barnhart	Wood Creek Courts Homeowners	
Mark Cohen	State Farm Insurance	
Deann Daniel	Sedgebrook of Lincolnshire	<i>[Signature]</i>
Jamie Godshalk	57 Lincolnshire Dr	<i>[Signature]</i>
Ramesh Gulatee	4 Dukes Ln	
Stancia Kalmus	10 Anglican Ln	
Wendy Kritt	58 Lincolnshire Dr	
Marj Lundy	57 Lincolnshire Dr	<i>[Signature]</i>
Jennifer Lugo	38 Plymouth Ct	
Ann Maine	Lake Country Board	
Judy Mankus	95 Lincolnshire Dr	
Roger Mankus	95 Lincolnshire Dr	
Jeff Merwin	14826 W Mayland Villa Rd	
Rev. Douglas Meyer	Lutheran Church of the Holy Spirit	
Andy Muzik	8 Stonegate Circle	<i>[Signature]</i>
Craig Parcels	65 Lincolnshire Dr	
Joseph Pratt	Westgate Homeowners	
Stan Reznik	79 Lincolnshire Dr	
William Rubinstein	Rivershire Homeowners Assoc.	
David Schaper	11 Oxford Dr	<i>[Signature]</i>
Rob Sturuss	1 Stonegate Circle	
Mike Tiemens	Bank Financial, Lincolnshire	
Rob Weinberg	Sutton Place Homeowners	



Lincolnshire Natural Hazards Mitigation Planning Committee

Thursday, May 22, 2013, 7:00 p.m.

Village Hall Board Room

Agenda

1. Welcome
2. Review of Last Meeting & Purpose of Tonight's Meeting
3. Lincolnshire Natural Hazards Mitigation Plan
 - a. Review of Action Items
 - b. Overview of Draft Plan for Public Comment
4. Lincolnshire Plan for Public Information and Flood Insurance Coverage Improvement
 - a. Status of Coverage Improvement Plan
 - b. Review of Draft "PPI"
5. Public Comment
6. Next Steps/Next Meeting
 - a. Public Meeting & Review Process
 - b. Village Board Adoption
7. Adjourn

Notes:

The Village developed an All-Natural Hazards Mitigation Plan in an effort to reduce flood insurance premiums for residents, and to assess current disaster response operations. The All Natural Hazards Plan addresses natural hazards likely to impact the Village including floods, tornadoes, wind, and winter storms. The Village has developed the attached survey to gather community input to help shape the plan.

This survey should take less than 5 minutes to complete. Your feedback is important to the Village in working to assist with planning and responding to potential disasters. The deadline to complete this survey is January 24, 2020.

This survey can be completed online at the Village's website: www.lincolnshireil.gov or you may answer the questions below.

1. Please tell us a little about you

- Property Owner
- Renter
- Business Owner

2. How long have you lived or operated a business at your current location?

- Less than 1 year
- 1 year but less than 5 years
- 5 years but less than 10 years
- 10 years or more

3. In the past 10 years, have you or someone at your household or business been impacted by the following natural hazards (Check all that apply)?

- Flooding
- Wind
- Snow
- Ice
- Hail
- No natural hazard problems
- Other (please specify)

4. If you answered yes to Question 3, please indicate the extent of the impact experienced.

5. During a natural disaster, where do you go for information updates (Check all that apply)?

- Television news
- Radio
- Newspapers
- Village websites
- Lincolnshire Twitter/Facebook Page
- Local School Districts
- Direct mail correspondence from Village
- Village fact sheet/brochure
- Public workshops/meetings
- Fire Department/Law Enforcement
- Public Health Department (Not Village)
- Lake County Government
- Village E-newsletter
- Village Blackboard Connect Emergency Notification Service
- Other (please specify)

6. Prior to a natural disaster, what are the best ways for you to receive information from the Village about how to protect your family, home or business from damage due to natural hazards (Check all that apply)?

- Village Websites
- Lincolnshire Twitter/Facebook Page
- Local School Districts
- Direct Mail Correspondence from Village
- Village Fact Sheet/Brochure
- Public Workshops/Meetings
- Fire Department/Law Enforcement
- Public Health Department (Not Village)
- Lake County Government
- Village E-newsletter
- Village quarterly print newsletter
- Village Blackboard Connect Emergency Notification Service
- Other (please specify)

7. What natural hazards, concern your family or business (Check all that apply)?

- Dam Failure
- Drought
- Earthquake
- Extreme cold
- Extreme heat
- Floods
- Groundwater
- Hail
- Ice storm
- High wind/microburst
- Lightning
- Severe shoreline erosion
- Sewer backup
- Snow storm
- Thunderstorm
- Tornado
- Wildfire

Other (please specify)

8. How prepared are you for a natural hazards should it occur within our community?

- Not at all prepared
- Somewhat prepared
- Adequately prepared
- Well prepared
- Very well prepared

9. What steps have you taken to prepare your home or business for natural hazards (Check all that apply)?

- Created a family/business disaster plan and discussed it with my family/co-workers
- Established a family/business communication plan
- Constructed a family/business disaster kit which includes water, food, flashlight and batteries
- Purchased a battery-powered emergency radio
- Created a First Aid Kit
- Received First Aid/CPR training
- Practiced a fire escape plan
- Installed a fire extinguisher in my house or business
- Installed smoke/Carbon Monoxide detectors
- Discussed utility shutoffs
- Purchased flood insurance
- Purchased sewer backup rider on insurance policy
- Other (please specify)

10. How do you feel Lincolnshire is doing in creating awareness of the natural hazards faced by residents and businesses?

- Excellent
- Good
- Fair
- Poor

11. Please provide any other information you think the Village should know about natural hazards that may impact your family, residence, or business.